

Bipartisan *Infrastructure Investment and Jobs Act* Summary

A Road to Stronger Economic Growth

August 7, 2021

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Topline Summary

- Historic investment in nation's core infrastructure priorities— including roads and bridges, rail, transit, ports, airports, the electric grid, and broadband.
- No tax hikes.
- Includes bipartisan Senate-passed water infrastructure bill and bipartisan committee-passed Commerce and EPW surface transportation bills, along with ENR energy infrastructure bill.
- Improves permitting by including enhanced FAST-41 program, which has substantially reduced the permitting timeline for larger infrastructure projects while maintaining environmental standards.
- Makes a down payment on the infrastructure needed for a low-carbon economy and helps to reduce emissions and improve the environment.
- Includes rural infrastructure development and dedicated new funds for major projects.
- Long-term spending for capital assets that will improve economic efficiency, productivity, GDP and revenue, and will not increase inflation.

\$550 Billion In New Spending Over 5 Years

Roads, Bridges, & major projects: \$110B - Includes Commerce and EPW-passed surface transportation reauthorization bills. Funds new, dedicated grant program to replace and repair bridges and increases funding for the major project competitive grant programs. At the same time, the package preserves the 90/10 split of federal highway aid to states.

Passenger and Freight Rail: \$66B - Provides funding for the Amtrak National Network for new service and dedicated funding to the Northeast Corridor, which has incurred a severe repair backlog after Hurricane Sandy. Increases funding for freight rail and safety.

Safety and Research: \$11B - Funds highway & pedestrian safety and research programs, as well as pipeline safety and repair.

Public Transit: \$39.2B - Funds nation's transit system repair backlog, which DOT estimates is more than 24,000 buses, 5,000 rail cars, 200 stations, and thousands of miles of track, signals, and power systems.

Broadband: \$65B - Grants to states for broadband deployment and other efforts to close the digital divide. Expands eligible private activity bond projects to include broadband infrastructure.

Airports: \$25B - Increases funds for Airport Improvement grant program for runways, gates, & taxiways as well as a new Airport Terminal Improvement program for terminals, concessions, and multimodal connections.

Ports and Waterways: \$17.4B - Funding for waterway and coastal infrastructure, inland waterway improvements, port infrastructure, and land ports of entry through the Army Corps, DOT, Coast Guard, the GSA, and DHS.

Water Infrastructure: \$54B - Includes the bipartisan Drinking Water and Wastewater Infrastructure Act. Provides a historic \$15 billion for lead service line replacement and \$10 billion to address PFAS.

Supports water infrastructure in Tribal communities by providing \$1.8 billion for the Indian Health Service Sanitation Facilities Construction program, in addition to funding to complete all currently-authorized Indian Water Rights Settlements.

Power and Grid: \$65B - Includes the bipartisan Energy Infrastructure Act, which includes funds for grid reliability and resiliency and support for a Grid Development Authority; critical minerals and supply chains for clean energy technology; key technologies like carbon capture, hydrogen, direct air capture, and energy efficiency; and energy demonstration projects from the bipartisan Energy Act of 2020.

Resiliency: \$46B - Funding for cybersecurity to address critical infrastructure needs, flood mitigation, wildfire, drought, coastal resiliency, waste management, ecosystem restoration, and weatherization.

Low-Carbon and Zero-Emission School Buses & Ferries: \$7.5B - Funds for the adoption of low-carbon and zero-emission school buses, including through hydrogen, propane, LNG, compressed natural gas, biofuel, and electric technologies. Provides support for a pilot program for low emission ferries and rural ferry systems.

Electric Vehicle Charging: \$7.5B – Funds for alternative fuel corridors and to build out a national network of electric vehicle charging infrastructure to facilitate long-distance travel and to provide convenient charging where people live, work, and shop. The federal funding will have a particular focus on rural disadvantaged, and hard-to-reach communities.

Reconnecting Communities: \$1B – Funds for projects that remove barriers to opportunity caused by legacy infrastructure. The program will provide dedicated funding for planning, design, demolition, and reconstruction of street grids, parks, or other infrastructure.

Addressing Legacy Pollution: \$21B – Funds to clean up brownfield and superfund sites, reclaim abandoned mine lands, and plug orphan oil and gas wells, improving public health and creating good-paying jobs.

Portman, Sinema Statement on CBO Score for Bipartisan Infrastructure Investment & Jobs Act

“The bipartisan legislation the Senate is now considering is a historic investment in our nation’s core infrastructure needs – including roads and bridges, rail, transit, ports, airports, the electric grid, broadband, and much more. This investment is being made without new tax hikes on everyday families. Independent studies have shown that the long-term spending for capital assets in this measure will improve economic efficiency and productivity, increase GDP, generate additional revenue, and will not increase inflation.”

“The CBO score says that the cost of the bill is \$228 billion over five years and \$415 billion over 10 years, and the offsets we have identified total \$519 billion. The new spending under the bill is offset through a combination of new revenue and savings, some of which is reflected in the formal CBO score and some of which is reflected in other savings and additional revenue identified in estimates, as CBO is limited in what it can include in its formal score. The American people strongly support this bipartisan legislation and we look forward to working with our colleagues on both sides of the aisle and President Biden to get it passed through Congress and signed into law.”

###

Spending Pay-Fors

- \$53 billion from certain states' unused enhanced federal UI supplements (Source: CBO [estimate](#))
- \$67 billion in unused savings from the COVID-19 employer retention tax credit that CBO projected would be utilized and were not, minus the impact of sunsetting the credit (CBO [letter](#))
- \$106 billion in unused savings from COVID-19 paid & family leave tax credits that CBO projected would be utilized and were not (CBO [letter](#))
- \$51 billion from delaying Medicare Part D rebate rule (Source: CBO [score](#))
- \$21.4 billion in rescissions in unused funding from 2020 COVID bills (Source: CBO [score](#))
- \$10.2 billion from sales of future spectrum auctions (Source: CBO [score](#))
- \$67 billion from proceeds of the February 2021 c-band auction (Source: CBO [estimate](#))
- \$53 billion in economic growth resulting from a 33 percent return on investment in these long-term infrastructure projects (Source: CBO analysis)
- \$28 billion from clarifying the application of information reporting requirements for cryptocurrency (Source: [JCT score](#))
- \$21 billion from extending fees on GSEs (Source: CBO [score](#))
- \$14.5 billion from reinstating certain Superfund fees (Source: [JCT score](#))
- \$8.7 billion from extending the mandatory sequester (Source: CBO [score](#))
- \$6.1 billion in sales from the Strategic Petroleum Reserve (Source: CBO [score](#))
- \$6.1 billion from extending customs user fees (Source: CBO [score](#))
- \$3.2 billion in savings from reducing Medicare spending on discarded medications from large, single-use drug vials (Source: CBO [score](#))
- \$2.9 billion from extending available interest rate smoothing options for defined benefit pension plans (Source: [JCT score](#))

TOTAL OFFSETS = \$519 billion

Economic Benefits of the *Infrastructure Investment and Jobs Act*

- The *Infrastructure Investment & Jobs Act* will grow our economy, create jobs and increase wages, and reduce inflation.
- Economic growth will occur as a result of our economy becoming more efficient, with new and improved infrastructure making it less costly for businesses to operate while making workers more productive.
- As business efficiency and worker productivity improve, so will wages.
- The resulting economic growth, with more, higher-paying jobs means the federal government will be able to collect additional revenues – without raising taxes.
- This spending on capital assets is a critical investment in our nation’s long-term economic growth, paving the way to a higher standard of living and stronger economic growth that will generate additional federal revenue for deficit reduction.

Penn Wharton Budget Model (PWBM)

- The PWBM says that the *Infrastructure Investment & Jobs Act* will increase hourly wages by 0.1% within 10 years and will reduce government debt by 0.9% by 2050.
- They said, “[t]he additional private capital makes workers more productive. Workers’ productivity is reflected in an increase in wages...output increases because of the larger increase in productive private capital.”

Douglas Holtz-Eakin (American Action Forum)

- “A well-structured infrastructure bill would boost the supply side of the economy, reducing inflationary pressures. Improving roads, bridges, and ports would make it less costly for businesses to operate, allowing them to increase their output per hour, and putting downward pressure on consumer prices.”
- “In addition to boosting productivity, the timing of the proposed infrastructure plans mitigates concern about inflation. The goal of the proposed infrastructure plan is not to boost the demand side of the economy, giving it a quick, Keynesian jolt through “shovel-ready” projects. This type of infrastructure spending could be inflationary. Instead, the goal is to increase the productive capacity of the economy over the course of nearly one decade.”

Michael Strain (AEI)

- “There are good reasons to believe this bipartisan infrastructure spending won’t be inflationary. Its focus is on improving longer-term productivity, not near-term demand. By strengthening the supply side of the economy, it would ease inflationary pressures. In addition, the spending would be spread out over a decade.”

Congressional Budget Office (CBO)

- The CBO estimates that infrastructure spending will create a 33% return on investment because of the economic benefits of the long-term infrastructure projects (offset in part by debt issued).

Widespread Support for the *Infrastructure Investment & Jobs Act*

• U.S. Chamber of Commerce	• Business Roundtable
• National Association of Manufacturers	• AFL-CIO
• Agricultural Retailers Association	• Airports Council International North America
• American Apparel & Footwear Association	• American Association of Port Authorities
• American Concrete Pavement Association	• American Concrete Pipe Association
• American Concrete Pumping Association	• American Consulting Engineers Council
• American Council of Engineering Companies	• American Council for Capital Formation
• American Farm Bureau Federation	• American Foundry Society
• American Highway Users Alliance	• American Institute of Steel Construction
• American Iron & Steel Institute	• American Public Transportation Association
• American Rental Association	• American Road & Transportation Builders Association
• American Securities Association	• American Society of Civil Engineers
• American Society of Landscape Architects	• American Subcontractors Association
• American Traffic Safety Services Association	• American Trucking Associations
• Associated Builders and Contractors	• Associated Equipment Distributors
• Associated General Contractors of America	• Associated Wire Rope Fabricators
• Association of American Railroads	• Association of Equipment Manufacturers
• Auto Care Association	• Bipartisan Policy Center
• Building America's Future	• Build Together CEO Working Group
• Coalition for America's Gateways & Trade Corridors	• Community Transportation Association of American
• Computer & Communications Industry Association	• Construction & Demolition Recycling Association
• Corn Refiners Association	• Design-Build Institute of America
• Edison Electric Institute	• FP2, formerly the Foundation for Pavement Preservation
• Independent Electrical Contractors	• Independent Lubricant Manufacturers Association
• Industrial Minerals Association – North America	• Information Technology Industry Council
• Institute of Manufacturers of Explosives	• Institute of Transportation Engineers
• International Association of Iron Workers	• International Brotherhood of Teamsters
• International Society of Explosive Engineers	• International Union of Operating Engineers
• Laborers' International Union of North America	• Major Metro Coalition
• National Air Traffic Controllers Association	• National Asphalt Pavement Association
• National Association of Convenience Stores	• National Association of Counties
• National Association of County Engineers	• National Association of Home Builders
• National Association of Remodeling Industry	• National Association of Surety Bond Producers
• National Association of Trailer Manufacturers	• National Associations of Truckstop Operators
• National Association of Wholesaler-Distributors	• National Cattlemen's Beef Association
• National Conference of State Legislatures	• National Electrical Contractors Association
• National Governors Association	• National Independent Autodealers Association

• National League of Cities	• National Lime Association
• National Mining Association	• National Ready Mixed Concrete Association
• National Retail Federation	• National Society of Professional Surveyors
• National Steel Bridge Alliance	• National Stone, Sand, and Gravel Association
• National Waste & Recycling Association	• No Labels
• North American Association of Food Equipment Manufacturers	• North America's Building Trades Unions
• Portland Cement Association	• Precast/Prestressed Concrete Institute
• Railway Supply Institute	• Retail Industry Leaders Association
• Sheet Metal and Air Conditioning Contractors National Association	• Small Business Roundtable
• Society of Independent Gasoline Marketers of America	• Specialized Carriers & Rigging Association
• Steel Manufacturers Association	• Subsurface Utility Engineering Association
• TechNet	• The Council of State Governments
• The Nature Conservancy	• The Surety & Fidelity Association of America
• Tire Industry Association	• Transport Workers Unions of America
• Transportation Intermediaries Association	• Transportation Trades Department, AFL-CIO
• Travel Goods Association	• U.S. Conference of Mayors
• U.S. Geospatial Executives Organization	• U.S. Tire Manufacturers Association
• U.S. Travel Association	• United Brotherhood of Carpenters and Joiners of America
• United Motorcoach Association	

Survey Data: Americans Overwhelmingly Support Fixing Our Nation's Infrastructure

- The overwhelming majority of Americans – about 8 in 10 – favor plans to increase funding for roads, bridges and ports and for pipes that supply drinking water, according to a [survey conducted by Associated Press-NORC Center for Public Affairs Research](#). (Poll conducted July 15-19, 2021)
- A [CBNC poll](#) conducted in late April indicated 87% of the public backs bipartisan efforts to fix our roads and bridges.
- A [CBS News/You Gov](#) survey found that 87% of Americans support more federal spending on building and repairing roads and bridges. 59% of respondents in the same survey said they support the Bipartisan Infrastructure Agreement. (Poll conducted July 14-17, 2021)
- According to a Yahoo News YouGov poll, [6 in 10 Republican voters say they favor the new \\$1.2 trillion infrastructure package](#) negotiated by a bipartisan group of senators and endorsed by the Biden White House. (Poll conducted June 22-24, 2021)

Roads, Bridges & Major Projects

Summary: The \$110 billion in new spending in this section of the bipartisan infrastructure agreement addresses the aging infrastructure needs of the nation's roads & bridges. This section also contains the authorizations as included in the bipartisan EPW committee-passed Surface Transportation Reauthorization Act

- **Increased Contract Authority – \$55.48B**
 - Reflective of a 35% increase from FAST Act levels coming from EPW's Surface Transportation Reauthorization Act.
- **Supplemental appropriations – \$55.52B**
 - ***Bridge grant programs – \$36.735B***
 - This funding supports increased funding for the EPW Bridge Investment Program— a competitive grant program to assist the repair and replacement of deficient and outdated bridges and ease the national bridge repair backlog.
 - In addition to the competitive program, this funding also supports a bridge formula program to help support the \$125 billion bridge repair backlog (as estimated by the American Society of Civil Engineers).
 - ***Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grants – \$7.5B***
 - This funding will boost funding for the RAISE (formerly BUILD) grant program, which supports surface transportation projects of local and/or regional significance.
 - ***National Infrastructure Project Assistance grant program – \$5B***
 - This new program supports multi-modal, multi-jurisdictional projects of national or regional significance.
 - ***Infrastructure for Rebuilding America (INFRA) Grant Program – \$3.2B***
 - This funding supports an increase in baseline funding to the INFRA grant program, which supports highway and rail projects of regional and national economic significance.
 - ***Appalachian Development Highway System formula program – \$1.25B***
 - The Appalachian Development Highway System consists of a series of highway corridors connecting 13 Appalachian states, from New York to Alabama. The routes are designed as local and regional routes for improving economic development in the historically isolated region. This dedicated funding will help complete the ADHS and spur economic development in Appalachia.
 - ***Surface Transportation Private Activity Bonds – \$500M***
 - This plan increases the current cap on these bonds from \$15 billion to \$30 billion, as currently \$14.98 billion has been issued or allocated. This increase will allow state and local governments to enter into additional public-private partnerships to supplement future surface transportation projects with private investment.
 - ***University Transportation Centers – \$95M***

- This funding supports the University Transportation Centers (UTC) Program, which advances the state-of-the-art in transportation research and technology.

Section by Section: Surface Transportation Reauthorization Act of 2021

Authorization of appropriations.

- Provides the level of contract authority funding to be made available from the Highway Trust Fund for the Federal-aid highway programs. It also provides the level of authorizations for appropriation from the General Fund for certain programs during the same five-year authorization period of the bill, fiscal years 2022 through 2026.

Obligation ceiling.

- Sets the annual limitation on obligations for Federal-aid highway programs for each of fiscal years 2022 through 2026. This section identifies the programs that are exempt from the obligation limitation and provides the methodology for distributing the obligation authority between programs and among the States.

Definitions.

- Modifies the definition of the term “construction” to include activities associated with assessing resilience and building wildlife crossing structures, modifies the definition of the term “transportation systems management and operations” to include consideration of incorporating natural infrastructure, and adds definitions for the terms “resilience” and “natural infrastructure” to the list of defined terms under Section 101 of title 23 United States Code.

Apportionment.

- Provides the amounts for administrative expenses of Federal Highway Administration (FHWA) for each fiscal year and distributes contract authority funding among the States.

National highway performance program.

- Augments the purpose of the National Highway Performance Program (NHPP) to include a focus on measures that increase resiliency to the impacts of sea level rise, extreme weather events, flooding, and other natural disasters, such as earthquakes and rockslides. This section expands eligibility for States to use NHPP funds for resiliency, cybersecurity, and undergrounding utility infrastructure. It also allows a State to use up to 15 percent of its NHPP funding for protective features on a Federal-aid highway or bridge that is off the National Highway System if the protective feature is designed to mitigate the risk of recurring damage or the cost of future repairs from extreme weather events, flooding, or other natural disasters.

Emergency relief.

- Clarifies the Emergency Relief (ER) program may include repairing damage from natural disasters over a wide area caused by wildfire. It allows the use of ER program funding for protective features designed to mitigate the risk of recurring damage or the cost of future repairs from extreme weather events, flooding, or other natural disasters.
- This section removes the restriction on funding for certain projects that were already included on a statewide transportation improvement plan at the time of a disaster. It expands the definition of a comparable facility to include a facility that incorporates economically justifiable improvements designed to mitigate the risk of recurring damage from extreme weather events, flooding, or other natural disasters.

Federal share payable.

- Provides for a Federal share payable of up to 100 percent for vehicle-to-infrastructure communication equipment and contractual provisions that provide safety contingency funds to incorporate safety enhancements to work zones prior to or during roadway construction activities.
- This section extends the deadline for projects to be 100 percent federal-share from 180 to 270 days, as well as allowing for both permanent and temporary repairs to be 100 percent federal-share under the Emergency Relief Program. This section allows the Secretary to waive the federal-share for the Surface Transportation Block Grant Program with considerations regarding whether a project or activity best serve the interests of the Federal-aid highway program and addresses national or regional high priority research, development, and technology transfer problems in a manner that would benefit multiple States or metropolitan planning organizations.
- This section also creates a Federal Share Flexibility Pilot Program that gives up to ten States additional flexibility to determine the Federal share on a project, multiple-project, or program basis for projects under any of the following funded under the National Highway Performance Program, the Surface Transportation Block Grant Program, the Highway Safety Improvement Program, the Congestion Mitigation and Air Quality Improvement Program National Highway Freight Program, the Carbon Reduction Program, and the PROTECT grant program.

Railway-highway grade crossings.

- Continues to set aside \$245,000,000 of the funding authorized for the Highway Safety Improvement Program (HSIP) for the Railway-Highway Crossings (Section 130) Program for each of fiscal years 2022 through 2026. This section removes the requirement that at least half of the funds set aside for the Section 130 program must be for the installation of protective devices at railway-highway crossings. This section increases the Federal share for projects funded under the Section 130 program from 90 to 100 percent, as well as clarifies that the replacement of functionally obsolete warning devices is an eligible expense. This section also increases the amount of state incentive payment at-grade crossing closures from \$7,500 to \$100,000, and increases the set-aside for compilation and analysis of data from 2 percent up to 8 percent.
- This section emphasizes eligibility for projects to reduce pedestrian fatalities and injuries from trespassing at grade crossings, and states that it is the sense of Congress that the DOT should, where feasible, coordinate efforts to prevent or reduce trespasser deaths along railroad rights-of-way and at or near railway-highway crossings. This section requires the Comptroller General of the United States to submit a report that includes an analysis of the effectiveness of the Section 130 program as a set-aside within HSIP.

Surface transportation block grant program.

- Increases the amount of funding set aside within the Surface Transportation Block Grant (STBG) Program for the Transportation Alternatives Program (TAP), increases the minimum percentage of TAP funding that is sub-allocated on the basis of population to 59 percent, and provides a process by which States may opt to increase that percentage to as high as 100 percent. This section allows a State to elect to use up to 5 percent of TAP funds on technical and application assistance and administration and adds eligibilities for smaller communities to apply for TAP funding.

- This section also adds new eligibilities to STBG including construction of wildlife crossing structures, electric vehicle charging infrastructure and vehicle-to-grid infrastructure, installation and deployment of intelligent transportation technologies, projects that facilitate intermodal connections between emerging transportation technologies, resilience features, cybersecurity protections, and rural barge landings, docks, and waterfront infrastructure projects, and the construction of certain privately-owned ferry boats and terminals.
- This section also increases off-system bridge set-aside, and allows low water crossing replacement projects to be eligible for use under this set-aside, and creates a new set-aside for projects in rural areas.
- This section provides for more granular suballocation of funding, with a new population category for 50,000 to 200,000, and provides for state consultation with metropolitan planning organizations

Nationally significant freight and highway projects.

- Renames the Nationally Significant Freight and Highway Projects (NSFHP) program (also known as the INFRA grant program) to be the Nationally Significant Multimodal Freight and Highway Program (NSMFHP) and amends it by raising the cap on eligible multimodal projects to 30 percent of the amounts made available for grants in each of fiscal years 2022 through 2026. This section provides a limited amount of funds (no more than two percent of program funds total) for the purposes of grant application review, grant administration, and oversight by the National Surface Transportation and Innovative Finance Bureau (also known as the Build America Bureau), and by the relevant operating administrations.
- This section sets aside \$150,000,000 per year of NSMFHP funds for a pilot program that prioritizes applications offering the greatest non-Federal share of project costs.
- This section also increases the minimum amount (from 10 percent to 15 percent) that the Secretary shall reserve for small projects, as defined by NSMFHP, and requires that not less than 30 percent of funds reserved for small projects be used for certain projects in rural areas. This section also increases the Federal share allowable for small projects from 60 to 80 percent, and allows increased maximum Federal involvement for a State with a population density of not more than 80 persons per square mile.
- This section also adds the enhancement of freight resilience to natural hazards or disasters such as high winds, heavy snowfall, flooding, rockslides, mudslides, wildfire, or steep grades as an additional consideration by the Secretary when making NSMFHP grants. The section adds wildlife crossings, surface transportation improvements functionally connected to an international border crossing, projects on the National Multimodal Freight Network, and marine highway projects functionally connected to the National Highway Freight Network as eligible activities.
- This section allows NSMFHP grants and other competitively awarded grants greater than
- \$5,000,000 to be expended after grant selection but prior to the grant agreement being signed, and for such funds to be credited toward the non-Federal cost share of the project. This section expands the transparency requirements in project selection and requires the Secretary to provide each eligible applicant not selected for an NSMFHP grant a written notification that the eligible applicant was not selected, which shall include an offer for a debrief as to why the project was not selected. The Secretary must now also consider if the State, or eligible entity in that State, has received a grant under this section in previous years. For each project selected for a grant,

this section requires the Secretary to submit a report to Congress explaining the reasons the project was selected. Further, this section requires the Comptroller General and the Department of Transportation Inspector General to conduct separate assessments of the NSMFHP project selection process.

- This section also authorizes additional appropriations for the NSMFHP grant program of \$6 billion over 5 years.

Highway safety improvement program.

- Restores flexibility to fund certain non-infrastructure activities and behavioral safety projects, such as educational campaigns about traffic safety and enforcement activities, and allows a State to spend up to 10 percent of its Highway Safety Improvement Program (HSIP) funding on such projects.
- This section includes leading pedestrian intervals, construction or installation of features, measures, and road designs to calm traffic and reduce vehicle speeds, installation or upgrades of traffic control devices for pedestrians and bicyclists, roadway improvements that provide separation between pedestrians and motor vehicles or between bicyclists and motor vehicles, and a pedestrian security feature designed to slow or stop a motor vehicle as an eligible highway safety improvement project.
- This section defines a “safe system approach” and “vulnerable road user”, and requires that when total annual fatalities of vulnerable road users in a State represents not less than 15 percent of the total annual crash fatalities in the State, that State shall be required to obligate not less than 15 percent of their HSIP funds for the following fiscal year for projects to address the safety of vulnerable road users. This section also directs the Secretary to update the study on High-risk rural roads.
- This section creates a Vulnerable Road User Assessment, to be integrated into the existing requirement for a State Strategic Highway Safety Plan, which requires states to gather and assess data on fatalities and serious injuries of vulnerable road users, and identify a program of projects to mitigate such safety risks.

Federal lands transportation program.

- Raises the cap on Federal Lands Transportation Program (FLTP) funds that may be used to improve public safety and reduce wildlife vehicle collisions while maintaining habitat connectivity from \$10,000,000 to \$20,000,000 per year. This section also requires entities carrying out FLTP projects to consider the use of native plants and designs that minimize runoff and heat generation.

Federal lands access program.

- Broadens activities eligible under the Federal Lands Access Program (FLAP) to include contextual wayfinding markers, landscaping, and cooperative mitigation of visual blight. This section also requires entities carrying out FLAP projects to consider the use of native plants and designs that minimize runoff and heat generation. This section also allows the use of context-sensitive solutions, which help to ensure that designs for a built structure’s size, scale, spacing, lighting, materials, and other design elements are respectful of the setting’s natural, scenic, historical, archaeological, and cultural values and visually connect or integrate the character of the Federal lands with adjacent areas and communities.
- This section also makes FLAP projects eligible for 100 percent federal share, and lifts the cap for

bridge inspections and transportation planning activities from 5 to 20 percent.

National highway freight program.

- Increases the maximum number of highway miles a State may designate as critical rural freight corridors from 150 to 300 miles, and as critical urban freight corridors from 75 to 150 miles. This section also provides additional flexibility for lower population-density States to designate as critical rural freight corridors a maximum of 600 miles of highway, or 25 percent of the primary highway freight system mileage in the State – whichever is greater. The section increases the percent of program funds that may be used for eligible multimodal projects from a 10 percent cap to a 30 percent cap, and adds lock, dam, and marine highway projects as eligible as long as the projects are functionally connected to the National Highway Freight Network and are likely to reduce on-road mobile source emissions.

Congestion mitigation and air quality improvement program.

- Adds flexibility to the Congestion Mitigation and Air Quality Improvement Program (CMAQ) by allowing States to spend up to 10 percent of CMAQ funds on certain lock and dam modernization or rehabilitation projects and certain marine highway corridor, connector, or crossings projects if such projects are functionally connected to the Federal-aid highway system and are likely to contribute to the attainment or maintenance of a national ambient air quality standard. This section also clarifies when eligible transit operating costs are not subject to a time limitation or phase-out requirement.
- This section also adds eligibility for shared micromobility, including bike share and shared scooter systems, as well as for the purchase of medium- or heavy-duty zero emission vehicles and related charging equipment. This section also permits for the Secretary, at the request of an MPO, to assist that MPO with tracking progress made in minority or low-income populations as part of a performance plan.

Alaska Highway.

- Clarifies that the Secretary may provide allocated and apportioned funding for certain sections of the Alaska Highway, including sections in Canada, if the highway meets all applicable eligibility requirements. This section does not create new programs or funding sources. This section does not alter current or require new agreements between the United States and Canada.

Toll roads, bridges, tunnels, and ferries.

- Clarifies that the construction of ferry boats and terminals also includes the construction of maintenance facilities, and permits the use of Federal funds to procure transit vehicles as part of the ferry boat program if the vehicles are used exclusively as part of an intermodal ferry trip. This section also clarifies that for a project to replace or retrofit a diesel fuel ferry vessel that provides substantial emissions reductions, the Federal share of the cost of the project may be up to 85 percent, as determined by the State.

Bridge investment program.

- Establishes a new competitive grant program to assist State, local, Federal and tribal entities in rehabilitating or replacing bridges, including culverts, and eligibility for large projects and bundling of smaller bridge projects.
- Under this program, the minimum grant amount for a large project is not less than \$50,000,000; the minimum grant amount for any other eligible project is \$2,500,000. In all cases, grant

amounts, in combination with other anticipated funds, should be of a size sufficient to enable the project to proceed through completion. This program prioritizes certain projects within States that have applied for but have yet to receive grants, and requires the Secretary, during the period of fiscal years 2022 through 2026, to award a selected State with not fewer than either 1 large project, or 2 other than large projects.

- The bridge program would include an application and evaluation process for large projects, after which the Secretary would submit an annual report to Congress on funding recommendations for large projects, based on project evaluations. Large projects could be funded with multi-year funding agreements. To be able to receive a grant for a project under the program, the Secretary is to determine that an eligible bridge project is justified under factors listed in the section. Further, this program allows for funding of large projects during the first year of the program.
- Under this program, at least 50 percent of program funds, in the aggregate from fiscal years 2022 through 2026, must be used for large projects, and a total of \$100 million over five years would be set-aside for tribal bridge projects.

Safe routes to school.

- Codifies the Safe Routes to School Program and amends it to apply the program through 12th grade to enable and encourage high school students to walk and bike to school safely.

Highway use tax evasion projects.

- Reauthorizes funding to be used by the Secretary in conjunction with the Internal Revenue Service to address highway use tax evasion for fiscal years 2022 through 2026.

Construction of ferry boats and ferry terminal facilities.

- Increases funding for the ferry boat program, which funds the construction of ferry boats and ferry terminal facilities.

Vulnerable road user research.

- Directs the FHWA Administrator to establish a research plan to prioritize research on roadway designs, the development of safety countermeasures to minimize fatalities and serious injuries to vulnerable road users, and the promotion of bicycling and walking. This includes research relating to roadway safety improvements, the impacts of traffic speeds, and tools to evaluate the impact of transportation improvements on projected rates and safety of bicycling and walking.

Wildlife crossing safety.

- Establishes a wildlife crossing pilot program to provide grants for projects designed to reduce wildlife-vehicle collisions and improve habitat connectivity. This section also requires the Secretary update and expand the “Wildlife Vehicle Collision Reduction Study: 2008 Report to Congress,” develop reports, guidance and data collection methodology.

Consolidation of programs.

- Provides funding for Operation Lifesaver, work zone safety grants, and safety clearinghouses for fiscal years 2022 through 2026.

GAO report.

- Repeals a GAO reporting requirement from the FAST Act describing the administrative expenses of the Federal Highway Administration funded from the Highway Trust Fund.

Territorial and Puerto Rico highway program.

- Authorizes increased funding for the Territorial and Puerto Rico Highway Program, a total of \$900,995,000 for Puerto Rico, and \$239,505,000 for the territories on the National Highway System for fiscal years 2022 through 2026. This section also adds eligibility for preventative maintenance for a portion of the allocation to Puerto Rico.

Nationally significant Federal lands and Tribal projects program.

- Amends the Nationally Significant Federal Lands and Tribal Projects Program (NSFLTP) by allowing smaller projects to qualify for the program. This section also allows 100 percent Federal share for Tribal projects. This section further requires an even split in total use of funds between Federal lands projects and tribal transportation projects, and requires that for each of fiscal years 2022 through 2026 at least one Federal lands project be in a unit of the National Park System with not less than 3,000,000 annual visitors.

Tribal high priority projects program.

- Reinstates and provides funding for the Tribal High Priority Projects program at \$30,000,000 for each of fiscal years 2022 through 2026 from the General Fund, and sets aside for the program \$9,000,000 per year for each of fiscal years 2022 through 2026 from the Tribal Transportation Program.

Standards.

- Directs the Department of Transportation to update the Manual on Uniform Traffic Control Devices, and to continue to update the manual no less than every four years thereafter. This section also outlines that the initial update shall include protection of vulnerable road users, the safe testing of automated vehicle technology, and minimum retroreflectivity of traffic control devices and pavement markings. This section also adds electric vehicle charging stations to the section.

Public transportation.

- Adds eligibility for a capital project for the construction of a bus rapid transit corridor or dedicated bus lanes, including the construction or installation of traffic signaling and prioritization systems, redesigned intersections that are necessary for the establishment of a bus rapid transit corridor, on-street stations, fare collection systems, information and wayfinding systems, and depots.

Reservation of certain funds.

- Amends language to direct the Secretary to determine if a State has not enacted or is not enforcing an open container law, and a repeat intoxicated driver law, for the prior fiscal year before the reservation of certain funds is in enacted.

Rural surface transportation grant program.

- Directs the Secretary to establish a rural surface transportation grant program to provide grants, on a competitive basis, 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, and the generation of regional economic growth and improving the quality of life. A grant under the program shall be at least \$25,000,000, and the federal share shall be at least 80 percent, and up to 100 percent for projects

on the Appalachian Development Highway System. No more than 10 percent of funds may be used for projects smaller than \$25,000,000, and at least 25 percent of funds shall be reserved for projects that further the completion of designated routes of the Appalachian Development Highway System. The program also sets aside 15 percent of the funding for eligible projects in States with higher than average rural roadway lane departure fatalities

Bicycle transportation and pedestrian walkways.

- Provides a definition for the class 1, 2, and 3 electric bicycles and the addition of micromobility as an eligible use of funds for construction of walkways and bicycle transportation facilities.

Recreational Trails Program.

- Allows for funds apportioned to a State under their apportionment to be use on a recreational trail or a related project, shall be administered as if the funds were made available to carry out the Recreational Trails Program.

Updates to the Manual on Uniform Traffic Control Devices.

- Directs the Department to update the MUTCD, and to include updates necessary to provide for the protection of vulnerable road users, supporting the safe testing of automated vehicle technology and any preparation necessary for the safe integration of automated vehicles onto public streets, appropriate use of variable message signs to enhance public safety, and the minimum retro reflectivity of traffic control devices and pavement markings.

Transportation planning.

- Clarifies considerations required of Metropolitan Planning Organizations (MPO) when designating officials or representatives. This section also enhances coordination among MPOs and encourages States and MPOs to use social media and other web-based tools to encourage public participation in the transportation planning process.

Fiscal constraint on long-range transportation plans.

- Clarifies that for purposes of developing a financial plan under a metropolitan transportation plan, any years beyond the 4-year transportation improvement plan horizon shall be considered outer years for purposes of financial plan requirements.

State human capital plans.

- Requires the Secretary to encourage States to develop a voluntary human capital plan for the immediate and long-term transportation-related personnel and workforce needs of the State. These voluntary human capital plans are to be publicly available and updated at least once every 5 years.

Prioritization Process Pilot Program.

- Establishes a prioritization process pilot program to support data-driven approaches to transportation planning. This section authorizes the Secretary to 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. The purpose of the pilot program is to support data-driven approaches to planning that, on completion, can be evaluated for public benefit.

- Pilot program grants may not exceed \$2,000,000. States and MPOs that receive grants shall use funds to develop and implement a publically accessible, transparent prioritization process for the selection of projects for inclusion on the applicable long-term transportation plan. If a grant recipient has fully implemented a prioritization process, they may use any additional remaining grant funds for any transportation planning purpose. In the event that the inclusion or exclusion of a project on a transportation improvement program (TIP) or statewide transportation improvement program (STIP) deviates from the long-term transportation plan, the eligible entity is required to provide a public explanation for the decision.

Travel Demand Data and Modeling.

- Requires the Secretary to carry out a study of forecasted travel demand data compared to actual observed travel, and to use the findings of that study to inform State and MPO use of travel forecasting to evaluate the impacts of transportation investments on travel demand, to support more accurate travel demand forecasting, and to enhance the capacity of States and MPOs to forecast travel and track observed travel behavior.

Increasing safe and accessible transportation options.

- Requires each State and metropolitan planning organization to spend a minimum amount of funding for either the adoption of complete streets standards and policies, development of a complete streets prioritization plan, active and mass transportation planning, regional and megaregional planning to address travel demand through alternatives to highway travel, or transit-oriented development planning. This section provides an exemption for a State or MPO if it has Complete Streets standards and policies in place, and has developed an up-to-date prioritization plan.

Codification of One Federal Decision.

- Amends section 139 of title 23, United States Code, to provide new environmental review procedures and requirements for major projects. Under this section, the Department of Transportation is required to develop a schedule consistent with an agency average of two years to complete an environmental impact statement and requires accountability to the public when milestones are missed. Environmental documents under this section are limited to 200 pages unless a review is of unusual scope and complexity. The Secretary is also directed to work with relevant Federal agencies to adopt appropriate categorical exclusions to facilitate project delivery.

Work zone process reviews.

- Requires the Secretary to review work zone processes not more frequently than once every 5 years.

Transportation management plans.

- Requires the Secretary to clarify that only projects with a lane closure for 3 or more consecutive days are to be deemed significant and removes the requirement for a State to develop or implement a transportation management plan for any project that is not on the Interstate and that requires not more than three consecutive days of lane closures.

Intelligent transportation systems.

- Requires the Secretary to develop guidance for using existing flexibilities with respect to the systems engineering analysis. Specifically, this section requires the Secretary to ensure that the

guidance clarifies criteria for low-risk and exempt intelligent transportation system projects to minimize unnecessary delays or paperwork burdens.

Alternative contracting methods.

- Provides the Secretary flexible authority to use contracting methods available to a State under title 23 on behalf of Federal land management agencies (and Tribes under section 202) in using funds under sections 203, 204, or 308 of title 23, or section 1535 of title 31. This section requires that the Secretary solicit input from stakeholders and consult with Federal land management agencies to establish clear procedures for alternative contracting methods that are consistent with Federal procurement requirements to the maximum extent practicable.

Flexibility for projects.

- Requires the Secretary, on request by a State, and if in the public interest, to exercise all existing flexibilities under the requirements of title 23 and other requirements administered by the Secretary to expedite processes.

Improved Federal-State stewardship and oversight agreements.

- Requires the Secretary to request public comment on a template for Federal- State stewardship and oversight agreements and requires the Secretary to update existing agreements with States according to the template.

Geomatic data.

- Requires the Secretary to develop and issue, for public comment, guidance for the acceptance and use of information obtained from a non-Federal interest through geomatic techniques, including remote sensing and land surveying, cartography, geographic information systems, global navigation satellite systems, photogrammetry, or other remote means.

Evaluation of projects within an operational right-of-way.

- Establishes deadlines for the review, response, and action by Federal agencies carrying out their permit, approval, or other authorization responsibilities over preventative maintenance, preservation, or highway safety projects (including certain turn lane projects) in the operational right-of-way. This section requires Federal agencies to provide at least a preliminary evaluation of the application within 45 days and subjects Federal agencies that do not meet the requirements of this section to a reporting requirement to describe why the deadline was missed.

Preliminary engineering.

- Eliminates the requirement in section 102(b) of title 23, United States Code, that a State repay Federal-aid reimbursements for preliminary engineering costs on a project that has not advanced to right-of-way acquisition or construction within 10 years.

Efficient implementation of NEPA for Federal lands management projects.

- Allows for a Federal land management agency to more efficiently satisfy NEPA obligations by relying upon an environmental document previously prepared by the Federal Highway Administration. This section also allows for a Federal Land Management Agency to use the categorical exclusions promulgated in the implementing regulations of the Federal Highway Administration if the use of the categorical exclusion does not otherwise conflict with the

implementing regulations of the project sponsor.

National Environmental Policy Act of 1969 reporting program.

- Directs the Secretary to carry out a process to track, and annually submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report containing time to complete the NEPA process for an environmental impact statement and an environmental assessment.

Surface transportation project delivery program written agreements.

- Extends the time period for a State to have an agreement to assume the responsibilities under the National Environmental Policy Act of 1969, from a term of not more than 5 years, to allow for any State that has participated in a program under this section for at least 10 years, to have a term of 10 years.

State assumption of responsibility for categorical exclusions.

- Extends the time period for a State to assume the responsibility for determining whether certain designated activities are categorical exclusions, from a term of not more than 3 years, to a term of 5 years, in the case of a State that has assumed the responsibility for categorical exclusions under this section for not fewer than 10 years.

Early utility relocation prior to transportation project environmental review.

- Allows reimbursement with funds made available for title 23 projects for an “early utility relocation project” (defined as those relocation activities identified by the State for performance prior to completion of environmental review for the transportation project). In order for such reimbursement to occur, the early utility relocation project must subsequently be incorporated into a larger, authorized transportation project. In addition to the requirements for reimbursement, this section also outlines requirements for utility relocation prior to completion of environmental review, including that the early utility relocation project did not influence the environmental review process.

Streamlining of section 4(f) reviews.

- Establishes a deadline for interagency consultation for Section 4(f) reviews and specifies that if comments are not received within 15 days of the deadline, the Secretary shall assume a lack of objection and proceed with the action.

Categorical exclusions for projects of limited Federal assistance.

- Amends the existing categorical exclusion for projects of limited federal funding.

Certain gathering lines located on Federal land and Indian land.

- Provides the Secretary of the Interior discretion to establish a categorical exclusion for certain gathering lines that would reduce vented, flared, or avoidably lost natural gas from or vehicular traffic servicing onshore oil and gas wells on Federal land and, with tribal consent, Indian land, as described in a sundry notice or right-of-way submitted to the Bureau of Land Management or, where applicable, the Bureau of Indian Affairs.

Annual report.

- Requires the Secretary to submit to Congress an annual report describing certain projects that are five years or more behind schedule or exceed the original cost estimate for the project by \$1 billion.

Grants for charging and fueling infrastructure.

- Directs the Secretary to establish a grant program for Alternative Fuel Corridors, as well as a set-aside grant program for Community grants. These programs are designed to strategically deploy publicly accessible electric vehicle charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure along designated alternative fuel corridors or in certain other locations that will be accessible to all drivers of electric vehicles, hydrogen vehicles, propane vehicles, and natural gas vehicles. Eligible entities include a State or political subdivision of a State, a metropolitan planning organization, a unit of local government, a special purpose district or public authority with a transportation function, including a port authority, an Indian tribe, and a territory of the United States. Section 1401 would also make the process of designating alternative fuel corridors periodic and recurring, and also modifies a reporting deadline
- Eligible entities under the program are all public entities and are comprised of: a State or political subdivision of a State; an MPO; a unit of local government; a special purpose district or public authority with a transportation function; an Indian tribe; an authority entity, agency, or instrumentality of, or an entity owned by, 1 or more of the preceding eligible entities; and a group of the preceding eligible entities.
- Applications must include a description of how the eligible entity has considered public accessibility relative to the proposed project, collaborative engagement with stakeholders, the location of the proposed project, responsiveness to technology advancements, and the long-term operation and maintenance of the proposed project.
- In selecting eligible entities to receive grants, the Secretary must consider whether an application would improve alternative fueling corridor networks, meet the current or anticipated market for charging or alternative fueling infrastructure, enable or accelerate the construction of charging or alternative fueling infrastructure that would be unlikely to be completed without Federal assistance, and support a long-term competitive market for alternative fueling and charging infrastructure. Additionally, the Secretary must consider geographic diversity among applicants, the finances and experience of private entity contractors, and the adequacy of agreements between eligible entities and their private entity contractors.
- Grants for the alternative fuel corridors are to be used to contract with a private entity for acquisition and installation of publicly accessible alternative fuel vehicle charging and fueling infrastructure that is directly related to the charging or fueling of a vehicle. Such infrastructure is to be located along an alternative fuel corridor either designated under section 151, or by a State or group of States on the condition that any affected Indian tribes are consulted before the designation. Eligible entities may use a portion of grant funds to provide a private entity operating assistance for the first 5 years of operations after infrastructure installation.
- Eligibility includes propane fueling infrastructure, but limits it to infrastructure for medium- and heavy-duty vehicles.

- 50 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, schools, parks, and in publicly accessible parking facilities. These 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.
- 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.

Reduction of truck emissions at port facilities.

- Establishes a program to reduce idling and emissions at port facilities. This section requires the Secretary to study how ports would benefit from electrification and to study emerging technologies that reduce emissions from idling trucks. This section requires the Secretary to coordinate and fund projects through competitive grants that reduce port-related emissions from idling trucks. This Section requires that any project funded under a grant under this section shall be treated as a project on a Federal-aid highway. This section requires the Secretary to submit a report to Congress detailing the status and effectiveness of the program.

Formula carbon reduction program.

- Establishes a carbon reduction program to reduce transportation emissions. Eligible projects include a project to establish or operate a traffic monitoring, management, and control facility or program, including advanced truck stop electrification systems, a public transportation project that is eligible for assistance under section 142 (Public Transportation), the construction, planning, and design of on-road and off-road trail facilities for pedestrians and bicyclists, a project for advanced transportation and congestion management technologies, a project for the deployment of infrastructure-based intelligent transportation systems capital improvements, the installation of vehicle to infrastructure communications equipment, including retrofitting dedicated short-range communications (DSRC) technology, a project to replace street lighting and traffic control devices with energy-efficient alternatives, and the development of a carbon reduction strategy.
- This section also establishes that 2 years after the date of enactment a State, in consultation with any metropolitan planning organization designated within the State, shall develop a carbon reduction strategy that supports efforts to reduce greenhouse gas emissions, identifies projects and strategies to reduce transportation emissions, supports the achievement of targets for the reduction of transportation emissions, quantifies the total carbon emissions from the production, transport, and use of materials used in the construction of transportation facilities within the State, and is appropriate to the population density and context of the State. 65 percent of funding under this program would be suballocated by population.
- Also permits, at the request of a State, that the Secretary shall provide technical assistance in the development of the carbon reduction strategy

Congestion relief program.

- Subsection (a) establishes a congestion relief program to provide competitive grants to States, local governments, and metropolitan planning organizations, for projects in large urbanized areas to advance innovative, integrated, and multimodal solutions to congestion relief in the most congested metropolitan areas of the United States.

- The goals of the congestion relief program are to reduce highway congestion, economic and environmental costs related to congestion, and to optimize existing highway capacity and usage of transit systems that provide alternatives to highways. To achieve these goals, the program allows States and MPOs to compete for grants for eligible projects within urbanized areas containing populations of more than 1,000,000 people. Grant awards shall be not less than \$10,000,000. Eligible projects consist of planning, design, implementation, and construction activities to achieve program goals, including the deployment and operation of mobility services, integrated congestion management systems, and systems that implement or enforce high occupancy vehicle toll lanes, cordon pricing, parking pricing, or congestion pricing. Incentive programs that encourage travelers to carpool or use non-highway travel modes are also included. When selecting grants, the Secretary shall give priority to eligible projects located in urbanized areas that are experiencing high degrees of recurrent congestion. The Federal cost-share shall 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 not approve the use of tolls on the Interstate System under the program in more than 10 urbanized areas.
- Subsection (b) of Section 1404 amends section 129(a) of title 23 to require toll facilities on the Interstate System constructed or converted after the date of enactment to allow high occupancy vehicles, transit, and paratransit vehicles to use the facility at a discounted rate or without charge unless the public authority determines that the number of such discounted vehicles would reduce the travel time reliability of the facility.

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant program.

- Establishes a formula and competitive grant program to help States improve the resiliency of transportation infrastructure.
- Resilience grants comprise resilience improvement grants, community resilience and evacuation route grants, and at-risk coastal infrastructure grants.
- This section describes the required plan contents of a voluntary resilience improvement plan, and allows a State or eligible entity that receives a grant to have the non-Federal share of projects reduced if the State or eligible entity meets certain voluntary planning requirements. Specifically, the non-Federal share of projects carried out with PROTECT funds can be reduced by 7 percent if a State or eligible entity develops a resiliency improvement plan, and reduced by an additional 3 percent if a State or eligible entity incorporates a resiliency improvement plan within its long-range statewide transportation plan or metropolitan transportation plan.

Healthy Streets program.

- Establishes a discretionary grant program, to be known as the “Healthy Streets program”, to provide grants to eligible entities to deploy cool pavements and porous pavements and to expand tree cover. The goals of the program are to mitigate urban heat islands, improve air quality, and reduce the extent of impervious surfaces, storm water runoff and flood risks, and heat impacts to infrastructure and road users.

Additional deposits into Highway Trust Fund.

- Repeals section 105 of title 23. Because STRA authorizes funding for Federal-aid highway and highway safety programs for fiscal years 2022 through 2026, there is no need for additional funding to be automatically authorized in the manner contemplated under section 105 of title 23.

Stopping threats on pedestrians.

- Establishes a grant program to provide assistance to State DOTs and local government entities for bollard installation projects designed to prevent pedestrian injuries and acts of terrorism in areas used by large numbers of pedestrians. The program is authorized for appropriations at \$5,000,000 for each of fiscal years 2022 through 2026.

Transfer and sale of toll credits.

- Establishes a toll credit exchange on a pilot basis to enable the Secretary to evaluate the feasibility of and demand for a toll credit marketplace through which States could sell, transfer, or purchase toll credits. The Secretary may only select up to 10 States to participate in the pilot program, which allows originating States to transfer or sell toll credits pursuant to section 120(i) of title 23, United States Code. This section allows recipient States to use a credit toward the non-Federal share requirement for any funds made available under title 23 or chapter 53 of title 49, United States Code. Under this section, an originating State shall use the proceeds from the sale of a credit for the construction costs of any title 23 eligible project within that State. Originating and recipient States shall submit to the Secretary a written notification not later than 30 days after the date on which a credit is transferred or sold. Under this section, the Secretary must verify the amount of unused toll credits and provide a publicly accessible website where originating States shall post the verified amount of toll credits available for sale or transfer. The Secretary shall submit an initial and final report to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives not later than 1 and 3 years, respectively, after the date of establishment of the pilot program.

Study of impacts on roads from self-driving vehicles.

- Directs the Secretary to initiate a study on the existing and future impacts of self-driving vehicles to transportation infrastructure, mobility, the environment, and safety, including impacts on the Interstate System, urban roads, rural roads, corridors with heavy traffic congestion, and transportation systems optimization. The study shall include specific recommendations for both rural and urban communities regarding the impacts of self-driving vehicles on existing transportation system capacity.

Disaster relief mobilization study.

- Directs the Secretary to carry out a study to determine the utility of incorporating the use of bicycles into the disaster preparedness and disaster response plans of local communities. The study will look at a vulnerability assessment of the infrastructure in local communities that supports active transportation, including bicycling, walking, and personal mobility devices, with a particular focus on areas in communities that have low levels of vehicle ownership and lack sufficient active transportation infrastructure routes to public transportation. Not later than 2 years after enactment, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that describes the results of the study carried out and provides recommendations, if any, relating to the methods by which to incorporate bicycles into disaster preparedness and disaster response plans of local communities and improvements to training

programs.

Appalachian Regional Commission.

- Reauthorizes the Appalachian Regional Commission (ARC) at \$200,000,000 for each of fiscal years 2022 through 2026, including \$5,000,000 per year to establish an Appalachian Regional Energy Hub and \$20,000,000 per year to deploy high-speed broadband in the Appalachian region. This section also adds Catawba and Cleveland counties (in North Carolina) and Union county (in South Carolina) as part of the Appalachian region for purposes of the ARC.

Denali Commission

- Amends the Denali Commission Act of 1998 by directing that funds transferred to the Commission from another Federal agency not be subject to any requirements that applied to the funds before the transfer, including a requirement in an appropriations act or a requirement or regulation of the agency from which the funds are transferred. This section also authorizes for appropriations \$20 million for each of fiscal years 2022 through 2026.

Requirements for transportation projects carried out through public-private partnerships.

- Contains transparency requirements for projects carried out through public-private partnerships with an estimated cost of \$100,000,000 or more. Specifically, this section requires that as a condition to receiving Federal financial assistance for a project, a public partner must disclose and certify certain information relating to the private partner's satisfaction of the terms of the public-private partnership agreement not later than 3 years after the date of the opening of the project to traffic. This section also requires the Secretary to provide Congress with notification when projects are carried out through public-private partnerships. This section also requires project sponsors receiving Federal loans or grants to include a detailed value for money analysis within the financial plan if the project sponsor intends to carry out the project through a public-private partnership. This section makes such analysis an eligible expense under the Surface Transportation Block Grant program.

Reconnecting communities pilot program.

- Establishes a community connectivity pilot program through which eligible entities may apply for planning funds to study the feasibility and impacts of removing, retrofitting, or mitigating an existing transportation facilities that create barriers to mobility, access, or economic development, and for construction funds to carry out a project to remove, retrofit or mitigate an eligible facility and, if appropriate, to replace it with a new facility.
- An eligible facility includes a limited access highway, viaduct, or any other principal arterial facility that creates a barrier to community connectivity, including barriers to mobility, access, or economic development, due to high speeds, grade separations, or other design factors.
- This section allows the Secretary to award planning grants and provide technical assistance to eligible entities. Planning grant awards may not exceed \$2,000,000, and the Federal cost-share for a project may not exceed 80 percent.
- This section also allows the Secretary to award capital construction grants to owners of eligible facilities for eligible projects for which all necessary feasibility studies (and other planning activities) have been completed. Eligible projects include the removal and replacement of eligible facilities. Capital construction grants must be at least \$5,000,000. The Federal cost-share for a project may not exceed 50 percent, and the maximum Federal involvement shall not

exceed 80 percent. This subsection also allows grantees to form community advisory boards to help achieve inclusive economic development benefits with respect to the project for which a grant is awarded.

- The Secretary may not use more than \$15,000,000 during the period of fiscal years 2022 through 2026 to provide technical assistance under this section.

Cybersecurity tool; cyber coordinator.

- Requires the Federal Highway Administration to develop a tool to assist transportation authorities in identifying, detecting, protecting against, responding to, and recovering from cyber incidents. This section requires the FHWA to use the cybersecurity framework established by the National Institute of Standards and Technology, to establish a structured cybersecurity assessment and development program, and to provide for a period of public review and comment on the tool. This section requires the FHWA to designate an office as a “cyber coordinator” for monitoring, alerting, and advising transportation authorities of cyber incidents. It is the intention of the Committee that the scope of this section be limited to actions undertaken by the FHWA and those State and local authorities within its oversight jurisdiction, and that those actions be coordinated with other cybersecurity-related efforts elsewhere in the Department.

Report on emerging alternative fuel vehicles and infrastructure.

- Directs the Secretary to make publicly available a report that includes an evaluation of emerging alternative fuel vehicles and projections for potential locations of emerging alternative fuel vehicle owners during the 5-year period beginning on the date of submission of the report, identifies areas where emerging alternative fueling infrastructure will be needed to meet the current and future needs of drivers during the 5-year period beginning on the date of submission of the report, identifies specific areas, such as a lack of pipeline infrastructure, that may impede deployment and adoption of emerging alternative fuel vehicles, includes a map that identifies concentrations of emerging alternative fuel vehicles to meet the needs of current and future emerging alternative fueling infrastructure, estimates the future need for emerging alternative fueling infrastructure to support the adoption and use of emerging alternative fuel vehicles, and includes a tool to allow States to compare and evaluate different adoption and use scenarios for emerging alternative fuel vehicles, with the ability to adjust factors to account for regionally specific characteristics.

Nonhighway recreational fuel study.

- Authorizes a study and recurring report to produce the best available estimate of the total amount of fuel taxes paid by users of non-highway recreational vehicles into the Highway Trust Fund. This section provides that the study will be used to assist Congress in determining an appropriate funding level for the recreational trails program.

Buy America.

- Requires the Secretary to issue a public notice 15 days in advance of issuing a waiver for the Buy America requirement for Federal-aid projects and to report to Congress annually on all such waivers.

High priority corridors on the National Highway System.

- Amends section 1105 of the Intermodal Surface Transportation Efficiency Act by adding new future Interstate designations along corridors in North Carolina, Kentucky, Arkansas and Mississippi. This section also requires the Comptroller General to submit a report to Congress

on the safety and infrastructure impacts, if any, of the continuation of currently applicable weight limits on those specific highway segments after those segments are open for operation as part of the Interstate system.

Interstate weight limits.

- Amends section 127 of title 23, United States Code to continue current weight limits by adding exemptions to Federal truck weight limits along specific corridors in North Carolina and Kentucky should any such corridors become designated as a route on the Interstate System.

Report on air quality improvements.

- Requires the Comptroller General of the United States to conduct an evaluation of CMAQ that includes consideration of reductions in certain emissions that have resulted from projects under the program, the cost-effectiveness of such reductions, the results of investments under the program in certain communities, the effectiveness of certain performance measures established for traffic congestion and on-road mobile source emissions, and the extent to which the program lacks eligibilities for additional project types that would be likely to contribute to higher air quality.

Roadside highway safety hardware.

- Requires the Secretary, to the greatest extent possible, to develop a third- party verification of roadside safety hardware testing results from crash test labs and to ensure the independence of crash test labs when lab employees test devices that were developed within the parent organization of the employee. This section encourages FHWA to continue issuing Federal-aid eligibility letters for roadside safety hardware as a service to States until the third-party verification processes are complete. If at any point FHWA seeks to discontinue issuing the letters, FHWA must submit a Report to Congress describing the third party verification process that will replace the FHWA issuance of eligibility letters.

Permeable pavements study.

- Requires the Secretary to conduct a study on the effects of permeable pavements on flood control and to develop related models and best practices. This section requires the Secretary to make a report on the results of the study available publicly.

Emergency relief projects.

- Requires the Secretary to revise the Emergency Relief (ER) program manual of FHWA to: include a definition of resilience; identify procedures that may be used to incorporate resilience into ER projects; encourage the use of complete streets design principles in ER projects; develop best practices for improving the use of resilience in ER projects; and to develop and implement a process to track the consideration of resilience as part of the ER program as well as the cost of ER projects.

Study on stormwater best management practices.

- Requires the Secretary and Administrator of EPA to offer to enter into an agreement with TRB to conduct a study on stormwater runoff from highways and pedestrian facilities and provide recommendations regarding potential stormwater management recommendations for State departments of transportation. The study will also examine the potential for the Secretary to assist

State departments of transportation in implementing and communicating stormwater management practices for highways and pedestrian facilities.

Stormwater best management practices reports.

- Requires the Administrator of FHWA to update and reissue two existing stormwater best management practices reports to reflect new information and advancements in the field. In addition, this section instructs the Administrator to continue updating the two reports not less frequently than once every five years, unless the reports are either withdrawn or incorporated into regulations.

Invasive plant elimination program.

- Establishes a new grant program to fund projects by States to eliminate or control existing invasive plants or prevent introduction of or encroachment by new invasive plants along and in areas adjacent to transportation corridor rights-of-way. The term “invasive plant” means a nonnative plant, tree, grass, or weed species. This section requires the Secretary to prioritize projects that utilize native plants and wildflowers. This section limits amounts to be used for equipment to not more than ten percent and administrative and indirect costs to not more than five percent. This section requires each grantee to coordinate with local authorities and to report annually on the uses of the funds. This section limits the Federal share to 50 percent except in the case of projects that utilize native plants and wildflowers which are eligible for 75 percent Federal share. This section authorizes the program for appropriations at \$50,000,000 per year for each of fiscal years 2022 through 2026.

Over-the-road bus tolling equity.

- Amends title 23 to ensure there is accountability for equal access to certain tolled facilities between over-the-road buses and public transportation buses. This section adds a reporting requirement for public authorities, and further extends an existing audit requirement to include an audit for reporting compliance.

Bridge terminology.

- Modernizes bridge terminology used in title 23.

Technical corrections.

- Makes technical corrections to title 23 of the United States Code.

Working group in covered resources.

- Directs the Secretary to convene a working group to study the use of aggregate resources in federal transportation projects and how the proximity of aggregate resources impacts costs and the environment. The group will also examine how state, tribal and local transportation and planning agencies may consider aggregated resources when developing projects, and identify measures the federal government, state, tribal and local transportation and planning agencies may take to preserve currently identified aggregate resources for future development. The results of the study are submitted in a report to Congress.

Blood transport vehicles.

- Permits public authorities with jurisdiction over high-occupancy vehicle (HOV) facilities to allow blood transport vehicles to use the HOV facility under certain circumstances.

Pollinator-friendly practices on roadsides and highway rights-of-way.

- Establishes a program to provide grants to carry out activities that benefit pollinators on roadsides and highway rights-of-way, the section authorizes for appropriations \$2 million for each of fiscal years 2022 through 2026 for the program.

Active transportation infrastructure investment program.

- Directs the Secretary to carry out an active transportation infrastructure investment program that provides grants on a competitive basis to eligible entities. This section also requires the Secretary to initiate a rulemaking that encourages the use of programmatic categorical exclusion, expedited procurement techniques, and other best practices in regards to connecting active transportation systems.
- Eligible projects include construction of active transportation networks that connect people with public transportation, businesses, workplaces, schools, residences, recreation areas, and other community activity centers. Greater federal-share (up to 100 percent) would be available for projects that serve communities with a poverty rate over 40 percent. This section authorizes for appropriations \$200 million for each of fiscal years 2022 through 2026 for the program.

Transportation Infrastructure Finance and Innovation Act of 1998 amendments.

- Makes several updates to the Transportation Infrastructure Finance and Innovation Act (TIFIA) program intended to increase program utilization, streamline the application process for assistance, and increase transparency in the vetting process for projects seeking TIFIA funds. This section extends the period during which contingent commitments under a master credit agreement must result in a financial close from 3 years to 5 years. This section adds eligibility for public infrastructure located near transportation facilities to promote transit-oriented development subject to a September 30, 2025 letter of interest deadline and a cap on the funding available for such projects. This section adds eligibility for airport-related projects subject to a September 30, 2024 letter of interest deadline and a cap on the funding available for such projects, and requires the Secretary to report to Congress on the impact of this new eligibility on the use of TIFIA funds including recommendations for permanent modifications to the program. This section adds eligibility for projects to acquire plant and wildlife habitats pursuant to a transportation project environmental impact mitigation plan. This section raises the threshold for securing multiple credit rating agency opinions from \$75,000,000 to \$150,000,000. This section requires the Secretary to provide applicants with an estimate of the timeline of application approval or disapproval and, to the maximum extent practical, such estimate shall be less than 150 days from the submission of a letter of interest. In the case of government borrowers, this section removes the requirement that loans be prepaid with excess revenues so long as those revenues are used for surface transportation projects. This section also adds new criteria to the streamlined application process for public agency borrowers intended to increase the likelihood that the Secretary will be able to move more projects through the process expeditiously. This section extends the authority to use a portion of TIFIA funding for administrative costs through fiscal year 2026. This section increases overall transparency in the TIFIA process by requiring DOT to publish status reports online. This section also extends the repayment terms for TIFIA loans for certain assets to the lesser of 75 years, or 75 percent of an asset's useful life to lower the financing costs for these assets.
- Section 2001 also extends the authorization of the State Infrastructure Bank program through

fiscal year 2026.

Strategic Innovation for Revenue Collection.

- Reauthorizes and renames the Surface Transportation System Funding Alternatives Program, to continue the program 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 level. The section expands eligible applicants from States DOTs, to include a local government or a group of local governments, a metropolitan planning organization, and a group of metropolitan planning organizations. The section also increases the federal-share for the program to 80 percent of the total cost of a project carried out by an eligible entity that has not otherwise received a grant under this section, and 70 percent of the total cost of a project carried out by an eligible entity that has received at least 1 grant previously.

National Motor Vehicle Per-Mile User Fee Pilot.

- Directs the Secretary, in coordination with the Secretary of the Treasury, to establish a pilot program to demonstrate a national motor vehicle per-mile user fee. In carrying out the pilot program, the Secretary, in coordination with the Secretary of the Treasury, shall provide different methods that volunteer participants can choose from to track motor vehicle miles traveled, solicit volunteer participants from all 50 States, the District of Columbia, and the Commonwealth of Puerto Rico, ensure an equitable geographic distribution by population among volunteer participants, and include commercial vehicles and passenger motor vehicles. For the purposes of the pilot program, the Secretary of the Treasury shall establish, on an annual basis, per-mile user fees for passenger motor vehicles, light trucks, and medium- and heavy-duty trucks, which amount may vary between vehicle types and weight classes to reflect estimated impacts on infrastructure, safety, congestion, the environment, or other related social impacts.
- The section also establishes a Federal System Funding Alternative Advisory Board to assist with providing the Secretary with recommendations related to the structure, scope, and methodology for developing and implementing the pilot program, carrying out the public awareness campaign, and developing a report. Not later than 1 year after the date on which volunteer participants begin participating in the pilot program, and each year thereafter for the duration of the pilot program, the Secretary and the Secretary of the Treasury shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that includes an analysis of whether the objectives were achieved, how volunteer participant protections were complied with, whether motor vehicle per-mile user fees can maintain the long-term solvency of the Highway Trust Fund and improve and maintain the surface transportation system, which shall include estimates of administrative costs related to collecting such motor vehicle per mile user fees, how the privacy of volunteers was maintained, and equity impacts of the pilot program, including the impacts of the pilot program on low-income commuters.

Performance Management Data Support Program.

- Extends the authorization and provides a funding source for FHWA to develop, use, and maintain data sets and data analysis tools to MPOs and States in carrying out performance management analyses and requirements. A national performance management program

provides information to help Federal, State, and local governments and others in their decision-making as they consider strategic transportation investments and policies.

Data Integration Pilot Program.

- Authorizes for appropriation from the General Fund, \$2,500,000 for each of fiscal years 2022 through 2026 to research and develop models that integrate real-time information, including weather conditions, roadway conditions, and information from emergency responders. This section authorizes the Secretary to facilitate data integration between DOT and the National Weather Service, as well as address safety, resiliency, and vulnerability threats, by providing tools to help public safety officials and end users make important transportation decisions.

Emerging technology research pilot program.

- Establishes a pilot program to conduct emerging technology research, specifically including advanced and additive manufacturing (3-D printing) technologies, as well as research into activities to reduce the impact of automated driving systems and advanced driver automation systems technologies on pavement and infrastructure performance, and to improve transportation infrastructure design. This section authorizes for appropriation from the General Fund \$5,000,000 for each of fiscal years 2022 through 2026 to support the pilot program.

Research and technology development and deployment.

- Expands the objectives of the Turner Fairbank Highway Research Center to support research on non-market ready technologies in consultation with public and private entities. This section establishes an open challenge and research proposal pilot program that provides grants for proposals to research needs or challenges identified or determined to be important by the Secretary. This section also expands the Technology and Innovation Deployment Program by adding a focus on accelerated market readiness efforts, and increases funding for the program, including \$100,000,000 in new and innovative construction technologies for smarter, accelerated project delivery. This section extends the authorization for the Accelerated Implementation and Deployment of Pavement Technologies program and adds pavement-related considerations to enhance the environment and promote sustainability in the reporting under this program. The modified Advanced Transportation Technologies and Innovative Mobility Deployment program includes intermodal connectivity and a rural set-aside of not less than 20 percent. This section also expands the eligibility under this program to include retrofitting dedicated short-range communications (DSRC) technology deployed as part of an existing pilot program to cellular vehicle-to-everything technology, as well as advanced transportation technologies. This section also authorizes a new Center of Excellence on New Mobility and Automated Vehicles to research the impact of highly automated vehicles and new mobility, such as docked and dockless bicycles and electric scooters.

Workforce development, training, and education.

- Provides authority to allow States greater flexibility to address surface transportation workforce development, training, and education needs, including activities that address current workforce gaps, such as work on construction projects. This section permits States to obligate funds for purposes such as pre-apprenticeships, apprenticeships, and career opportunities for on-the-job training, and vocational school support. This section modifies an existing grant program under section 504(f) in title 23 that requires the Secretary to make workforce development grants. This section expands the eligibility of educational institutions beyond institutions of higher education.

This section also authorizes the Secretary to award grants for training deployment purposes beyond the development, testing, and review of new curricula and education programs. This section encourages coordination and partnership with stakeholders, including industry, construction, labor organizations, and relevant government agencies, such as the U.S. Department of Labor Employment and Training Administration, the U.S. Department of Education, and State, regional, and local partners, such as Workforce Development Boards. This section also establishes minimum reporting requirements for grant recipients to establish accountability in the award of grants.

Wildlife-vehicle collision research.

- Adds animal detection systems to reduce the number of wildlife-vehicle collisions as eligible for priority consideration for intelligent transportation system (ITS) research projects. This section amends membership of the advisory committee required to advise the Secretary on carrying out ITS programs.

Transportation Resilience and Adaptation Centers of Excellence.

- Directs the Secretary to designate 10 regional Centers of Excellence for Resilience and Adaptation and 1 national Center of Excellence for Resilience and Adaptation, which shall serve as a coordinator for the regional Centers, to receive grants to advance research and development that improves the resilience of regions of the United States to natural disasters, extreme weather, and the effects of climate change on surface transportation infrastructure and infrastructure dependent on surface transportation. Subject to the availability of appropriations, the Secretary shall provide to each Center of Excellence a grant of not less than \$5,000,000 for each of fiscal years 2022 through 2031 to carry out the activities.
- Activities include supporting climate vulnerability assessments informed by climate change science, including national climate assessments produced by the United States Global Change Research Program under section 106 of the Global Change Research Act of 1990 (15 U.S.C. 2936), relevant feasibility analyses of resilient transportation improvements, and transportation resilience planning, development of new design, operations, and maintenance standards for transportation infrastructure that can inform Federal and State decision making, research and development of new materials and technologies that could be integrated into existing and new transportation infrastructure, development, refinement, and piloting of new and emerging resilience improvements and strategies, including natural infrastructure approaches and relocation, development of and investment in new approaches for facilitating meaningful engagement in transportation decision making by local, Tribal, regional, or national stakeholders and communities, technical capacity building, workforce development and training, development and dissemination of data, tools, techniques, assessments, and information that informs Federal, State, Tribal, and local government decision making, policies, planning, and investments, education and outreach regarding transportation infrastructure resilience, and technology transfer and commercialization.

Transportation Access Pilot Program.

- Establishes a transportation pilot program to develop or procure an accessibility data set and make it available to each eligible entity selected to participate in the pilot program, to improve transportation planning. The pilot will measure the level of access by surface transportation modes to important destinations, which may include jobs, health care facilities, child care facilities,

educational and workforce training facilities, housing, food sources, points within the supply chain for freight commodities, domestic and international markets, and connections between surface transportation modes. The pilot will assess the change in accessibility that would result from new transportation investments.

Definition of Secretary.

- Defines the term “Secretary” as the Secretary of the Interior

Environmental reviews for certain tribal transportation facilities.

- Aligns the Department of the Interior’s process of expediting environmental reviews for tribal transportation safety projects to be similar to the Department of Transportation’s process.

Programmatic agreements for tribal categorical exclusions.

- Allows the Secretary of the Interior or the Secretary of Transportation to enter into programmatic agreements with Indian tribes.

Use of certain tribal transportation funds.

- Removes the 3 percent set-aside for the Tribal Transportation Facility Bridges program and specifies funding eligibilities for the same program.

Bureau of Indian Affairs road maintenance program.

- Authorizes \$50,000,000 for the Road Maintenance Program for fiscal year 2022, with increases of \$2,000,000 per year through fiscal year 2026.

Study of road maintenance on Indian land.

- Directs the Secretary of the Interior, in consultation with the Secretary of Transportation, to study and address the deferred maintenance backlog of existing roads on Indian land.

Maintenance of certain Indian reservation roads.

- Allows the Commissioner of U.S. Customs and Border Protection to transfer funds to the BIA to maintain or repair roads under the jurisdiction of the BIA.

Tribal transportation safety needs.

- Directs the Secretary, in consultation with the Secretary of DOI, Indian tribes, and Alaska Native villages to develop best practices and create a standardized motor vehicle crash report form. Tribes could voluntarily use this crash report form to capture data and communicate with State departments of transportation. This section directs the Bureau of Indian Affairs to use the Incident Management Analysis and Reporting System form of the applicable State to report motor vehicle crash data. This section also modifies the set-aside amount for the Tribal Transportation Program Safety Fund from 2 percent to 4 percent.

Office of Tribal Government Affairs.

- Establishes an Assistant Secretary for Tribal Government Affairs under the DOT, who shall be appointed by the President but not Senate confirmed.

Section by Section: Surface Transportation Investment Act of 2021

Title VI – Multimodal and Freight Transportation

SUBTITLE A – MULTIMODAL FREIGHT POLICY

Office of Multimodal Freight Infrastructure and Policy.

- This section would establish an Office of Multimodal Freight Infrastructure and Policy within the Department of Transportation (DOT). Headed by an Assistant Secretary of Multimodal Freight, the Freight Office would be a one-stop-shop responsible for developing and managing freight policy and funding programs within the DOT.

Updates to National Freight Strategic Plan.

- This section would update the National Freight Strategic Plan to include best practices for reducing environmental impacts, consider potential impacts of the freight system on rural and historically-disadvantaged communities, strategies for decarbonization, and the impacts of e-commerce on the national multimodal freight system.

State Collaboration with National Multimodal Freight Network.

- This section would increase the amount of mileage that a State can propose adding to the National Multimodal Freight Network.

Improving State Freight Plans.

- This section would require State freight plans to include supply chain cargo flows, an inventory of commercial ports, findings and recommendations from any multi-State freight compacts, the impacts of e-commerce on freight infrastructure, the considerations of military freight, and an assessment of truck parking facilities in the State. The section would also change the frequency with which a State must update its freight plan from every five years to every four years.

Implementation of National Multimodal Freight Network.

- This section would require the Secretary of Transportation (Secretary) to report to relevant Congressional committees on the status of the final National Multimodal Freight Network as required by the Fixing America's Surface Transportation Act of 2015 (P.L. 114-94).

Multi-State Freight Corridor Planning.

- This section would authorize States and certain other local governmental entities that are regionally linked with an interest in a specific multi-State freight corridor to enter into multi-State compacts to promote the improved mobility of goods. This section would require the Secretary to establish a grant program to provide financial assistance to compacts in amounts up to \$2 million for a new multi-State compact and \$1 million for an existing multi-State compact.

State freight advisory committees.

- This section would add to the makeup and role of State freight advisory committees, and lists State freight advisory committee member qualifications.

SUBTITLE B – MULTIMODAL INVESTMENT

National Infrastructure Project Assistance.

- This section would establish and authorize \$10 billion over five years for the National Infrastructure Project Assistance Program. This program would provide single- or multi-year grants to projects generating national or regional economic, mobility, or safety benefits for large and smaller-scale projects. Eligible projects include highway or bridge projects, freight intermodal or freight rail projects, railway-highway grade separation or elimination projects, intercity passenger rail projects, and certain public transportation projects.

Sec. 6202. Local and Regional Project Assistance.

- This section would authorize \$1.5 billion a year for the Local and Regional Project Assistance Program (the RAISE/BUILD program) to provide grants for surface transportation projects that will have significant local or regional impacts. Eligible projects include highway or bridge projects, passenger or freight rail projects, port infrastructure projects, and surface transportation components of airport projects, among other surface transportation projects. The section would limit the size of each grant to \$25 million and provide an equal split between rural and urban areas.

National Culvert Removal, Replacement, and Restoration Grant Program.

- This section would authorize \$800 million a year for a National Culvert Removal, Replacement, and Restoration Program to provide grants to States, local governments, and Tribes to address anadromous fish passage as well as provide funding for certain freshwater impacts to marine fish and shellfish species. Requires the Secretary to consult with the Undersecretary of Commerce for Oceans and Atmosphere to prioritize projects that would have a meaningful impact on declining stocks.

Sec. 62 National Multimodal Cooperative Freight Research Program.

- This section would authorize \$3.75 million annually for a national cooperative freight transportation research program. This section would direct the Secretary to enter into agreement with the National Academy of Sciences to establish an advisory committee to recommend a national research agenda on ways to improve the efficiency and resiliency of freight movement.

Rural and Tribal Infrastructure Advancement.

- This section would provide the Secretary an average of \$2 million a year to establish a pilot program within the Build America Bureau to provide assistance to rural and Tribal communities. The pilot would provide financial, technical, and legal assistance to help rural and Tribal communities with development phase activities when evaluating potential transportation projects.

SUBTITLE C – RAILROAD REHABILITATION AND IMPROVEMENT FINANCING REFORMS

Railroad Rehabilitation and Improvement Financing Codification and Reforms.

- This section would codify the Railroad Rehabilitation and Improvement Financing (RRIF) program in title 49 and makes reforms to the RRIF program including:
 - Adding landside port infrastructure as an eligible project category,
 - Making permanent the transit-oriented development project eligibility,
 - Codifying the RRIF Express program,

- Providing \$50 million each year to subsidize credit risk premiums, up to \$20 million per loan, and requiring those premiums to be refunded upon repayment.

Substantive Criteria and Standards.

- This section would require the Secretary to update the publicly available credit program guide.

Semi-Annual Report on Transit-Oriented Development Eligibility.

- This section would require the Secretary to submit a report to Congress within six months of enactment, and biannually thereafter, that identifies the number of applicants that sought a RRIF loan for a transit-oriented development project, the number of loans provided to such applicants, and the reasons for providing or declining to provide the requested loan for projects.

Title II – Rail

Sec. 7001. Short title.

SUBTITLE A – AUTHORIZATION OF APPROPRIATIONS

Grants to Amtrak.

- This section would authorize appropriations for grants to Amtrak for activities associated with the Northeast Corridor and the National Network. This section also allocates funding for oversight, the State-Supported Route Committee, the Northeast Corridor Commission, Interstate Rail Compacts, compliance with the Americans with Disabilities Act, and corridor development. In total the bill provides an average of \$2.5 billion a year for the National Network, and an average of \$1.3 billion a year for the Northeast Corridor.

Federal Railroad Administration.

- This section would authorize appropriations for the operations of the Federal Railroad Administration (an average of \$263 million a year) and for activities associated with the agency's railroad research and development activities (an average of \$45 million a year). This section also authorizes the Secretary to withhold funding for certain Transportation Technology Center construction activities and for Rail Research and Development Center of Excellence grants.

Consolidated Rail Infrastructure and Safety Improvements Grants.

- This section would authorize \$1 billion a year for the Consolidated Rail Infrastructure and Safety Improvements grant program.

Railroad Crossing Elimination Program.

- This section would authorize \$500 million a year for the new Railroad Crossing Elimination grant program. This includes a small set-aside to carry out a highway-rail grade crossing safety information and education program.

Restoration and Enhancement Grants.

- This section would authorize \$50 million a year for the Restoration and Enhancement grants program.

Federal-State Partnership for Intercity Passenger Rail Grants.

- This section would authorize \$1.5 billion a year for the Federal-State Partnership for Intercity Passenger Rail grants program.

Amtrak Office of Inspector General.

- This section authorizes an average of \$27.5 million a year for the Office of Inspector General of Amtrak.

SUBTITLE B – AMTRAK REFORMS

Amtrak Findings, Mission, and Goals.

- This section would amend Amtrak’s mission and goals to emphasize its role in providing service to rural communities, recognize the value and importance of long-distance routes, and encourage Amtrak to maximize the benefits of the Federal investments.

Composition of Amtrak’s Board of Directors.

- This section would revise the composition of Amtrak’s Board of Directors to ensure representation across the Amtrak network, and would require regular engagement with the disability community and Amtrak employees.

Station Agents.

- This section would require that Amtrak ensure at least one Amtrak ticket agent is employed at each station building that averages at least 40 passengers per day.

Increasing Oversight of Changes to Amtrak Long-Distance Routes and Other Intercity Services.

- This section would require Amtrak to include information regarding any change or plans to change a route, frequency of service, or station stops in its annual operations report and its general and legislative annual report to Congress.

Improved Oversight of Amtrak Accounting.

- This section would require the Secretary, in consultation with Amtrak, to define, maintain, and periodically update an account structure and improve accounting methodologies, as necessary, to support the Northeast Corridor and the National Network. This section would also provide that Amtrak, in consultation with DOT, shall maintain and implement any account structures and improvements to enable Amtrak to produce sources and uses statements for each service line and each asset line that identifies sources, uses of revenues, appropriations, and transfers.

Improved Oversight of Amtrak Spending.

- This section would require the Secretary to establish substantive and procedural requirements, including schedules, for Amtrak grant requests. In their grant requests, Amtrak would have to report a number of specific details, including to categorize and identify the amount of funds each service type receives and spends by operating expenses, debt service, capital expenses, and contingency levels; describe the operations, services, programs, projects, and other activities to be funded, by category; provide the estimated projected scope, schedule, and budget necessary to complete each project and program; describe the performance measures used to quantify expected and actual project outcomes and benefits; and describe the status of efforts to improve Amtrak’s safety culture.

Increasing Service Line and Asset Line Plan Transparency.

- This section would redefine business lines as “service lines” and require Amtrak to submit annual updates on financial sources, uses statements, and forecasts to Congress. The section also would require Amtrak to provide information on access services of Amtrak-owned or controlled infrastructure and facilities as a part of the five-year service line plans, to jointly develop its five-year service line plans with the Secretary, and to submit the State-supported routes service line plan to State-Amtrak Intercity Passenger Rail Committee.

Passenger Experience Enhancement.

- This section would remove the requirement that food and beverage services on trains may only be provided if their revenues break even during a fiscal year. This section would also require Amtrak to establish a working group to develop recommendations to improve Amtrak’s onboard food and beverage services. Amtrak must submit a plan to implement the recommendations to Congress.

Amtrak Smoking Policy.

- This section would require Amtrak to prohibit smoking, including the use of electronic cigarettes, onboard Amtrak trains.

Protecting Amtrak Routes through Rural Communities.

- This section would prohibit Amtrak from discontinuing, reducing the frequency of, suspending, or substantially altering the route of rail service on any segment of any long-distance route if Amtrak receives adequate funding for that route.

State-Supported Route Committee.

- This section would require the State-Amtrak Intercity Passenger Rail Committee (SAIPRC) to update its cost allocation methodology to improve accountability and transparency, while still requiring States to pay all costs attributable to their services, and to report to Congress on the updated methodology. This section would also direct Amtrak to provide monthly invoices to each State as well as the SAIPRC that describes operating costs of State-supported routes. This section would require Amtrak to consult with stakeholders early in the development of any new State-supported route.

Enhancing Cross Border Service.

- This section would require Amtrak to report to Congress on how to improve Amtrak passenger rail service between the United States and Canada. The report would identify challenges to Amtrak operations in Canada, such as delays associated with customs and immigration inspections.

Creating Quality Jobs.

- This section would prohibit Amtrak from contracting out railroad work covered by a collective bargaining agreement during the time such an employee has been laid off and has not been recalled to perform such work.

SUBTITLE C – INTERCITY PASSENGER RAIL POLICY

Northeast Corridor Planning.

- This section would require the Northeast Corridor Commission to create a service development plan, to be updated every five years, and to create an annual capital investment plan aligned with

categories required for Amtrak capital planning. These plans must all be submitted to Congress. This section would also require Amtrak and each State and public transportation entity that owns infrastructure used for intercity rail passenger transportation along the Northeast Corridor to develop an asset management system to inform the Northeast Corridor Commission's capital investment plan.

Northeast Corridor Commission.

- This section would require the Northeast Corridor Commission to report on ridership trends and the progress made to eliminate the state-of-good-repair backlog. This section would also require Amtrak and commuter railroads to develop and update timetables for usage agreements of facilities and services.

Consolidated Rail Infrastructure and Safety Improvements.

- This section would expand eligibility to Tribes and short line associations and clarifies eligibility for projects that prevent trespassing, fund innovative rail technologies, and improve hazardous material response plans. This popular discretionary grant program remains largely unchanged.

Restoration and Enhancement Grants.

- This section would broaden the applicant eligibility for the Restoration and Enhancement grants program to include Tribes. This section also allows for the program to provide funds to support a route for up to six years (increased from three years), still with a diminishing Federal share each year.

Railroad Crossing Elimination Program.

- This section would establish a competitive grant program under which the Secretary shall award grants for projects that make improvements to highway and pathway rail crossings, such as eliminating highway-rail at-grade crossings that are frequently blocked by trains, adding gates or signals, relocating track, or installing a bridge. The program would improve the safety of communities and the mobility of people and goods. At least 20 percent of grant funds are reserved for projects located in rural areas or on Tribal lands.

Interstate Rail Compacts.

- This section would establish a competitive grant program to provide financial assistance to entities implementing interstate rail compacts for costs of administration, systems planning, and operations coordination. Grants under this program may not exceed \$1,000,000 annually and require a non-Federal match of at least 50 percent.

Federal-State Partnership for Intercity Passenger Rail Grants.

- This section would reform the Federal-State Partnership grant program by broadening project eligibility beyond Amtrak- and State-owned assets and to allow expansion of or construction on new intercity passenger rail routes, in addition to capital projects that address state-of-good repair. The program requires at least 45 percent of the funds to go to projects located on the Northeast Corridor, and at least 45 percent of the funds to be for projects not located on the Northeast Corridor. In addition, at least 20 percent of such funds for the National Network must benefit a long-distance route. This section would also allow FRA to provide funding to a project over multiple years.

Corridor Identification and Development Program.

- This section would require the Secretary to establish a program to develop intercity passenger rail corridors. Development would include creating new routes, enhancing service on existing routes, or restoring former service. Each rail corridor selected for development would work with DOT and relevant States to prepare a plan outlining capital projects needed to establish service. This section would also require the Secretary to report annually to Congress on rail corridors selected for development.

Surface Transportation Board Passenger Rail Program.

- This section would direct the Surface Transportation Board to hire additional full-time employees to assist in carrying out its passenger rail responsibilities.

Railroad Rights-of-Way.

- This section would require the Government Accountability Office (GAO) to study the railroad rights-of-way exemption process under the National Historic Preservation Act of 1966.

SUBTITLE D – RAIL SAFETY

Railway-Highway Crossings Program Evaluation.

- This section would require the Secretary to evaluate whether the railway-highway crossings program provides sufficient flexibility and resources for States to address grade crossing safety issues. The section also provides for the Secretary to make any recommendations to improve the effectiveness of the program.

Grade Crossing Accident Prediction Model.

- This section would require the Federal Railroad Administrator to update the Federal Railroad Administration's grade crossing accident prediction and severity model and provide training on the use of the updated model within two years of enactment.

Periodic Updates to Highway-Rail Crossing Reports and Plans.

- This section would require States to submit annual reports to DOT with information on progress implementing plans to improve safety highway-rail grade crossings, plans that were required by the FAST Act. This section would also require DOT to periodically assess and report to Congress on States' progress implementing their plans, as well as to assess the strategies used by States to improve the safety of highway-rail grade crossings.

Blocked Crossing Portal.

- This section would require the Federal Railroad Administration to establish a blocked crossing portal to collect information about blocked highway-rail grade crossings from the public. The Federal Railroad Administration is to use the information to assess the impact of blocked crossings, inform outreach to communities and railroads about blocked crossings, and produce an annual report on the program. This pilot program will expire three years after enactment.

Data Accessibility.

- This section would require the Chief Information Officer of the DOT to review of the website of the Federal Railroad Administration's Office of Safety Analysis and provide recommendations for improving the website's usability and accessibility to the public. This section would also require that the website be updated, taking into account the Chief Information Officer's recommendations, within one year of receiving them.

Emergency Lighting.

- This section would direct the Secretary to require all rail carriers that provide intercity passenger rail or commuter rail service to implement periodic inspection plans to ensure that passenger equipment complies with the existing regulations. These regulations include ensuring that rail cars have adequate emergency lighting available if power is lost for passengers, crewmembers, and first responders safely move through and out of a rail car.

Comprehensive Rail Safety Review of Amtrak.

- This section would require the Secretary to conduct a focused review of Amtrak's overall safety culture, including its safety-related processes and procedures. This section also requires Amtrak to create and annually update a plan to address any findings from the Secretary's review.

Completion of Hours of Service and Fatigue Studies.

- This section would direct the Federal Railroad Administration to start pilot programs required under Federal law to analyze practices that could reduce fatigue for train and other railroad employees.

Positive Train Control Study.

- This section would require the GAO to examine the annual costs to public commuter railroads to operate and maintain positive train control systems, and to submit a summary report on the findings to Congress.

Operating Crew Member Training, Qualification, and Certification.

- This section would require the Secretary to initiate audits of railroads' training and certification programs for locomotive engineers and conductors. The section requires audits of Class I railroads, including Amtrak and other intercity passenger rail providers, at least once every five years. The section requires audits of a select number of Class II and Class III railroads annually. The section requires railroads to update their training and certification programs to eliminate any deficiencies identified by an audit. The section also requires the Secretary to publish an annual report summarizing the results of its audits.

Transparency and Safety.

- This section would revise the Secretary's authority to issue nonemergency waivers and suspend compliance with rail safety regulations by requiring a public notice and comment process in regards to such a waiver or suspension. This section also provides that, not later than one year after the date on which a waiver has been in continuous effect for a six-year period, the Secretary shall review and determine whether a rulemaking consistent with the waiver is in the public interest and consistent with railroad safety. The Secretary shall publish the review and analysis of the waiver, and may initiate a rulemaking to incorporate relevant aspects of the waiver.

Research and Development.

- This section would provide the Secretary with express authority to construct or repair the Federal Railroad Administration's Transportation Technology Center's (TTC) buildings and facilities, including both outdoor infrastructure and indoor training areas. This section also authorizes the Secretary to collect fees or rents from facility users to offset appropriated amounts for the cost of providing facilities or other services at the TTC, and to establish a revolving fund for such amounts for operation, maintenance, repair, or improvement of the TTC. This section also would authorize the Secretary to allow TTC lessees and contractors to purchase insurance for activities and assets at TTC to mitigate risk. This section also authorizes the Secretary to enter into a contract for the purchase of electric power to enable use of the land at TTC for projects to produce energy from renewable sources.

Rail Research and Development Center of Excellence.

- This section establishes a Center of Excellence to advance research and development that improves the safety, efficiency, and reliability of passenger and freight rail transportation. This section authorizes the Secretary to issue grants in support of this program. The Center would support basic and applied research, including research on advances in rolling stock, advanced positive train control, human factors, inspection technology, and remote sensing, the Federal share of costs under this program would be 50 percent.

Quarterly Report on Positive Train Control System Performance.

- This section requires each railroad required to implement positive train control to submit a quarterly report on positive train control system performance to the DOT. The report is to contain information on the number of system initialization failures and system malfunctions, among other data points. This section allows the Secretary, three years after enactment, to reduce the frequency of reporting to not less than twice per year or justify maintaining quarterly reporting.

Speed Limit Action Plans.

- This section requires railroad carriers to submit a speed limit action plan and for carriers to annually review their action plans to ensure effectiveness. The section requires a carrier to submit a revised speed limit action plan at least 90 days prior to implementing any significant operational or territorial operating changes.

New Passenger Service Pre-Revenue Safety Validation Plan.

- This section requires any railroad providing new, regularly scheduled intercity or commuter rail passenger transportation, or expanding or reinitiating service, to create a comprehensive, pre-revenue safety validation plan. Once submitted, the railroad must comply with the plan as it prepares to start the new service. This section requires the agency to develop conforming regulations to implement this section.

Federal Railroad Administration Accident and Incident Investigations.

- This section requires the Secretary to create a standardized accident and rail investigation process and, when developing the process, to consider ways to maintain the confidentiality of certain entities involved in investigations, when requested.

Civil Penalty Enforcement Authority.

- This section amends the Federal Railroad Administration’s existing rail safety civil penalty authority to add a provision allowing the agency to resolve civil penalty assessments for non-hazardous materials regulation violations administratively, without having to refer the disputes to the Department of Justice for litigation.

Advancing Safety and Innovation Technology.

- This section requires the Secretary to issue safety regulations necessary for high-speed rail services and, before issuing any safety regulations, to consult with developers of new high-speed rail technologies to inform methods for evaluating safety performance.

Passenger Rail Vehicle Occupant Protection Systems.

- This section requires the Federal Railroad Administration to complete a study on how passenger rail vehicle occupant protection systems could materially improve passenger safety. Upon completion of the study, the Administrator must report on the findings to Congress. In addition, the section provides that the agency may issue a rule with standards for the use of occupant protection systems in new passenger rail rolling stock.

Federal Railroad Administration reporting requirements.

- This section requires the Secretary to update its accident and incident reporting form to collect additional information on the train equipment and crew involved in an accident or incident.

National Academies Study On Trains Longer Than 7,500 Feet.

- This section requires the Secretary to spend between \$1 million and \$2 million on a report by the National Academies on the operations, safety, and efficiency of trains longer than 7,500 feet, to be submitted to relevant Congressional committees within two years.

High-Speed Train Noise Emissions.

- This section authorizes the Secretary to lead, though still in consultation with the Environmental Protection Agency, when prescribing regulations governing railroad-related noise emission standards for trains operating on the general railroad system at speeds greater than 160 miles per hour.

Critical Incident Stress Plans.

- This section requires the Secretary to amend critical incident stress plan regulations encompass employees of commuter railroads and intercity passenger railroads who directly interact with passengers and to ensure that assaults of such employees are included in the definition of critical incident under the regulations.

Requirements for railroad freight cars placed into service in the United States.

- This section would place restrictions on the use of freight rail cars manufactured by a state-owned enterprise (SOE) to protect the security of sensitive information. To implement this section, the Secretary would be required to issue regulations within 2 years and is authorized to fine a manufacturer up to \$250,000 per violation.

Railroad point of contact for public safety issues.

- This section would require all railroads to provide contact information on a public website so that the public could report public safety issues to the railroad.

Controlled substances testing for mechanical employees.

- This section would require the Secretary, within 180 days after enactment of this Act, to amend its regulations to require all mechanical employees of railroads to be subject to all of the breath or body fluid testing set forth in subparts C, D, and E of part 219 of title 49, Code of Federal Regulations.

Title III – Motor Carrier Safety

Authorization of Appropriation.

- This section would authorize appropriations out of the Highway Trust Fund for administrative expenses of the Federal Motor Carrier Safety Administration, including appropriations to carry out the motor carrier safety assistance program, the high priority program, the commercial motor vehicle enforcement training and support grant program, the commercial motor vehicle operators grant program, and the financial assistance program for commercial driver's license implementation.

Motor Carrier Safety Advisory Committee.

- This section would revise the Motor Carrier Safety Advisory Committee to include small business motor carriers and extend the committee through September 2025.

Combating Human Trafficking.

- This section would allow funding to support the recognition, prevention, and reporting of human trafficking as well as the detection of and enforcement of laws relating to such criminal activity.

Immobilization Grant Program.

- This section would establish a grant program to provide discretionary grants to States to immobilize or impound passenger-carrying commercial motor vehicles that are determined to be unsafe or fail inspection. This section would require the Secretary to work with States to develop a list of safety violations that would warrant the immediate immobilization or impoundment of a passenger-carrying commercial motor vehicle.

Commercial Motor Vehicle Enforcement Training and Support.

- This section would establish a grant program to provide discretionary grants for nonprofit organization to provide training to non-Federal employees who conduct commercial motor vehicle enforcement activities and to develop related training materials.

Study of Commercial Motor Vehicle Crash Causation.

- This section would require the Secretary to carry out a comprehensive study to determine the causes of, and contributing factors to, crashes that involve a commercial motor vehicle, as well as to identify data requirements, data collection procedures, reports, and any other measures that can help improve the ability of States and the Secretary to evaluate future crashes, monitor crash trends, and develop effective safety policies. This section would also require the Secretary to submit a report to Congress describing the results of the study and any legislative recommendations.

Promoting Women in the Trucking Workforce.

- This section would establish the Women of Trucking Advisory Board to identify barriers and industry trends that directly or indirectly discourage women from pursuing and retaining careers in trucking, and examine ways to facilitate support for women pursuing careers in trucking including training and outreach programs.

State Inspection of Passenger-Carrying Commercial Motor Vehicles.

- This section would require the Secretary to solicit additional comment on the advance notice of proposed rulemaking entitled “State Inspection Programs for Passenger-Carrier Vehicles” within one year, and to issue a final rule if supported by the data and information.

Truck Leasing Task Force.

- This section would require the Secretary, in consultation with the Secretary of Labor, to establish a Truck Leasing Task Force. The Task Force shall examine common truck leasing arrangements, including the impact of inequitable leasing agreements on the industry, and resources to assist commercial motor vehicle drivers in assessing the financial impacts of leasing agreements. This section requires the Task Force to submit its findings and recommendations to Congress, as well as the Secretary of Transportation, and the Secretary of Labor.

Automatic Emergency Braking.

- This section would require the Secretary, not later than two years after enactment, to prescribe a motor vehicle safety standard and accompanying performance requirements for automatic emergency braking systems for heavy-duty commercial motor vehicles, and to require that systems installed in such vehicles be in use during operation. This section would also direct the Secretary to study equipping other commercial motor vehicles with an automatic emergency braking system and, if warranted, develop performance standards for such systems.

Underride Protection.

- This section would direct the Secretary, within one year of enactment, to strengthen rear underride guard standards and to conduct additional research on the design and development of rear impact guards to prevent crashes at higher speeds. This section would also require the Secretary, within one year of enactment, to amend regulations on minimum periodic inspection standards and reports to include rear impact guards and rear end protection. The Secretary would also be directed to complete additional research on side underride guards, and, if warranted, develop performance standards for side underride guards. This section also creates an Advisory Committee on Underride Protection.

Providers of Recreational Activities.

- This section would exempt providers of recreational activities operating small passenger vehicles from Federal registration requirements if they operate within a 150 air-mile radius.

Amendments to Regulations Relating to Transportation of Household Goods in Interstate Commerce.

- This section would direct the DOT to update regulations relating to the interstate transportation of household goods, and to consider changes recommended by the Household Goods Consumer Protection Working Group.

Improving Federal-State Motor Carrier Safety Enforcement Coordination.

- This section would require the Secretary to publish in the Federal Register a process to review

each out-of-service order issued by a covered State within 30 days after the date on which the out-of-service order is submitted to the Secretary. This section also requires the Secretary to publish a process under which the Secretary shall review imminent hazard determinations made by covered States.

Limousine Research.

- This section would require the Secretary to conduct research on crashworthiness and evacuation standards for limousines, and prescribe motor vehicle safety standards based upon that research. This section would also prevent a limousine operator from introducing a limousine into interstate commerce unless the operator has displayed the date of the most recent inspection under Federal or State law, the results of the inspection, and any corrective action to ensure the limousine passed inspection. This section provides that the Federal Trade Commission (FTC) shall enforce these requirements.

National Consumer Complaint Database.

- This section would require GAO to examine the National Consumer Complaint Database of the Federal Motor Carrier Safety Administration, and to evaluate the effectiveness of efforts to consider and follow-up on complaints submitted to the database, the types of complaints, and awareness of the database.

Electronic Logging Device Oversight.

- This section would require the Secretary to submit a report to Congress on the processes used by the Federal Motor Carrier Safety Administration to review electronic logging device logs and to protect proprietary and personally identifiable information.

Transportation of agricultural commodities and farm supplies.

- This section would exempt drivers transporting livestock within a 150 air-mile radius from the final destination from hours of service regulations prescribed by the Secretary.

Modification of restrictions on certain commercial driver's licenses.

- This section would require the Administrator of the FMCSA to revise its regulations to limit a restricted commercial driver's license issued to an employee in a farm-related service industry to the applicable seasonal periods defined by the State issuing the license.

Report on human trafficking violations involving commercial motor vehicles.

- This section would require the Secretary, acting through the DOT Advisory Committee on Human Trafficking, to report to Congress every 3 years on human trafficking violations involving commercial motor vehicles.

Broker guidance relating to Federal motor carrier safety regulations.

- This section would require the Secretary to clarify the definition of broker and bona fide agent given changes to how technology has changed the roles of those involved in booking and dispatching freight services.

Apprenticeship pilot program.

- This section would establish a 3-year pilot program under which employers could create apprenticeship programs to allow drivers under the age of 21 to drive commercial motor vehicles in interstate commerce. This section would limit the pilot program to 3,000 apprentices at any one

time. This section would require DOT to report to Congress on the findings and conclusions from the pilot program, including analyzing the safety records of these younger, apprentice drivers. This section would also require DOT to enter into an agreement with the National Academies of Science to study the impact methods of driver compensation have on safety and retention.

Title IV – Highway and Motor Vehicle Safety

SUBTITLE A—HIGHWAY TRAFFIC SAFETY

Authorization of Appropriations.

- This section would authorize appropriations for highway safety programs, research and development, high-visibility enforcement, priority safety programs, and operations of the National Highway Traffic Safety Administration.

Highway Safety Programs.

- This section would create new highway safety program eligibilities to promote widespread and proper use of child restraints, improve recall awareness, prevent child heatstroke fatalities, reduce deaths and injuries from vehicles not moving over for stopped emergency response vehicles, and educate drivers to prevent misuse or misunderstanding of new vehicle technology. This section would also require States that have legalized marijuana to consider additional programs to educate drivers on the risks associated with marijuana-impaired driving. This section would change the frequency of State Highway Safety Plans from annual to triennial and require the Secretary to publish approved State Highway Safety Plans, State performance targets, and State progress toward meeting performance targets on a website.

Highway Safety Research and Development.

- This section would increase funding for a cooperative program to research and evaluate priority highway safety countermeasures from \$2.5 million to \$3.5 million annually. The section also would direct the Secretary to evaluate the effectiveness of innovative behavioral traffic safety countermeasures to inform guidance for State highway safety officials.

High-Visibility Enforcement Programs.

- This section would require the Secretary to conduct three high-visibility enforcement campaigns each year.

National Priority Safety Programs.

- The section would make improvements to priority safety programs, such as clarifying or expanding eligibility, to address underutilization of certain programs, including programs that address distracted driving and impaired driving. This section would also clarify the goals and allowable uses of funds for programs, such as for State traffic safety information system improvement grants, to improve the consistency and quality of State data. This section would also establish new priority programs to educate drivers and law enforcement officers about proper law enforcement practices for traffic stops and to prevent deaths and injuries involving motor vehicles stopped on the side of the road.

Multiple Substance-Impaired Driving Prevention.

- This section would expand the use of penalty funds for States that have not enacted or are not enforcing open container laws for impaired driving countermeasures beyond those focused on alcohol-impaired driving. This section would also require a GAO study on State and local agency reporting of impaired driving data into federal databases.

Minimum Penalties for Repeat Offenders for Driving While Intoxicated or Driving Under the Influence.

- This section would expand the use of penalty funds for States that have not enacted or are not enforcing a repeat intoxicated driver law to include multiple-substance impaired driving countermeasures, rather than only alcohol-impaired countermeasures.

Crash Data.

- This section would require the Secretary to revise crash data systems to be able to distinguish bicycles, electric scooters, and other individual personal conveyance vehicles from other vehicles involved in a crash. This section would establish a grant program to States to modernize data collection systems to enable them to more efficiently share data with the National Highway Traffic Safety Administration.

Review of Move Over or Slow Down Law Public Awareness.

- This section would require the GAO to study Federal and State efforts to improve awareness and enforcement of laws that require vehicles to change lanes or slow down when approaching an emergency vehicle on the roadside.

Review of Laws, Safety Measures, and Technologies Relating to School Buses.

- This section would require the Secretary to study the effectiveness of State laws that make it illegal to pass a stopped school bus on the road and identify best practices to address vehicles that illegally pass stopped school buses. This section would also require the Secretary to conduct a public safety messaging campaign to help prevent the illegal passing of school buses and improve the safe loading and unloading of school buses. This section would also direct the Secretary to research vehicle technologies and driver education methods that could further improve school bus safety.

Motorcyclist Advisory Council.

- This section would establish a Motorcyclist Advisory Council to advise the DOT on motorcycle safety issues, including road design and maintenance, barrier design, and use of intelligent transportation systems. The section would require the Council to make recommendations on motorcycle safety to the Secretary, and for the Secretary to accept or reject the recommendations and report to Congress on these decisions.

Safe Streets and Roads for All Grant Program.

- This section would establish a grant program for metropolitan planning organizations, local governments, and Tribal governments to develop and carry out comprehensive safety plans to prevent death and injury on roads and streets, commonly known as “Vision Zero” or “Toward Zero Deaths” initiatives. The section would authorize \$1 billion for this program, with no less than 40 percent allocated to support the development of comprehensive safety plans.

Implementation of GAO Recommendations.

- This section would require the Secretary to implement GAO recommendations related to the national 911 program and to improve safety relating to pedestrians and cyclists.

Authorization of Appropriations.

- This section would authorize appropriations for the National Highway Traffic Safety Administration to carry out motor vehicle safety programs and activities.

Recall Completion.

- This section would require motor vehicle manufacturers to report to DOT information on recall campaigns, including the number of affected vehicles and the number of repaired vehicles. The section would also require DOT to annually publish data on recall campaigns, including the percentage of vehicles that were repaired.

Recall Engagement.

- This section would require the GAO to examine the reasons vehicle owners do not have repairs performed to address recalls for safety defects and what steps could help more vehicle owners have repairs performed. This section would also require the GAO to conduct a study to determine the number of motor vehicles used by transportation network companies (for purposes such as ridesharing) that are subject to recalls and have not been repaired. This section would also require the DOT to identify methods to improve communications to vehicle owners to inform them about recalls and encourage them to have repairs performed.

Motor Vehicle Seat Back Safety Standards.

- This section would require the Secretary to examine updating seat back safety standards for motor vehicles.

Automatic Shutoff.

- This section would require the Secretary to update safety standards for vehicles with keyless ignition devices so that the vehicle automatically shuts off after it has idled for a designated period of time.

Petitions by Interested Persons for Standards and Enforcement.

- This section would clarify language regarding petitions by interested persons.

Child Safety Seat Accessibility Study.

- This section would require the Secretary to coordinate with other Federal agencies to study whether low-income families and underserved populations have access to child safety seats and to take steps to improve access based on the study.

Crash Avoidance Technology.

- This section would require the Secretary to require that all new motor vehicles be equipped with two crash avoidance technologies—forward collision warning and automatic emergency braking systems, and lane departure and lane keeping assist systems.

Reduction of Driver Distraction.

- This section would require the Secretary to study driver monitoring systems to minimize driver distraction and disengagement, and, if warranted based on the results of the study, require a rulemaking.

Rulemaking Report.

- This section would require the Secretary to regularly provide a written notification to Congress on the status of regulations or rulemakings that have not been finalized, including for several rulemakings required in the FAST Act and MAP-21. For each covered rulemaking, the notification must include an updated timeline, an expected date of completion, and a list of factors causing delays, among other details on outstanding rulemakings.

Global Harmonization.

- This section would require the Secretary to cooperate, to the maximum extent practicable, with foreign governments, nongovernmental stakeholder groups, the motor vehicle industry, and consumer groups on global harmonization of vehicle regulations to improve motor vehicle safety.

Headlamps.

- This section would require the Secretary to update the safety standard for headlamp systems, including to allow for vehicles to have adaptive headlamp systems.

New Car Assessment Program.

- This section would require the Secretary to update and modernize the New Car Assessment Program (NCAP). Required changes to NCAP would include implementing a rating system for crash-avoidance technologies, similar to the rating system currently in place for the crashworthiness of vehicles. This section would also require the Secretary to establish and regularly update a roadmap to plan for and implement additional improvements to NCAP.

Hood and Bumper Standards.

- This section would require the Secretary to examine updating hood and bumper safety standards for motor vehicles considering, in particular, crash avoidance technologies and technologies to prevent injuries and fatalities suffered by pedestrians, bicyclists, or other vulnerable road users.

Emergency Medical Services and 9-1-1.

- This section would end the requirement for the National Highway Traffic Safety Administration and the National Telecommunications and Information Administration to report annually to Congress on how the agencies coordinate regarding 911 services.

Early Warning Reporting.

- This section would direct manufacturers to comply with requirements to report data and information to DOT help identify possible safety defects, including information on crashes and incidents.

Improved Vehicle Safety Databases.

- This section would require the Secretary to improve the organization, functionality, and search capability of the National Highway Traffic Safety Administration's publicly accessible vehicle safety databases.

National Driver Register Advisory Committee Repeal.

- This section would repeal the National Driver Register Advisory Committee.

Research on Connected Vehicle Technology.

- This section would require DOT to conduct research to examine how connected vehicle systems can safely account for bicyclists and other vulnerable road users.

Advanced Impaired-Driving Technology.

- This section would require the Secretary to require all new passenger motor vehicles to be equipped with advanced drunk driving prevention technology that can passively monitor and accurately detect that a driver is impaired.

GAO report on crash dummies.

- This section would require GAO to study NHTSA's use and deployment of crash test dummies to test vehicle safety. This section also requires NHTSA to issue a report describing the current and planned use of crash test dummies to test vehicle safety.

Child safety.

- This section would direct the Secretary to require that new passenger motor vehicles be equipped with a system to alert the driver to check rear seating positions after the engine of the vehicle is deactivated. This section would also require the Secretary to study the practicality of retrofitting existing passenger motor vehicles with technologies to address the problem of children left in rear seating positions.

Title V – Research and Innovation

Intelligent Transportation Systems Program Advisory Committee.

- This section would expand the membership of the Intelligent Transportation Systems Program Advisory Committee to include additional areas of expertise and experience, sets member terms at three years, and provides for virtual meetings.

Smart Community Resource Center.

- This section would require the Secretary to create a website with resources on smart community transportation projects—projects that use innovative technologies, data, and other means to address local challenges—including technical assistance, training, and examples of projects.

Federal Support for Local Decision-Making.

- This section would direct the Bureau of Transportation Statistics (BTS) to conduct outreach and identify data needs of local government officials to make informed decisions about infrastructure investments. BTS would also have to create a plan to develop relevant data analysis tools for infrastructure investments in rural and urban communities.

Bureau of Transportation Statistics.

- This section would authorize \$10 million annually for BTS.

Strengthening Mobility and Revolutionizing Transportation Grant Program.

- This section would establish a competitive grant program for city or community demonstration project that incorporate innovative transportation technologies or uses of data, including coordinated automation, connected vehicles, and intelligent sensor-based infrastructure. The Secretary is directed to consider geographic diversity and select projects across rural, midsized, and large communities. Both the Secretary and the GAO must report on the progress of the program. The section would authorize \$100 million annually for the program.

Electric Vehicle Working Group.

- This section would establish a 25-member electric vehicle working group, comprising a variety of Federal and non-Federal stakeholders, to provide Federal guidance and strategy for the development, adoption, and integration of electric vehicles into the nation's transportation and energy systems. The Secretaries of Transportation and Energy will lead the working group, and the working group is required to prepare a series of reports to Congress on barriers to electric vehicle adoption and possible opportunities and solutions.

Risk and System Resilience.

- This section would direct the Secretary to develop a process for States, Tribes, local governments, and other entities to make quantitative risk assessments that can help to enhance the resilience of the surface transportation system, building on existing work by the Transportation Research Board and National Institute of Standards and Technology. This section would also direct the Secretary to provide technical assistance to these entities to help ensure system resilience.

Coordination on Emerging Transportation Technology.

- This section would codify the Nontraditional and Emerging Transportation Technology Council, which improves agency coordination to enable and regulate new and novel transportation technologies through adoption of best practices and identification of a lead modal administration for a given technology.

Interagency Infrastructure Permitting Improvement Center.

- This section would codify the duties and responsibilities of the Infrastructure Permitting Improvement Center. The Center will seek to expedite permitting and environmental reviews for projects, work with DOT modal administrations to modernize and improve permitting and project reviews, and develop metrics to assess the timeliness of permitting and projects reviews

Rural Opportunities to Use Transportation for Economic Success Initiative.

- This section would codify the Rural Opportunities to Use Transportation for Economic Success Initiative (ROUTES) Council and establish an Office within DOT to identify and address the needs of entities seeking Federal grants and assistance for rural projects. The ROUTES Office would also collect relevant data and coordinate rural-related funding programs across modal administrations.

Safety Data Initiative.

- This section would establish the Safety Data Initiative, to be developed through collaboration among DOT leadership, through which the Secretary can conduct demonstration projects, award grants, and use other strategies that develop new data visualization, sharing, and analytic tools that Federal, State, and local entities can use to enhance surface transportation safety.

Advanced Transportation Research.

- This section would establish the Advanced Research Projects Agency-Infrastructure (ARPA-I) to fund research and development on advanced transportation infrastructure technologies. ARPA-I would support novel, early stage research as well as advance conceptual research into testing and development. The section would provide for a Director to lead ARPA-I, and require that the Director ensure that the activities of ARPA-I do not duplicate other DOT research activities and programs. This section would require an evaluation of how well ARPA-I is achieving its goals within three years.

Open Research Initiative.

- The section would establish a pilot program for universities, nonprofit organizations, and other entities can submit research proposals to the Secretary. This section would require the Secretary to coordinate any research carried out under the pilot program with other DOT research activities to avoid duplication of efforts.

Transportation Research and Development 5-year Strategic Plans.

- This section would require the Secretary to update DOT's Research and Development Strategic Plan every five years. This section also would amend the Strategic Plan to include reducing transportation cybersecurity risks.

Research Planning Modifications.

- This section would require that annual research plans for the modal administrations describe the proposed research for the upcoming years and the potential impact of this proposed research. This section would also require DOT to publish a database with information on individual research projects, including the objectives of a research project and the amount of funds provided to a research project.

Incorporation of Department of Transportation Research.

- This section would require the Secretary to review the results of research conducted by DOT every five years to identify opportunities to inform changes to laws, regulations, and policies that would improve the safety or efficiency of the transportation system. The section would require the Secretary to report to Congress on changes made as a result of research conducted by DOT, as well as any additional changes to statute or regulation.

University Transportation Centers Program.

- This section would make technical revisions related to University Transportation Centers and would require the Secretary to publish a description of the process used to select University Transportation Centers on the DOT's website.

National Travel and Tourism Infrastructure Strategic Plan.

- This section would require the Secretary to revise the national travel and tourism infrastructure strategic plan to consider the impacts of the COVID-19 pandemic.

Local Hiring Preference for Construction Jobs.

- This section would require the Secretary, in collaboration with the Secretary of Labor, to study means to increase the diversity of the transportation workforce, including examining the use of pre-apprenticeship programs and local hiring preferences. The section would also require the

Secretary use the results of the study resources for States, local governments, and private entities to increase diversity within the transportation workforce.

Transportation Workforce Development.

- This section would call for a National Academy of Sciences study on the workforce needs of intelligent transportation technologies and systems industry. Using the results of this study, the section would require the Secretary to create a working group and a plan to address the recommendations and issues outlined in the National Academy of Sciences' study. This section would also require the Secretary to conduct a public service announcement campaign to increase awareness of career opportunities in the transportation sector across diverse segments of the population.

Intermodal Transportation Advisory Board Repeal.

- This section would repeal Section 5502 of title 49.

GAO Cybersecurity Recommendations.

- This section would require the Secretary to implement GAO recommendations related to cybersecurity risk management and cybersecurity workforce needs. GAO would also be required to study DOT's approach to managing cybersecurity for its systems and information, including the roles, responsibilities, and reporting relationships of senior officials with respect to cybersecurity.

Volpe Oversight.

- This section would require the Secretary to implement recommendations from the Inspector General to strengthen its oversight of Volpe. This section would also require the GAO to submit a report examining the Volpe Center's surface transportation activities.

Modifications to grant program.

- This section would amend a grant program, commonly known as the Section 1906 Program, which encourages states to prohibit the use of racial profiling by law enforcement during traffic safety stops and to collect statewide data on motor vehicle stops for analysis. This section would expand eligible uses of funds to further incentivize states to participate in the program and increase funding to \$11.5 million annually.

Drug-impaired driving data collection.

- This section would require the Secretary, in consultation with other Federal agencies, States, and others, to report to Congressional committees on the barriers States face sharing data on alcohol and drug toxicology results with NHTSA for national crash databases, as well as steps to improve the collection of this data.

Report on marijuana research.

- This section would require the Secretary, working with the Attorney General and Secretary of Health and Human Services, to report on methods to improve access to marijuana products for scientific research on marijuana-impaired driving and to make recommendations on how to address any Federal barriers to conducting research on marijuana-impaired driving.

GAO study on improving the efficiency of traffic systems.

- This section would require GAO to study the potential societal benefits of improving the efficiency of traffic systems.

Title VI – Hazardous Materials

Authorization of Appropriations.

- This section would authorize appropriations to the Secretary an average of about \$130 million a year for hazardous materials emergency preparedness and other safety programs.

Assistance for Local Emergency Response Training Grant Program.

- This section would authorize the Assistance for Local Emergency Response Training (ALERT) grant program, which promotes hazardous material response training for volunteer or remote emergency responders.

Real-time Emergency Response Information.

- This section would amend a requirement for Class I railroads that transport hazardous materials to share train consist information, including the quantity of hazardous materials and the origin and destination of the train, so that railroads provide this information electronically to appropriate State and local officials, rather than through a third party.

Title VII—General Provisions

Performance measurement, transparency, and accountability.

- This section would allow the Secretary to develop metrics and establish performance standards that use such metrics to assess the effectiveness of grants awarded under the Act.

Coordination regarding forced labor.

- This section would require the Secretary to coordinate with the Commissioner of U.S. Customs and Border Protection to help ensure that funding provided under the Act is not used to purchase products or materials produced with forced labor.

Department of Transportation spectrum audit.

- This section would require the Secretary of Transportation and Assistant Secretary of Commerce for Communications and Information to review the spectrum assigned to DOT, the purposes for which the assigned spectrum is used, and the portions of spectrum being shared with other users, among other topics.

Study and reports on the travel and tourism activities of the Department.

- This section would require the Secretary to study and report to Congressional committees on travel and tourism activities within DOT and how DOT evaluates travel and tourism needs in reviewing applications for grant programs. This section would also require GAO to assess the resources that DOT uses to carry out travel and tourism activities.

PUBLIC TRANSPORTATION REAUTHORIZATION

SECTION-BY-SECTION

DEFINITIONS. – AMENDS 49 U.S.C. § 5302

- The section adds a definition of “assault on a transit worker” to facilitate better safety data collection. It also adds eligibility for electric vehicle charging infrastructure in passenger parking facilities as part of a joint development project, while requiring recipients to collect fees related to the use of such charging facilities.

METROPOLITAN TRANSPORTATION PLANNING. – AMENDS 49 U.S.C. § 5303

- The section allows metropolitan planning organizations to elect to expand considerations of housing planning processes into the metropolitan transportation planning process. It also allows for the use of technology to encourage public participation in the planning process.
- The section allows for the use of technology to encourage public participation in the planning process.

PLANNING PROGRAMS. – AMENDS 49 U.S.C. § 5305

- The section adds eligibility for a greater Federal share for transportation planning activities in lower-density and lower-income portions of metropolitan areas and adjoining rural areas.

FIXED GUIDEWAY CAPITAL INVESTMENT GRANTS. – AMENDS 49 U.S.C. § 5309

- The section reauthorizes the Capital Investments Grants (CIG) Program. The section requires applicants to make progress toward meeting performance targets for asset management. The Small Starts thresholds are adjusted, and Core Capacity project eligibility is amended to use a 10-year timeframe to demonstrate capacity needs, instead of the limited 5-year timeframe used presently.
- The section establishes a process for immediate and future bundling of projects to allow sponsors to move multiple projects through the CIG pipeline simultaneously, allowing sponsors to seek savings during the contracting process. The new bundling eligibilities replace the “Program of Interrelated Projects” eligibility, which the Federal Transit Administration has been unable to implement since 2012.
- Division C of the *Infrastructure Investment and Jobs Act* reauthorizes Federal Transit Administration (FTA) programs for fiscal years 2022 through 2026. The reauthorization legislation is a component of the bipartisan infrastructure package and will provide \$69.9 billion of assistance for public transportation over five fiscal years. The current extension of the FAST Act expires on September 30, 2021.

STATEWIDE AND NONMETROPOLITAN TRANSPORTATION PLANNING. – AMENDS 49 U.S.C. § 5304

- The section also updates the before-and-after studies process, requires the Secretary to create and update a public-facing project dashboard, and reduces the required Congressional notification timeframe before the Secretary may finalize a grant agreement.

FORMULA GRANTS FOR RURAL AREAS. – AMENDS 49 U.S.C. § 5311

- The section amends the Rural Area Formula Grant Program by establishing fixed percentages for the Public Transportation on Indian Reservations and the Appalachian Development Public Transportation Assistance programs.

PUBLIC TRANSPORTATION INNOVATION. – AMENDS 49 U.S.C. § 5312

- The section updates requirements for the Secretary’s annual report on research activities under the Section 5312 innovation program. It authorizes the Secretary to reduce or waive matching requirements for research projects if there is substantial public benefit and provides updates and further flexibility in the Low-No Component Testing Program. The section provides eligibility for activities related to Advanced Digital Construction Management Systems.

BUS TESTING FACILITIES. – AMENDS 49 U.S.C. § 5318

- The section allows for bus testing facilities authorized under this section to use funds for the acquisition of equipment and capital projects related to testing new bus models.
- The section adds eligibility for site-specific plans.

GENERAL PROVISIONS. – AMENDS 49 U.S.C. § 5323

- The section is a technical correction to section 5323(u).
- The section requires applicants for emergency relief program funds to submit proof of insurance for structures related to grant applications.

PUBLIC TRANSPORTATION SAFETY PROGRAM. – AMENDS 49 U.S.C. § 5329

- The section includes provisions to enhance state safety oversight programs by strengthening rail inspection practices. The section also includes provisions to enhance practices related to the development of transit agency safety plans, improve safety training, reduce assaults on vehicle operators, and institute measures to reduce vehicular and pedestrian accidents involving buses.

ADMINISTRATIVE PROVISIONS. – AMENDS 49 U.S.C. § 5334

- The section allows for transit agencies selling rolling stock, equipment, or supplies past their useful life with proceeds over \$5,000 to recoup a portion of the local match.

PILOT PROGRAM FOR TRANSIT-ORIENTED DEVELOPMENT. – AMENDS SECTION 20005(B) OF MAP-21**PUBLIC TRANSPORTATION EMERGENCY RELIEF PROGRAM. – AMENDS 49 U.S.C. § 5324****NATIONAL TRANSIT DATABASE. – AMENDS 49 U.S.C. § 5335**

- The section adds geographic service area coverage as a reporting requirement to the National Transit Database (NTD). The section also requires data relating to assaults on a transit worker and fatalities resulting from impact with a bus to be reported into the NTD.
- The section increases the set-aside in the Section 5307 formula for Small Transit Intensive Cities from 2 to 3 percent. The section also increases the set-aside for state safety oversight grants from 0.5 percent to 0.75 percent.

STATE OF GOOD REPAIR GRANTS. – AMENDS 49 U.S.C. § 5337

- The section establishes a new competitive grant program to replace rail rolling stock that is past its useful life.

AUTHORIZATIONS. – AMENDS 49 U.S.C. 5338

- The section authorizes amounts to be made available under this Act.

GRANTS FOR BUSES AND BUS FACILITIES. – AMENDS 49 U.S.C. § 5339

- The section increases the minimum allotment for States and territories under section 5339(a) from \$1.75 million to \$4 million and encourages utilization of innovative procurement practices. It raises the rural set-aside in the section 5339(b) “Buses and Bus Facilities” competitive grant program to 15 percent, up from the current 10 percent requirement.
- The section ensures that lower-emission buses and vehicles, including natural gas-powered buses and vehicles, are eligible for no less than 25 percent of funds made available under the program.
- For applicants for zero-emission vehicles grants under the Section 5339(c) and section 5339(b) programs, the section requires submission of a zero-emission fleet transition plan, including a workforce transition plan, and provides funding for such activities.

METRO SAFETY, ACCOUNTABILITY, AND INVESTMENT.

- The section reauthorizes federal funding for Washington Metropolitan Area Transit Authority (WMATA) through fiscal year 2030 at current annual levels, matched by funding from Virginia, Maryland, and the District of Columbia. Additionally, the section requires improvements in oversight, governance, and support of WMATA's Inspector General.

Passenger And Freight Rail

Summary: The U.S. rail network is central to the success of the American economy, carrying more than 1.8 billion tons of freight valued at more than \$830 billion annually, and over 32.5 million passengers on Intercity Rail Passenger Transportation services. The bipartisan infrastructure agreement provides \$66 billion in new spending to address the infrastructure needs of the US rail network. This section also includes the Commerce Committee-passed Surface Transportation Investment Act rail reauthorization.

- **Northeast Corridor grants - \$6B**
 - This funding will go toward procurement & deferred maintenance backlog that currently exists on Amtrak's Northeast Corridor between Washington and Boston. Several transit agencies operate over the corridor, including NJ Transit in New Jersey and the Southeastern Pennsylvania Transportation Authority (SEPTA) in Pennsylvania and Delaware.
- **Fed-State Partnership Intercity Passenger Rail - \$36B**
 - **Northeast Corridor Fed-State Partnership set-aside - \$24B**
 - This program provides funding for capital projects within the United States to repair, replace, or rehabilitate qualified railroad assets to reduce the state of good repair backlog and improve intercity passenger rail performance.
- **Amtrak National Network - \$16B**
 - The Amtrak National Network consists 15 long distance routes and 28 state supported routes, on behalf of 20 partners including 17 states. This funding will provide the rail network with updated station locations and modernization; safety investments including grade crossings, fencing and collision-prevention technology.
- **Consolidated Rail Infrastructure and Safety Improvement (CRISI) - \$5B**
 - This program funds projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail. This program leverages private, state and local investments to support safety enhancements and general improvements to infrastructure for both intercity passenger and freight railroads.
- **Railroad Crossing Elimination Program - \$3B**
 - This competitive grant program provides funds for the elimination of hazards at railway-highway crossings.
- **Restoration and Enhancement Grants - \$50M**
 - This program funds operating assistance grants for initiating, restoring, or enhancing intercity passenger rail transportation. Projects such as additional frequency of current service, offering of new on board services, establishing of a new service, extension of a current service are all eligible for these grants.

Safety & Research

Summary: The bipartisan infrastructure agreement provides \$10.5 billion in new funding to address the safety requirements of our nation’s infrastructure. This section also includes the Commerce Committee-passed Surface Transportation Investment Act safety reauthorization.

- **\$2.24B in increased contract authority for FMCSA and NHTSA**
 - **Federal Motor Carrier Safety Administration (FMCSA)**
 - FMCSA safety grants are available to state and local government agencies working on commercial motor vehicle safety activities and demonstrate a capacity to work with highway traffic safety stakeholders that focus on commercial motor vehicle safety and training issues, and other industry stakeholders.
 - **National Highway Traffic Safety Administration (NHTSA)**
 - NHTSA is charged with writing and enforcing Federal Motor Vehicle Safety Standards as well as regulations for motor vehicle theft resistance and fuel economy. NHTSA awards grants for occupant protection, state traffic safety information systems, impaired driving countermeasures, distracted driving, motorcyclist safety, state graduated driver licensing laws, and non-motorized safety.
- **\$8.27 in supplemental appropriations**
 - **Safe Streets for all - \$5B**
 - The Biden administration’s Safe Streets for All program funds state and local “vision zero” plans and other improvements to reduce crashes and fatalities, especially for cyclists and pedestrians.
 - **SMART grant program - \$500M**
 - Complement to the Federal Pell Grant Program, the National Science and Mathematics Access to Retain Talent (SMART) Grants, awarded to third-, fourth-, and fifth-year undergraduates who are majoring in technical fields, critical foreign languages, or who are in a qualifying liberal arts program.
 - **NHTSA Programs – \$1.6B**
 - This program provides grants to states to improve driver behavior and safety
 - **FMCSA Safety Program – \$673M**
 - The program supports State and local law enforcement agencies through funding to mitigate crashes and hazardous materials incidents involving commercial motor vehicles (CMVs).
 - **PHMSA Modernization – \$1B**
 - This program would provide grants to community owned utilities to replace outdated cast iron and bare steel distribution pipes—some of which is more than

100 years old. This investment will reduce injuries and fatalities and prepare infrastructure for cleaner fuels, such as hydrogen and bio-blends.

Public Transit

Summary: This section of the bipartisan infrastructure agreement provides \$39.15 billion in new funding to address the infrastructure needs of the nation's public transit assets. This package includes an extension of FAST Act transit policy.

- **Increased Contract Authority - \$19.15 B**

- The transit title reflects an increase of 43% above baseline levels for contract authority, for \$69.9 billion over the next five years. When combined with the supplemental appropriations of this section, this package provides an 83% increase for transit funding compared to FAST Act levels.

- **State of Good Repair - \$4.75B**

- U.S. DOT has found that an estimated 40 percent of public transit buses and 23 percent of rail transit assets are in marginal or poor condition, with a significant backlog in deferred maintenance and replacement. State of Good Repair grants support maintenance, replacement, and rehabilitation projects. These activities help transit agencies maintain assets in a state of good repair and develop Transit Asset Management plans.

- **The Capital Investment Grants Program - \$8B**

- Capital Investment Grants support new and expanded commuter and light rail, bus, and ferry service. The program includes New Starts for the construction of new systems and expansion of existing systems, Small starts for new systems and expansion for with capital costs less than \$300 million, Core Capacity for projects related to corridor development, and projects with combined system goals.

- **Enhancing Transit Mobility & Accessibility for Seniors and Persons with Disabilities- \$2B**

This funding will make additional federal resources available to improve mobility and improve accessibility for seniors and persons with disabilities. Nearly 1,000 transit stations are still not built to Americans with Disabilities Act (ADA) standards.

- **Low-No Program - \$5.25B**

- The Low-No Program provides funding to state and local governments for the purchase or lease of zero-emission and low-emission transit buses, including acquisition, construction, and leasing of required supporting facilities.

Airports

Funding Table:

AIRPORTS	
\$20,000,000,000	Airside Projects (runways, taxiways, etc) and Terminal Projects
\$5,000,000,000	Air Traffic Control Infrastructure

Summary: This section of the bipartisan infrastructure agreement will address the aging infrastructure needs of the nation’s airports and air traffic control (ATC) facilities.

- **Airside projects (Runways, taxiways, etc) & Terminal projects - \$20 billion total**
 - **Formula funding:** \$15 billion (\$3 billion / year) for grants for airports to use for Airport Improvement Program (“AIP”) projects, such as runways and taxiways, terminal development projects, noise, multimodal, or airport-owned towers. This provides flexibility for airports to address their specific airside or landside needs. This funding is formula-driven and spread out over five years.
 - **Discretionary funding:** \$5 billion (\$1 billion / year) for the Airport Terminal Program, a discretionary grant program for terminal development and other landside projects spread out over 5 years. The language ensures that terminal projects at small hub airports, nonhub, and nonprimary airports will receive funding guaranteeing that communities of all sizes benefit.
- **ATC Infrastructure - \$5 billion**
 - **\$5 billion for FAA’s Facilities and Equipment** which includes funding for FAA-owned ATC facilities, including FAA-owned contract towers. This funding is spread out over five years and subject to congressional approval each fiscal year.

Ports/Waterways

Funding Table:

PORTS-WATERWAYS	
\$5,150,000,000	Army Corps of Engineers Construction
\$4,000,000,000	Army Corps of Engineers Operations and Maintenance
\$300,000,000	Army Corps of Engineers Mississippi River and Tributary
\$100,000,000	Army Corps of Engineers General Expenses/Regulatory Needs
\$2,250,000,000	DOT Port Infrastructure Development Program
\$25,000,000	DOT Marine Highways Program
\$429,000,000	U.S. Coast Guard Unfunded Priority Infrastructure
\$3,850,000,000	GSA/CBP Land Ports of Entry Modernization and Construction
\$400,000,000	Reduction in Truck Emissions at Ports
\$912,000,000	Ferry Boat and Terminal Construction

Section-by-Section:

\$9.55 billion for **Army Corps of Engineers** infrastructure priorities. This includes \$5.15 billion for construction projects to help address the huge backlog of authorized projects that have yet to receive funding. Included under Corps construction are specific funding set-asides for Navigation, Inland Waterways, Aquatic Ecosystem Restoration, Environmental Infrastructure, Continuing Authorities Program, Shore Protection, and Remote and Subsistence Harbor Projects. Within the \$4 billion for Corps Operations and Maintenance, which would be spent over a three-year period, there is funding for dredging Federal navigation projects and repairing damages to Corps Projects caused by natural disasters. Similarly, under the \$300 million for Corps Mississippi Rivers and Tributaries (MR&T) Projects, funding addresses emergencies for Corps projects caused by natural disasters. There is also \$200 million for Corps General Expenses and Regulatory Needs, which is split evenly between the Ports and Waterways and Flood Resiliency Working Groups.

\$455M per year for 5 years for Department of Transportation's **Port Infrastructure Development Program (PIDP)** and **Marine Highways Program (MHP)**. \$450M in funding a year for PIDP will allow significant improvements to improve port facilities on our coasts, rivers and Great Lakes. PIDP grants can improve port infrastructure, including intermodal connections, or reduce or eliminate pollutants and greenhouse gas emissions. MHP funds, \$5M a year for five years, will work to expand the use of America's navigable waters, working to expand marine highway service options and facilitate their further integration into the U.S. transportation system.

\$429M for **U.S. Coast Guard infrastructure priorities**. Building off the Coast Guard's unfunded priorities list, the bill contains funding for needed housing, family support and childcare facilities, as well as shore construction infrastructure and facility deficiency needs.

The bill contains \$3.85B to modernize and improve **Land Ports of Entry** at our nation's Northern and Southwest Border. The funds are split between General Services Administration (GSA) and Customs and Border Protection (CBP). The funds will allow GSA and CBP to execute construction and modernization at all ports on CBP's Five-Year Plan as well as those identified as a priority for upgrades. Port modernization improves border security while also improving the efficient flow of travel and trade across

our land border. Funds are also included for port of entry paving projects, the acquisition of leased ports and Federal Motor Carrier Safety Administration facility needs.

\$80M per year for 5 years for **Reduction in Truck Emissions at Ports**. This program requires the Secretary of Transportation to coordinate and fund projects through competitive grants that reduce port-related emissions from idling trucks. This program comes from the recent EPW Surface Transportation Reauthorization that passed committee unanimously. Additionally, this section requires a study on how ports would benefit from electrification and emerging technologies that reduces truck emissions.

\$182.4M for 5 years (total \$912M) for **Ferry Boat and Terminal Construction**. Taken from the EPW Surface Transportation Reauthorization that passed the committee unanimously, this increases funding for the ferry boat program, which funds the construction of ferry boats and ferry terminal facilities.

Broadband

Summary: 19 million Americans still lack access to high-speed internet. It is well past time to bridge America’s digital divide and build a 21st century broadband infrastructure that will meet our country’s needs not only today, but for years to come. The bipartisan infrastructure plan invests \$65 billion to address our nation’s digital divide once and for all.

- **Grants to states for deployment: \$42.45 billion**
 - This funding supports a formula-based grant program to states, territories and the District of Columbia for the purposes of broadband deployment . The program does not favor particular technologies or providers. Projects would have to meet a minimum download/upload build standard of 100/20 megabits per second.
 - The funding includes 10% set-aside for high-cost areas and each state and territory receives an initial minimum allocation, a portion of which could be used for technical assistance and supporting or establishing a state broadband office.
 - To increase affordability, all funding recipients must offer a low-cost plan.
 - States would be required to have plans to address all of their unserved areas before they are able to fund deployment projects in underserved areas. After both unserved and underserved areas are addressed, states may use funds for anchor institution projects.
- **Private Activity Bonds (PABs): \$600 million**
 - Based off the Rural Broadband Financing Flexibility Act (S.1676), a Hassan-Capito proposal, this provision allows states to issue PABs to finance broadband deployment, specifically for projects in rural areas where a majority of households do not have access to broadband.
- **Additional Support for Rural Areas: \$2 billion**
 - The provision includes supports for programs administered by the U.S. Department of Agriculture, including the ReConnect Program, that provide loans and grants (or a combination of loans and grants) to fund the construction, acquisition or improvement of facilities and equipment that provide broadband service in rural areas.
- **“Middle Mile”: \$1 billion**
 - This provision would create a grant program for the construction, improvement or acquisition of middle-mile infrastructure. Eligible entities include telecommunications companies, technology companies, electric utilities, utility cooperative, etc. The “middle mile” refers to the installation of a dedicated line that transmits a signal to and from an internet Point of Presence. Competition of middle-mile routes is necessary to serve areas, reducing capital expenditures, and lowering operating costs.
- **Tribal Grants: \$2 billion**
 - This provision will provide additional funding to the Tribal Broadband Connectivity Program, which was established by the December COVID-19 relief package and is administered by NTIA. Grants from this program will be made available to eligible Native American, Alaska Native and Native Hawaiian entities for broadband deployment as well as for digital inclusion, workforce development, telehealth and distance learning.

- **Inclusion: \$2.75 billion**
 - Includes the Digital Equity Act. This legislation establishes two NTIA-administered grant programs (formula-based and competitive) to promote digital inclusion and equity for communities that lack the skills, technologies and support needed to take advantage of broadband connections. Also tasks NTIA with evaluating digital inclusion projects and providing policymakers at the local, state and federal levels with detailed information about which projects are most effective.

- **Affordability: \$14.2 billion**
 - This provision creates a sustainable Affordable Connectivity Benefit to ensure low-income families can access the internet. The program provides a \$30 per month voucher for low-income families to use toward any internet service plan of their choosing. It builds on the Emergency Broadband Benefit, making the benefit permanent and expanding eligibility to help more low-income households, while also making it more sustainable for taxpayers.

Power Infrastructure

(contains allocations from power, resilience, orphan wells/AML, western water, and water)

<i>Jurisdictional to ENR, included in ENR bill</i>			
	Authorized	To be funded	Notes
Grid Infrastructure, Resiliency, and Reliability	\$ 28,760,000,000	\$ 27,650,000,000	All from power infrastructure funding bucket. This includes \$12.5 billion in borrowing authority, which does not score at this level and will ultimately keep within our cap.
Supply Chains for Clean Energy Technologies	\$ 8,624,000,000	\$ 7,712,000,000	Predominately power infrastructure funding bucket, \$125 million from waste management. Not funding authorizations for out years or amendments from markup.
Fuels and Technology Infrastructure Investments	\$ 27,853,740,781	\$ 27,853,740,781	All from power infrastructure funding bucket.
Orphan Wells and Abandoned Mine Land Reclamation	\$ 19,000,000,000	\$ 16,000,000,000	All from orphan well/AML funding bucket. Not funding amendments from markup.
Western Water	\$ 8,300,000,000	\$ 8,300,000,000	Funding is \$5 billion from western water, \$1 billion from water, and \$2.3 billion from resilience.
Resilience	\$ 9,000,000,000	\$ 9,000,000,000	All from resilience funding bucket. Includes weatherization, ecosystem restoration, and wildfires.
Legacy Roads	\$ 250,000,000	\$ 250,000,000	
Energy Act	\$ 9,041,068,000	\$ 8,307,068,000	Not funding extended authorizations for out years.
TOTAL ENR BILL	\$ 110,828,808,781	\$ 105,072,808,781	

<i>Power Infrastructure Items, non-Jurisdictional to ENR, not included in ENR bill</i>			
	Authorized	To be funded	
Hydropower		\$ 1,600,000,000	Straight appropriations for existing programs.

TOTAL EXPANDED POWER INFRASTRUCTURE WORKING GROUP			
	Authorized	To be funded	
	\$ 118,828,808,781	\$ 114,672,808,781	

Senate Energy and Natural Resources Energy Infrastructure Act Section-by-Section

Title I—Grid Infrastructure and Resiliency

Subtitle A—Grid Infrastructure and Reliability

Preventing outages and enhancing the resilience of the electric grid. This section directs the Department of Energy (DOE) to establish a grant program to support activities that reduce the likelihood and consequence of impacts to the electric grid due to extreme weather, wildfire, and natural disaster. This section authorizes \$5,000,000,000 for the period of fiscal years (FY) 22-26.

Hazard mitigation using disaster assistance. This section amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act to include wildfire within the hazard mitigation program.

Electric grid reliability and resilience research, development, and demonstration. This section establishes the “Program Upgrading Our Electric Grid Reliability and Resiliency” program to provide Federal financial assistance to demonstrate innovative approaches to transmission, storage, and distribution infrastructure to harden resilience and reliability and to demonstrate new approaches to enhance regional grid resilience, implemented through States by public and publicly regulated entities on a cost-shared basis. It also directs the Secretary to improve resilience, safety, and reliability and environmental protection in rural or remote areas and—in collaboration with Department of Homeland Security, the Federal Energy Regulatory Commission (FERC), and the North American Electric Reliability Corporation (NERC)—to develop a framework to assess the resilience of energy infrastructure. This section authorizes \$5,000,000,000 for the period of FY22-26 for the Energy Infrastructure Federal Financial Assistance program and \$1,000,000,000 for the period of FY22-26 for Rural or Remote Areas.

Utility demand response. This section requires State regulators to consider establishing rate mechanisms to allow utilities to recover the costs of promoting demand-response practices in order to encourage electrical utilities to promote the use of demand-response practices.

Siting of interstate electric transmission facilities. This section directs DOE to study capacity constraints and congestion when designating National Interest Electric Transmission Corridors (NIETC). It also adds more objective criteria to the list of considerations the Secretary of Energy uses to select and designate an NIETC. The section adds that the FERC may issue permits for construction or modification of certain interstate transmission facilities if a state commission withholds or denies an application seeking approval for the siting of such facilities. It also directs FERC to consider whether the transmission permit applicant has engaged states and non-federal entities in good faith consultations and in a timely manner before exercising its backstop siting authority.

Rulemaking to increase the effectiveness of interregional transmission planning. This section directs FERC to initiate a rulemaking to address the effectiveness of existing planning processes for interregional transmission projects, make changes to that process, and establish a cost allocation methodology that reflects the benefits provided by interregional transmissions solutions.

Transmission facilitation program. This section establishes a \$2,500,000,000 revolving loan fund to allow DOE to serve as an “anchor-tenant” for a new transmission line or an upgrade of an existing line. The section permits DOE to buy a certain portion of the planned capacity (not more than 50%), which it then may sell after determining that the transmission project has ensured financial viability. It also permits DOE to issue loans to or enter into public-private partnerships with eligible transmission projects. It also authorizes \$10,000,000 for each of FY22-26 to carry out the program.

Deployment of technologies to enhance grid flexibility. This section amends the Energy Independence and Security Act of 2007 to include Smart Grid investments that provide flexibility and help quickly rebalance the electrical system, facilitate the aggregation or integration of distributed energy resources, provide energy storage to meet fluctuating, provide voltage support, integrate intermittent generation sources, increase the network’s operational transfer capacity, and anticipate and mitigate impacts of extreme weather events or natural disasters on grid resilience. The section authorizes \$3,000,000,000 for the Smart Grid Investment Matching Grant Program.

State energy security plans. This section provides assistance for the creation of State Energy Security Plans that address all energy sources and potential hazards and provides a risk assessment and risk mitigation approach.

State energy program. This section authorizes \$500,000,000 for the period of FY22-26 for the State Energy Program. It also amends the Energy Policy and Conservation Act to require State Energy Conservation Plans to support transmission and distribution planning activities and to allow State Energy Conservation Plans to include programs that help reduce carbon emissions in the transportation sector and accelerate the use of alternative transportation fuels for, and the electrification of State government vehicles, fleet vehicles, taxis, and ridesharing services, mass transit, school buses, ferries, and privately owned passenger and medium- and heavy-duty vehicles.

Power Marketing Administration transmission borrowing authority. This section increases the Bonneville Power Administration’s (BPA) borrowing authority by \$10,000,000,000 to assist in the financing of the construction, acquisition, and replacement of the Federal Columbia River Power System. It also requires BPA to issue an updated financial plan that considers the projected and planned use and allocation of BPA’s borrowing authority across its mission responsibilities and requires BPA to engage with customers and stakeholders on its financial and cost management efforts.

Study of codes and standards for use of energy storage systems across sectors. This section directs the Secretary of Energy to conduct a study of types and commercial applications of codes and standards applied to stationary and mobile energy storage systems as well as those that move between stationary and mobile applications such as EV batteries.

Demonstration of electric vehicle battery second-life applications for grid services. This section directs the Secretary of Energy to establish a demonstration project for second-life applications of electric vehicle batteries as aggregated energy storage installations to provide services to the electric grid.

Columbia Basin power management. This section rebalances the Columbia River Treaty by upgrading transmission capacity between Canada and the Western and Southwestern United States and authorizes amounts equal to the aggregated amount of downstream power benefits that Canada is entitled to under

the Columbia River Treaty (\$1,000,000,000). It also authorizes \$100,000,000 to rehabilitate and enhance water storage and hydroelectric capacity, and \$10,000,000 to study better coordination of water and power flows between British Columbia and the Pacific Northwest.

Subtitle B—Cybersecurity

Enhancing grid security through public-private partnerships. This section requires the Secretary, in consultation with State regulatory authorities, industry, the Electric Reliability Organization, and other relevant federal agencies, to carry out a program to promote and advance the physical security and cybersecurity of electric utilities, with priority provided to utilities with fewer resources. This section also requires a report to Congress on improving the cybersecurity of electricity distribution systems.

Energy Cyber Sense program. This section establishes a voluntary Energy Cyber Sense program to test the cybersecurity of products and technologies intended for use in the bulk-power system.

Incentives for advanced cybersecurity technology investment. This section directs FERC to initiate a rulemaking to develop incentives that would encourage investment in cybersecurity technology and participation in cybersecurity threat information sharing programs.

Rural and municipal utility advanced cybersecurity grant and technological assistance program. This section directs the Secretary of Energy to establish the “Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program” to provide grants and technical assistance for utilities to detect, respond to, and recover from cybersecurity threats. This section authorizes \$250,000,000 for the period of FY22-26.

Enhanced grid security. This section creates a program to develop advanced cybersecurity applications and technologies for the energy sector, a program to enhance and test the emergency response capabilities of DOE, and a program to increase the functional preservation of electric grid operations or natural gas and oil operations in the face of threats and hazards. This section authorizes \$250,000,000 for the period of FY22-26 for the Cybersecurity for the Energy Sector RD&D program, \$50,000,000 for the period of FY22-26 for the Energy Sector Operational Support for Cyberresilience Program, and \$50,000,000 for the period of FY22-26 for Modeling and Assessing Energy Infrastructure Risk.

Cybersecurity Plan. This section allows the Secretary of Energy to require that award recipients, funded under this Act, submit a cybersecurity plan that demonstrates the entity’s cybersecurity maturity in the context of the project.

Savings Provision. This section establishes that nothing in the subtitle affects the authority of any other Federal department or agency.

Title II—Supply Chains for Clean Energy Technologies

Earth Mapping Resources Initiative. This section codifies the Earth Mapping Resources Initiative to accelerate mapping efforts at the USGS and authorizes \$320,000,000 for the period of FY22-26 to complete an initial comprehensive national modern surface and subsurface mapping and data integration effort to better understand our domestic mineral resources.

National Cooperative Geologic Mapping Program. This section includes an abandoned mine land and mine waste geologic mapping component in the geologic mapping program to ensure mine waste is catalogued and characterized for the occurrence of critical minerals and extends the existing program through 2031.

National Geological and Geophysical Data Preservation Program. This section directs the National Geological and Geophysical Data Preservation Program to preserve samples to track geochemical signatures from critical minerals in order to provide for provenance tracking.

USGS energy and minerals research facility. This section authorizes \$167,000,000 in funding for a USGS research facility to support energy and minerals research.

Rare earth elements demonstration facility. This section authorizes \$140,000,000 for FY22 for the Department of Energy to demonstrate the feasibility of a full-scale integrated rare earth element extraction and separation facility and refinery to strengthen domestic clean energy supply chains and provide environmental benefits through the reuse and treatment of waste material.

Critical minerals supply chains and reliability. This section creates improvements to the Federal permitting process with respect to critical mineral production on Federal land.

Battery processing and manufacturing. This section establishes a “Battery Material Processing Grant Program” within DOE’s Office of Fossil Energy to ensure the US has a viable battery materials processing industry. This section also establishes within the Office of Energy Efficiency and Renewable Energy a battery manufacturing and recycling grant program to support and sustain a North American battery supply chain. This section also directs the Secretary to continue the Lithium-Ion Battery Recycling Prize and convene a task force on battery producer requirements. This section also establishes several programs within the Department of Energy (DOE) that would provide grants for battery recycling research, development and demonstration, States and units of local government to assist in the establishment or enhancement of State battery collection, recycling, and reprocessing programs and retailers that sell batteries for the implementation or establishment of a system to collect used batteries. This section authorizes \$3,000,000,000 for FY22-26 for battery material processing grants, \$3,000,000,000 for FY22-26 for battery manufacturing and recycling grants and \$10,000,000 for FY22 for the recycling prize and \$125,000,000 for the battery recycling programs at DOE.

Electric drive vehicle battery recycling and second-life applications program. This section would expand an existing program at the Department of Energy for research, development, and demonstration of electric vehicle battery recycling and second-life applications for vehicle batteries. This section authorizes \$200,000,000 for each of FY22-26.

Advanced energy manufacturing and recycling grant program. This section establishes a grant program focused on small- and medium-sized manufacturers to enable them to build new or retrofit existing manufacturing and industrial facilities to produce or recycle advanced energy products in communities where coal mines or coal power plants have closed. This section authorizes \$750,000,000 for the period of FY22-26.

Critical minerals mining and recycling research. This section establishes several initiatives to address supply chain resiliency. It establishes a critical mineral mining, recycling, and reclamation research and

development grant program within the Department of Energy; establishes a Critical Minerals Subcommittee of the National Science and Technology Council to coordinate science and technology efforts on critical minerals including recycling and substitute materials; and establishes a Department of Energy grant program for pilot projects that process, recycle, or develop critical minerals. This section authorizes \$100,000,000 for the pilot project grant program for each of fiscal years 2021 through 2024.

21st Century Energy Workforce Advisory Board. This section establishes a 21st century to support and develop a skilled energy workforce. The board would consist of between 10 and 15 members, at least one of whom would represent a labor organization.

Title III—Fuels and Technology Infrastructure Investments

Subtitle A—Carbon Capture, Utilization, and Storage, and Transportation Infrastructure

Findings. This section expresses Congress' findings regarding the importance of carbon capture, utilization, storage and transport technologies and infrastructure to meeting emissions reductions goals.

Carbon utilization program. This section establishes a grant program for state and local governments to procure and use products derived from captured carbon oxides. It expands DOE's Carbon Utilization program objectives to include the development of standards and certifications to support commercialization of carbon oxide products. This section authorizes \$41,000,000 for FY22, \$65,250,000 for FY23, \$66,562,500 for FY24, \$67,940,625 for FY25, and \$69,387,656 for FY26.

Carbon capture technology program. This section expands DOE's Carbon Capture Technology program to include front-end engineering and design (FEED) for carbon dioxide transport infrastructure necessary to deploy CCUS technologies. This section authorizes \$100 million for FY22-26.

Carbon dioxide transportation infrastructure finance and innovation. This section establishes a CO₂ Infrastructure Finance and Innovation Act (CIFIA) program, which will provide flexible, low-interest loans for CO₂ transport infrastructure projects and grants for initial excess capacity on new infrastructure to facilitate future growth. CIFIA will help facilitate private sector investment in CO₂ infrastructure. This section authorizes \$600,000,000 for FY22 and 23 and \$300,000,000 for each of FY 24-26.

Carbon storage validation and testing. This section expands DOE's Carbon Storage Validation and Testing program to include large-scale commercialization of new or expanded carbon sequestration projects and associated carbon dioxide transport infrastructure. This section authorizes \$2,500,000,000 for FY22-26 for the program.

Secure geologic storage permitting. This section provides funding for the permitting of wells for the geologic sequestration of carbon dioxide and creates a grant program for states to establish their own Class VI permitting programs to ensure rigorous and efficient CO₂ geologic storage site permitting. This section authorizes \$75,000,000 for the period of FY22-26.

Geologic carbon sequestration on the outer Continental Shelf. This section allows the Department of the Interior to permit geologic carbon sequestration on the outer Continental Shelf.

Carbon Removal. This section authorize a program for projects that contribute to the development of four regional direct air capture hubs. This section authorizes \$3,500,000,000 for FY22-26 for direct air capture projects to establish the four regional hubs.

Subtitle B—Hydrogen Research and Development

Findings; purpose. This section expresses Congress’ findings on the importance of clean hydrogen in promoting energy security and resilience and outlines the need to accelerate research, development, demonstration, and deployment of hydrogen from clean energy sources.

Definitions. The section sets a definition for “clean hydrogen” and “hydrogen.”

Clean hydrogen research and development program. This section re-establishes and expands the scope of DOE’s hydrogen research and development program to advance cross-cutting R&D for purposes of demonstration and commercialization of clean hydrogen production, processing, delivery and end-use application technologies.

Additional clean hydrogen programs. This section establishes clean hydrogen programs at DOE, including:

- At least four regional clean hydrogen hubs to demonstrate the production, processing, delivery, storage, and end-use of clean hydrogen. This section authorizes \$8,000,000,000 for the period of FY22-26.
- The development of a national strategy and roadmap to facilitate a clean hydrogen economy.
- A clean hydrogen manufacturing and recycling program to support a clean hydrogen domestic supply chain. For this program, the section authorizes \$500,000,000 for the period of FY22-26.
- A demonstration, commercialization and deployment program intended to decrease the cost of clean hydrogen production from electrolyzers. For this program, the section authorizes \$1,000,000,000 for the period of FY22-26.
- The efficient execution of DOE’s clean hydrogen program by instructing the National Energy Technology Laboratory, the National Renewable Energy Laboratory, and Idaho National to work in a crosscutting manner to carry out the new regional clean hydrogen hubs and clean hydrogen manufacturing and recycling programs.

Clean Hydrogen Production Qualifications. This section directs the Secretary, in consultation with the EPA Administrator and outside stakeholders, to develop an initial standard for the carbon intensity of clean hydrogen production from renewable fossil fuel with CCUS, nuclear, and other fuel sources, beginning at 2 kilograms carbon dioxide per kilogram hydrogen (kg-CO₂/kg-H₂), adjusted after five years, and accounting for technological and economic feasibility to be applied to the activities in this title.

Subtitle C—Nuclear Energy Infrastructure

Infrastructure planning for micro and small modular nuclear reactors. This section requires the DOE to develop a report on the feasibility for using nuclear energy to meet resilience and carbon reduction goals for the Department.

Property interests relating to certain projects and protection of information relating to certain agreements. This section allows the DOE to transfer fee title or property interest acquired by the Secretary in relation to any project funded under the Advanced Reactor Demonstration Program and extends the confidentiality of intellectual property associated with the Advanced Demonstration Program from 5 years to 30 years.

Civil nuclear credit program. This section provides the DOE with the authority, in consultation with the heads of applicable Federal agencies, to establish a process to evaluate bids through an auction process and select certified nuclear reactors to be allocated credits. This section authorizes \$6,000,000,000 for the period of fiscal years FY22-26.

Subtitle D—Hydropower

Hydroelectric production incentives. This section authorizes \$125,000,000 for FY22 for hydroelectric production incentives until expended.

Hydroelectric efficiency improvement incentives. This section authorizes \$75,000,000 for FY22 for hydroelectric efficiency improvement incentives until expended.

Maintaining and enhancing hydroelectricity incentives. This section directs the Secretary of Energy to make incentive payments to the owners and operators of hydroelectric facilities for capital improvements related to maintaining and enhancing hydroelectricity generation by improving grid resiliency, improving dam safety, and environmental improvements. This section authorizes \$553,600,000 for FY22 until expended.

Pumped storage hydropower wind and solar integration and system reliability initiative. This section directs the Secretary to establish a demonstration project for a pumped storage hydropower project to facilitate the long-duration storage of intermittent renewable electricity. This section authorizes \$10,000,000 for the period of FY22-26.

Authority for pumped storage hydropower development using multiple Bureau of Reclamation reservoirs. This section creates a streamlined process under the Bureau of Reclamation for pumped storage hydropower development projects and clarifies that certain pumped storage projects using multiple BOR reservoirs shall proceed through BOR's permitting process, not through both the Federal Energy Regulatory Commission and Bureau of Reclamation processes.

Limitations on issuance of certain leases of power privilege. This section provides requirements for the Secretary of the Interior concerning the issuance of a lease of power privilege for a proposed pumped storage project in Washington State.

Subtitle E—Miscellaneous

Solar Energy Technologies on Current and Former Mine Land. This section requires the DOE to create a report of the viability of siting solar energy on current and former mine land, including necessary interconnection, transmission siting, and the impact on local job creation.

Clean energy demonstration program on current and former mine land. This section establishes a program to demonstrate the technical and economic viability of carrying out clean energy projects on current and former mine land in a compatible manner with any existing operations. This section authorizes \$500,000,000 for the period of FY22-26.

Leases, easements, and rights-of-way for energy and related purposes on the Outer Continental Shelf. This section amends the Outer Continental Shelf Lands Act to permit offshore energy storage. This will provide flexibility for the incorporation of energy storage technologies into future offshore energy development, such as battery storage for offshore wind.

Title IV—Enabling Energy Infrastructure Investment and Data Collection

Subtitle A—Department of Energy Loan Program

Department of Energy loan programs. This section clarifies the reasonable prospect of repayment criteria for both the Title XVII Innovative Energy Loan Guarantee (Title XVII) Program and the Advanced Technology Vehicle Manufacturing (ATVM) Program. It also expands the eligibility of the Title XVII Program to include projects that increase the domestic supply of critical minerals and makes certain state energy financing entities eligible to apply for Title XVII loans. The section expands the eligibility of the ATVM program to include medium and heavy duty vehicles, trains, aircraft, maritime vessels, and hyperloop technology. This section also provides loan guarantees for certain Alaska natural gas transportation projects and systems.

Subtitle B—Energy Information Administration

Definitions. This section provides definitions for the Energy Information Administration subtitle.

Data collection in the electricity sector. This section directs the EIA to create a dashboard relating to the operation of the bulk power system including hourly operating data, and a system to provide data on the operations of load-serving entities.

Expansion of energy consumption surveys. This section directs the EIA to expand the Manufacturing Energy Consumption Survey, the Commercial Building Energy Consumption Survey, and the Residential Energy Consumption Survey to obtain more comprehensive data and reduce the burden on survey respondents; report community-level economic and environmental impacts of energy supply; and improve the presentation and distribution of data.

Data collection on electric vehicle integration with the electricity grids. This section directs the EIA to expand data collection with respect to electric vehicle integration with the electricity grid.

Plan for the modeling and forecasting of demand for minerals used in the energy sector. This section directs the EIA to develop a plan in collaboration with USGS for the forecasting of demand for energy equipment, including equipment for energy production or storage purposes that uses minerals, such as lithium and cobalt, which are or potentially may be determined to be critical minerals.

Expansion of international energy data. This section directs the EIA to implement measures to expand and improve its international energy data resources in order to understand the production and use of energy in various countries, changing patterns of energy use internationally, the relative costs and environmental impacts of energy production and use internationally, and plans for or construction of major energy facilities or infrastructure.

Plan for the National Energy Modeling System. This section directs the EIA to develop a plan to update or further the capabilities of the National Energy Modeling System, including with respect to technologies identified for large-scale demonstration projects, such as carbon capture and hydrogen production.

Report on costs of carbon abatement in the electricity sector. This section directs the EIA to submit a report on the potential use of levelized cost of carbon abatement as a metric to compare system-level costs of technology options to reduce emissions, and a potential process to measure carbon dioxide emissions intensity per unit of output production.

Harmonization of efforts and data. This section directs the EIA to establish a system to harmonize data collection efforts with EPA and other relevant Federal agencies.

Subtitle C—Miscellaneous

Consideration of measures to promote greater electrification of the transportation sector. This section directs states to consider measures to promote greater electrification of the transportation sector including the establishment of rates that promote affordable and equitable electric vehicle charging options, improve the customer experience associated with EV charging including reducing wait times, accelerate third-party investment in public electric vehicle charging, and appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

Office of Public Participation. This section amends section 319 of the Federal Power Act regarding the Office of Public Participation. The section strikes provisions related to the Director of the Office of Public Participation's term and termination and updates the Director's pay scale. This section also strikes expired authorization provisions.

Digital climate solutions report. This section requires the Secretary to report on the use of digital tools and platforms, such as artificial intelligence, crowdsourcing, and other technologies, as climate solutions.

Study and report by the Secretary of Energy on job loss and impacts on consumer energy costs due to the revocation of the permit for the Keystone XL pipeline. This section requires the Secretary of Energy to complete a study and report on the job loss and impacts on consumer energy costs due to the revocation of the permit for the Keystone XL pipeline.

Study on impact of electric vehicles. This section requires the Secretary of Energy to conduct a study on the cradle to grave environmental impact of electric vehicles.

Study on impact of forced labor in China on the electric vehicle supply chain. This section requires the Secretary of Energy, in coordination with the Secretary of State, to study the impact of forced labor in China on the electric vehicle supply chain.

Title V—Energy Efficiency and Building Infrastructure

Subtitle A—Residential and Commercial Energy Efficiency

Definitions. This section provides definitions for the Residential and Commercial Energy Efficiency subtitle.

Energy efficiency revolving loan fund capitalization grant program. This section creates a revolving loan fund capitalization grant program within the State Energy Program for recipients to conduct commercial energy audits, residential energy audits, or energy upgrades or retrofits. This section authorizes \$250,000,000 for FY22.

Energy auditor training grant program. This section establishes a competitive grant program under which the Secretary shall award grants to eligible States to train individuals to conduct energy audits or surveys of commercial and residential buildings. This section authorizes \$40,000,000 for the period of FY22-26.

Subtitle B—Buildings

Cost-effective codes implementation for efficiency and resilience. This section creates a grant program within the Building Technologies Office to enable sustained, cost-effective implementation of updated building energy codes. This section authorizes \$225,000,000 for the period of FY22-26.

Building, training, and assessment centers. This section provides grants to institutions of higher education to establish building training and assessment centers to educate and train building technicians and engineers on implementing modern building technologies. This section authorizes \$10,000,000 for FY22.

Career skills training. This section directs the Secretary to award grants to pay the Federal share of associated career skills training programs under which students concurrently receive classroom instruction and on-the-job training for the purpose of obtaining an industry-related certification to install energy efficient buildings technologies. This section authorizes \$10,000,000 for FY22.

Commercial building energy consumption information sharing. This section requires the EIA and EPA to agree to an information sharing agreement related to commercial building energy consumption data.

Subtitle C—Industrial Energy Efficiency

Part 1—Industry

Future of industry program and industrial research and assessment centers. This section provides funding for institution of higher education-based industrial research and assessment centers to identify opportunities for optimizing energy efficiency and environmental performance at manufacturing and other

industrial facilities. This section also establishes a grant program to fund upgrades for small- and medium-sized manufacturers that have been recommended in an assessment from an IAC or CHP TAP. This section authorizes \$550,000,000 for the period of FY22-26.

Sustainable manufacturing initiatives. This section directs the Office of Energy Efficiency and Renewable Energy to provide technical assessments for manufacturers to maximize energy efficiency, prevent pollution, improve efficient use of water, conserve natural resources, and other goals determined by the Secretary.

Part II—Smart Manufacturing

Definitions. This section provides definitions for the Smart Manufacturing subtitle.

Leveraging existing agency programs to assist small and medium manufacturers. This section requires the Secretary to include smart manufacturing technologies and practices within the scope of technologies covered by the industrial assessment centers of the Department of Energy.

Leveraging smart manufacturing infrastructure at National Laboratories. This section requires the Secretary to conduct a study on how the Department can increase access to existing high-performance computing resources in the National Laboratories, particularly for small and medium manufacturers.

State manufacturing leadership. This section establishes a program for the Secretary to provide funding to states to invest in smart manufacturing technologies. This section authorizes \$50,000,000 for the period of FY22-26.

Report. This section requires the Secretary to submit a report on the progress made in advancing smart manufacturing in the United States.

Subtitle D—Schools and Nonprofits

Grants for energy efficiency improvements and renewable energy improvements at public school facilities. This section directs the Secretary to award competitive grants to make energy efficiency, renewable energy, and alternative fueled vehicle upgrades and improvements at public schools. This section authorizes \$500,000,000 for the period of FY22-26.

Energy efficiency materials pilot program. This section establishes a pilot program to award grants to provide nonprofit buildings with energy-efficiency materials. This section authorizes \$50,000,000 for the period of FY22-26.

Subtitle E—Miscellaneous

Weatherization assistance program. This section authorizes \$3,500,000,000 for FY22 for the Weatherization Assistance Program.

Energy efficiency and Conservation Block Grant Program. This section authorizes \$550,000,000 for FY22 for the Energy Efficiency and Conservation Block Grant Program. This section also amends the Energy Independence and Security Act of 2007 to allow EECBG funding to be used in programs that

finance energy efficiency and other clean energy capital investments, projects, loan programs, and performance contracting programs.

Survey, analysis, and report on employment and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States. This section establishes an “Energy Jobs Council” to conduct a survey of employers in the energy, energy efficiency, and motor vehicles sectors and perform analysis of the figures and demographics in those sectors to be made publicly available. This section is simply codifying the United States Energy and Employment Report that DOE used to produce, which has been produced by the Energy Futures Initiative since 2017.

Assisting Federal Facilities with Energy Conservation Technologies grant program. This section authorizes \$250,000,000 for FY22 for the existing AFFECT grants that are distributed through the Federal Energy Management Program to provide grants to federal agencies that they can leverage with private capital to make energy and water efficiency upgrades to federal buildings.

Rebates. This section authorizes \$20,000,000 for the period of FY22-23 for the extended product system rebate program and the energy efficient transformer rebate program.

Model guidance for combined heat and power systems and waste heat to power systems. This section requires the Secretary of Energy and FERC to review existing rules and procedures relating to interconnection service and additional services throughout the United States for electric generation with nameplate capacity up to 150 megawatts connecting at either distribution or transmission voltage levels to identify barriers to the deployment of combined heat and power systems and waste heat to power systems.

Title VI—Methane Reduction Infrastructure

Orphaned well site plugging, remediation, and restoration. This section authorizes \$4,707,000,000 for programs to plug, remediate, and reclaim orphaned wells on Federal, State, and Tribal lands.

Title VII Abandoned Mine Land Reclamation

Abandoned Mine Reclamation Fund authorization of appropriations. This section authorizes \$11,293,000,000 in funds for the Abandoned Mine Land Reclamation Fund.

Abandoned Mine Reclamation Fee. This section adjusts the rates of the Abandoned Mine Reclamation Fee to 22.4 cents per ton of coal produced by surface coal mining, 9.6 cents per ton of coal produced by underground mining, and 6.4 cents per ton for lignite coal. This section also extends the fee until 2034.

Amounts distributed from Abandoned Mine Reclamation Fund. This section extends the dates that amounts are to be distributed until 2036.

Abandoned hardrock mine reclamation. This section establishes a new program within the Department of the Interior to inventory, assess, decommission, reclaim, respond to hazardous substance releases on, and remediate abandoned hardrock mine land. This section authorizes \$3,000,000,000, of which 50 percent is reserved for grants to States and Tribes and 50 percent is reserved for use on Federal land.

Title VIII—Natural Resources-Related Infrastructure, Wildfire Management, and Ecosystem Restoration

Forest Service Legacy Road and Trail Remediation Program. This section authorizes \$250,000,000 for the Forest Service’s Legacy Road and Trail program, which funds activities to restore fish passage in streams at road and trail crossings, decommission unauthorized, user-created roads, decommission temporary roads, and other activities.

Study and report on feasibility of revegetating reclaimed mine sites. This section requires the Director of the Office of Surface Mining Reclamation to submit a study on the feasibility of revegetating reclaimed mine sites.

Wildfire risk reduction. This section authorizes \$3,369,200,000 to the Department of the Interior and the Forest Service for wildfire risk reduction by providing funding for community wildfire defense grants, mechanical thinning, controlled burns, the Collaborative Forest Restoration Program, and firefighting resources.

Ecosystem restoration. This section authorizes \$2,130,000,000 for the Department of the Interior and the Forest Service to restore the ecological health of Federal lands and waters and of private lands, through voluntary efforts, via a variety of programs, including through partnering with States.

GAO Study. This section directs the Comptroller General of the United States to conduct a study on the implementation of this Title and whether it effectively reduced wildfire risk and restored ecosystems. This section authorizes \$800,000 for this study.

Establishment of fuel breaks in forests and other wildland vegetation. This section establishes a categorical exclusion for certain forest management activities from the requirements under the National Environmental Policy Act.

Emergency actions. This section allows the Secretary to designate certain situations as emergency situations and take authorized emergency actions in response.

Title IX—Western Water Infrastructure

Western water infrastructure. This section authorizes \$8,300,000,000 for FY22-26 for Bureau of Reclamation western water infrastructure, including:

- \$3.2 billion for aging infrastructure,
- \$1.15 billion for water storage, groundwater storage and conveyance projects (includes \$100 million for small water storage),
- \$1 billion for water recycling and reuse projects (includes \$450 million for large water recycling projects),
- \$250 million for desalination projects,
- \$1 billion for rural water projects,
- \$500 million for dam safety projects,
- \$300 million for Drought Contingency Plan (includes \$50 million for Upper Basin States),

- \$400 million for waterSMART Water and Energy Efficiency Grants (includes \$100 million for natural infrastructure projects),
- \$100 million for the Cooperative Watershed Management Program,
- \$250 million for Aquatic Ecosystem Restoration Program,
- \$100 million for multi-benefit watershed projects, and
- \$50 million for Colorado River fish species recovery programs.

Water storage, groundwater storage and conveyance projects. This section clarifies eligibility and requirements for feasibility studies and construction funding for storage and conveyance projects.

Small water storage and groundwater storage projects. This section authorizes \$100 million for a new competitive grant program for small water storage projects.

Critical maintenance and repair. This section authorizes \$100 million in funding to support certain Bureau of Reclamation infrastructure that has failed in the last two years. This section also authorizes \$100 million in funding for dams developed under the Carey Act of 1894.

Large-scale water recycling and reuse projects. This section authorizes \$450 million for a new competitive grant program for large-scale water recycling and reuse projects.

Drought contingency plan funding requires. This section clarifies how the drought contingency plan funding can be used.

Multi-benefit projects to improve watershed health. This section authorizes \$100 million for a new competitive grant program for habitat restoration projects in river basins that have been impacted by Bureau of Reclamation water projects.

Eligible desalination projects. This section provides a technical amendment to current law.

Clarification of authority to use Coronavirus Fiscal Recovery Funds to meet a non-federal matching requirement for authorized Bureau of Reclamation water projects. The American Rescue Plan authorized State and local funds to be used broadly for water infrastructure. This section clarifies that these funds can be used to satisfy non-Federal matching requirements for authorized Bureau of Reclamation projects.

Federal assistance for groundwater recharge, aquifer storage, and water source substitution projects. This amendment authorizes the Bureau of Reclamation to provide technical and financial assistance for groundwater recharge, aquifer storage, and water source substitution projects.

Title X—Authorization of Appropriations for Energy Act of 2020

Energy storage demonstration projects. This section authorizes funding for the Energy Storage Demonstration Projects and Pilot Grant Program authorized by the Energy Act of 2020. This section authorizes \$355,000,000 for FY 22-25 for that program. This section also authorizes \$150,000,000 for FY22-25 for a Long-duration Demonstration Initiative and Joint Program.

Advanced reactor demonstration program. This section authorizes \$3,211,000,000 for the Advanced Reactor Demonstration Program authorized in the Energy Act of 2020 for FY22-27

Mineral security projects. This section authorizes \$825,668,000 in funding for FY 22-26 for the National Geological and Geophysical Data Preservation Program, Rare Earth Mineral Security, Critical Material Innovation, Efficiency, and Alternatives, and a Critical Mineral Supply Chain Research Facility authorized by the Energy Act of 2020.

Carbon capture demonstration and pilot programs. This section authorizes \$3,474,000,000 for FY 22-25 for Carbon Capture Large-Scale Pilot Projects and Carbon Capture Demonstration Projects authorized by the Energy Act of 2020.

Direct air capture technologies prize competitions. This section authorizes \$115,000,000 for FY 22-25 for the Direct Air Capture Technologies Prize Competition authorized by the Energy Act of 2020.

Water power projects. This section authorizes \$146,400,000 for FY 22-25 for hydropower and marine energy and National Marine Energy Centers authorized by the Energy Act of 2020.

Renewable energy projects. This section authorizes funding for the period of FY22-25 for renewable energy demonstration projects including \$84,000,000 for enhanced geothermal systems, \$100,000,000 for wind energy, and \$80,000,000 for solar energy authorized by the Energy Act of 2020. It includes a provision making it clear that the authorization for wind energy is part of the Energy Act authorization.

Industrial emissions demonstration projects. This section authorizes \$500,000,000 for FY 22-25 for industrial emissions demonstration projects authorized by the Energy Act of 2020.

Title XI—Wage Rate Requirements

Wage Rate Requirements. This section requires that wages for projects funded under this Act are not less than those prevailing on similar projects in the locality.

Title XII—Miscellaneous

Office of Clean Energy Demonstrations. This section establishes an Office of Clean Energy Demonstrations at the Department of Energy to coordinate activities relating to the selection, project management, and assessment of demonstration projects funded by the Department.

Extension of Secure Rural Schools and Community Self-Determination Act of 2000. This section extends the Secure Rural Schools and Community Self-Determination Act.

- desalination projects and studies, dam repair and replacement, and WaterSMART grants. This amount was credited to the ENR section, the Energy Infrastructure Act.
- **Water and Sewer Tax - \$1.274 billion**
 - The provision modifies section 118 of the Internal Revenue Code, which provides an exclusion from gross income for contributions to the capital of a corporation. Specifically, the new law excludes from taxable income any “contribution in aid of construction” (CIAC) or any other contribution as a customer or potential customer, as well as any contribution by any government entity or civic group (other than a contribution made by a shareholder as such) for purposes of water or sewerage improvements. This provision applies to contributions made after December 31, 2020, unless the contribution is made by a government entity pursuant to a master development plan that is approved prior to the effective date by a government entity.
- **Indian Health Service Water and Sewer - \$3.5 billion**
 - This amount provides funds for the provision of domestic and community sanitation facilities for Indians, as authorized by section 7 of the Act of August 5, 1954 (68 Stat. 674). Additionally, funds are made available to Tribes and Tribal organizations under the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5301 et seq.) available on a one-time basis. A total of \$1.7 billion of this IHS funding was credited to this section from Drought Resiliency funding.

Resiliency – BRIC

Summary Table:

FEMA Building Resilient Infrastructure and Communities (BRIC)	
\$1,000,000,000	General Funding for BRIC

Section-by-Section:

\$1B for the **FEMA Building Resilient Infrastructure and Communities (BRIC) Program**. This is a pre-disaster mitigation program, supporting states, local communities, tribes and territories undertaking hazard mitigation projects to reduce the risks they face from disasters and natural hazards.

Resiliency – Waste Management

\$75M for **the RECYCLE Act (S.923)**, which authorizes a new \$15 million per year grant program at the EPA to help educate households and consumers about their residential and community recycling program. This helps decrease contamination in the recycling stream and helps support recycling infrastructure.

\$150M for **critical mineral and battery recycling**, which aims to address the lack of domestic policy, markets, and infrastructure regarding the coordinated collection, recycling and reuse of single use and rechargeable consumer batteries which contain valuable materials needed to support a U.S.-based supply chain.

\$200M for the **NOAA Marine Debris Program**, which promotes action to reduce debris in our ocean, including clean up and response actions needed as a result of severe marine debris events.

\$275M for the **Save Our Seas Act 2.0 Sec. 302 Post-Consumer Materials Management Grants**, at \$55M per year. This would funding to a new grant program to support improvements to local post-consumer materials management, including municipal recycling program.

\$100M for the **EPA Pollution prevention program**, where the EPA provides grants and technical assistance to help businesses adopt pollution prevention practices.

\$10M for a **bioproduct pilot program at the U.S. Department of Agriculture** to partner with at least one university affiliated bioproduct research facility to study the relative benefits of using materials derived from agricultural commodities in the production of construction and consumer products. The benefits to be studied include waste management cost and greenhouse gas emission reductions and other environmental benefits.

Resiliency – Drought

\$2.2B over 5 years for the Aging Infrastructure Account. The Aging Infrastructure Account was created in the 2020 Consolidated Appropriations bill. Its function is to provide funds and funding assistance to The Bureau of Reclamation for costs of certain major, nonrecurring maintenance of bureau-owned water infrastructure at water infrastructure projects across the West that are in need of major upgrades or replacement. The total number of treatment facilities that fall under the category the Account covers comes in at 80 percent. As those facilities, most of which are more than 50 years old, continue to age, the issue of treating water thoroughly and in a timely manner only increases.

\$500M over 5 years for the Western Area Power Administration’s power purchase and transmission activities. The West and Midwest have over the past year been hit by worsening drought conditions and polar vortex, which has impacted WAPA’s reserve funds to purchase power on the open market. This funding will provide a critical infusion of funds to ensure that as drought conditions worsen WAPA’s does not deplete their power purchase funds. A depletion of funds would result in significant rate increases to customers across 15 states.

\$80M over 5 years for NOAA procurement of high-performance computing. This funding will allow NOAA to procure research supercomputing infrastructure used for weather and climate model development to improve drought, flood, and wildfire prediction, detection, and forecasting. NOAA has informed the Drought working group that this is their highest priority for monitoring and responding to drought conditions.

\$340M for 5 years (total \$1.7B) for Indian Health Services Sanitation Facilities Construction Enhancement. Sanitation and water infrastructure on tribal lands is severely outdated, as was made clear during the COVID-19 pandemic. This funding will be provided for sanitation facilities construction within Indian Health Services at HHS. Such funds would provide for the planning, design, construction, modernization, improvement, and renovation of water, sewer, and solid waste sanitation facilities that are funded, in whole or part, by the Indian Health Service.

\$100M over 5 years for Drought Contingency Plan Funding. The Drought Contingency Plan was agreed between the 7 states of the Upper and Lower Colorado Basins, and approved by Congress, to prepare for increasingly harsh drought conditions. This section provides \$50M each to the Upper and Lower Basins for drought contingency operations, such as monitoring and reclamation at Lake Powell and Lake Mead.

\$40M over 5 years for Missouri River Basin Drought and Snowpack Monitoring. This funding is provided to the Army Corps of Engineers to carry out Soil Moisture and Snowpack Monitoring activities as authorized in section 4003(a) of the Water Resources Reform and Development Act of 2014. These activities will enhance soil moisture and snowpack monitoring in the Upper Missouri River Basin to reduce flood risk and improve river and water resource management in the Upper Missouri River Basin as extreme drought conditions spread across the US.

\$1M over 5 years for a Soil Moisture and Snowpack Monitoring Pilot Program. This funding will support a NOAA study and pilot program with the State mesonet programs in the Upper Missouri River Basin. The program will study soil moisture and snowpack monitoring network in the Upper Missouri

River Basin pursuant to section 511(b)(3) of the Water Resources Development Act of 2020. The study will include assessments of:

- The contribution of the soil moisture, snowpack, and other relevant data generated by the network to weather, sub-seasonal and seasonal, and climate forecasting products on the local, regional, and national levels;
- The enhancements made to the National Integrated Drought Information System, the National Water Model, and the United States Drought Monitor, and other relevant national modeling efforts, using data and derived data products generated by the network;
- The contribution of data generated by the network to remote sensing products and approaches; and
- The viability of the ownership and operational structure of the network.

\$618M over 5 years for USDA NRCS Watershed Programs. This section provides \$500M for Watershed and Flood Prevention Operations (WFPO) and \$118M for Watershed Rehabilitation Programs. Both programs are critically important to Western and Midwestern states being hit by drought. WFPO helps units of federal, state, local, and tribal governments protect and restore watersheds up to 250,000 acres. This program provides for cooperation between the Federal government and the states and their political subdivisions to work together to prevent erosion; floodwater and sediment damage; to further the conservation development, use and disposal of water; and to further the conservation and proper use of land in authorized watersheds.

The Watershed Rehabilitation Program helps project sponsors rehabilitate aging dams that are reaching the end of their design lives. This rehabilitation addresses critical public health and safety concerns. Since 1948, the Natural Resources Conservation Service NRCS has assisted local sponsors in constructing 11,845 dams project dams.

\$216M over 5 years for Tribal Climate Resilience. This section provides \$216 million for tribal climate resilience, adaptation, and community relocation planning, design, and implementation of projects which address the varying climate challenges facing tribal communities across the country. Of that, \$130M is for community relocation and \$86M is for climate resilience and adaptation projects.

Resiliency – Ecosystems

ECOSYSTEMS	
\$500,000,000	USACE Ecosystem Restoration
\$1,000,000,000	Great Lakes Restoration Initiative (EPA)
\$238,000,000	Chesapeake Bay (EPA)
\$89,000,000	Puget Sound (EPA)
\$106,000,000	Long Island Sound (EPA)
\$53,000,000	Gulf of Mexico (EPA)
\$40,000,000	Lake Champlain (EPA)
\$24,000,000	San Francisco Bay (EPA)
\$16,000,000	South Florida (EPA)
\$15,000,000	Southern New England Estuaries (EPA)
\$4,000,000	Pacific Northwest (EPA)
\$79,000,000	Columbia River Basin (EPA)
\$53,000,000	Lake Pontchartrain (EPA)
\$132,000,000	National Estuary Program, 28 Estuaries (EPA)
\$26,000,000	Delaware River Basin (FWS)
\$162,483,000	Klamath Restoration (FWS)
\$16,909,000	Lake Tahoe Restoration Act (FWS)
\$50,000,000	Sagebrush Steppe (FWS)
\$207,000,000	Coastal Zone Management Program (NOAA)
\$77,000,000	National Estuarine Research Reserve System (NOAA)
\$172,000,000	Pacific Coastal Salmon Recovery Fund (NOAA)
\$60,000,000	Gulf of Mexico and Mississippi and Ohio Rivers Hypoxia
\$56,000,000	Regional Ocean Partnerships
\$150,000,000	Oceans and Coastal Observations (NOAA)
\$5,000,000	Permitting (USCG)
\$20,000,000	Permitting (NOAA)

Resiliency – Wildfire Management

Authorizes and funds \$5.75B for Title VIII of the Energy Infrastructure Act of 2021, as reported out of the Energy & Natural Resources Committee, for natural resources-related infrastructure, wildfire management, and restoration.

\$35.6M per year for 5 years (total \$178M) for the **Department of Interior to carry out hazardous fuels reduction projects**. This amount includes \$2M per year for 5 years (total \$10M) for projects authorized under the **Tribal Forestry Protection Act**.

\$45M per year for 5 years (total \$225M) for the **Department of Interior to carry out Burned Area Rehabilitation** programs.

\$102.8M per year for 5 years (total \$514M) for the **Forest Service to carry out hazardous fuels reduction projects**. This amount includes \$8M per year for 5 years (total \$40M) for projects authorized under the **Tribal Forestry Protection Act**, and \$12M per year for 5 years (total \$60M) for Community Wood Energy and Wood Innovation Grants.

\$45M per year for 5 years (total \$225M) for the **Forest Service to carry out Burned Area Rehabilitation** programs.

\$40M per year for 5 years (total \$200M) for the **Forest Service to carry out State and Private Forestry** grants to states for hazardous fuel work. This includes \$17.6M per year for 5 years (total \$88M) for State Fire Assistance Grants for hazardous fuels projects and \$4M per year for 5 years (total \$20M) for Volunteer Fire Assistance grants.

\$100M per year for 5 years (total \$500M) for **Forest Service Community Defense Grants**.

\$20M per year for 5 years (total \$100M) for the **Forest Service** for construction, maintenance, and decommissioning of roads limited to forest restoration projects.

\$300M over 5 years for the **USDA Natural Resources Conservation Service** for the Emergency Watershed Protection Program.

\$50M in FY22 to **carry out Public Law 102-575**, the Central Utah Project Completion Act.

\$100M over 5 years for **NOAA Fireweather Testbed programs**. These funds will be used to procure new systems and recapitalize existing and outdated systems to improve wildfire prediction, detection, observation, modeling, and forecasting.

Includes the Wildland Fire Mitigation & Management Commission Act of 2021, as unanimously reported out of the Homeland Security and Government Affairs Committee, which establishes a commission to study and recommend wildland fire prevention, mitigation, suppression, management, and rehabilitation policies.

Includes the REPLANT Act (S. 866), which removes the current \$30M per year cap on the Reforestation Trust Fund, and will help the U.S. Forest Service plant 1.2 billion trees on national forest

lands and create nearly 49,000 jobs over the next decade. The Reforestation Trust Fund is funded by tariffs collected on wood products. Currently revenues over \$30M are directed to the U.S. Treasury General Fund.

Resiliency – Cyber

\$20M per year for 5 years (total \$100M) for the Cyber Response and Recovery Fund. This provision is not law, but passed the Senate in the US Innovation and Competition Act of 2021 to develop a consensus on how best the U.S. can defend itself against cyberattacks. The bill allows the Secretary of Homeland Security to declare a Significant Incident following a breach of public and private networks and a fund that allows the CISA to provide direct support to public or private entities as they respond and recover from significant cyberattacks and breaches. Any unused funds remain available until expended with the program ending September 30, 2028.

The **State, Local, Tribal, and Territorial (SLTT) Grant Program** will be a new authorization with a total \$1B allocated over 4 years (\$200M FY22, \$400M FY23, \$300M FY24, \$100M FY25). Funds are available until expended. This will establish a new grant program and guard rails for such program to provide Federal assistance to SLTT entities. The current grant programs to provide cybersecurity assistance to SLTT entities has inherent flaws that this program will address. The program will be administered by FEMA in consultation with CISA acting as the subject matter expert.

\$31.5M per year over 5 years (total \$157.5M) for **DHS Science and Technology Directorate for Research and Development.** These funds will include support for specific areas of research related to risk assessments; cybersecurity vulnerability testing; and positioning, navigation, and timing capabilities.

\$35M in FY22 for **CISA Sector Risk Management.** This is a one-time investment for CISA to establish a capability to oversee and execute cross-sector government to support CISA's national cross-sector coordination role, established in the FY21 NDAA.

\$21M to the **Office of the National Cyber Director**, which will be available until September 30, 2022. The National Cyber Director was sworn in to office July 14, 2021. This office does not currently have appropriated funds. For the Cyber Director to get to work, this language will bridge a funding gap until such time as funds are appropriated for FY22.

\$75M/year for five years (total \$375M) to potentially fund the **National Cyber Resilience Assistance Fund.** This would be a new authorization would establish a grant program to address areas of significant cybersecurity risk for critical infrastructure in the private sector.

Low/No Carbon Buses and Ferries

Funding Table:

LOW CARBON BUSES AND FERRIES	
\$5,000,000,000	Clean School Bus Program
\$1,250,000,000	FTA Passenger Ferry Grant Program
\$250,000,000	Electric Ferry Pilot Program
\$1,000,000,000	Ferry Operations for Rural Communities

Authorizes and appropriates \$1 billion per year for FY 2022-2026 (total \$5 billion) to implement a school bus change out program (“Clean School Bus Program”) to reduce emissions and improve public health. Program is created by amending an expired program from the Energy Policy Act of 2005 and would be managed by the Administrator of the Environmental Protection Agency. State or local governments, eligible contractors, and nonprofit school transportation associations are authorized to receive grant funds. Fifty percent of the funds are authorized for zero-emission (electric) school buses, and 50 percent of the funds are authorized for zero emission and low emission alternative fuels buses. Funds may be prioritized for rural or low-income communities and entities that have matching funds available. The Administrator is authorized to provide funds to cover up to 100 percent of the costs for the replacement of the bus.

Provides \$1.25 billion for the Federal Transit Administration’s Passenger Ferry Grant Program.

Directs the Secretary of Transportation to establish a \$250 million pilot program to provide grants for the purchase of electric or low-emitting (methanol, natural gas, liquefied petroleum gas, hydrogen, biofuels) ferries. Requires that at least one grant be awarded to the State with the largest Marine Highway System and a bi-ferry service with an aging fleet. Funds are authorized and appropriated at \$50 million a year for FY 2022-2026.

Directs the Secretary of Transportation to establish a \$1 billion Basic Essential Ferry Service. Eligible places must serve at least two rural areas and have had scheduled ferry transportation service from 2015-2020, Funds are authorized and appropriated at \$200 million a year for FY 2022-2026. Makes operating costs an authorized use under 23 U.S.C. 147 and 23 U.S.C. 238(b).

Water Working Group

Funding Table:

Water	
\$23,426,000,000	State Revolving Funds (SRFs)
\$15,000,000,000	To address lead service lines
\$10,000,000,000	To address PFAS
\$2,500,000,000	Indian Water Rights Settlement Fund
\$1,800,000,000	Indian Health Service Sanitation Facilities
\$1,274,000,000	Water/Sewer Utility tax treatment

Drinking Water and Wastewater Infrastructure Act (DWWIA). Includes the bipartisan, Senate-passed Drinking Water and Wastewater Infrastructure Act of 2021, which authorized over \$35 billion in water infrastructure investments over 5 years. The bipartisan infrastructure bill also authorizes an additional \$13.825 billion over 5 years for the Drinking Water and Clean Water State Revolving Funds (SRFs).

\$23.426B split evenly between the Drinking Water and Clean Water SRFs. Federal capitalization grants for state drinking and waste water infrastructure investments.

\$15B to address lead service lines. Funds will be allocated to the Drinking Water State Revolving Fund (DWSRF) to replace lead service lines, with 49% of the funding distributed by the states as forgivable loans or grants.

\$10B to address per- and polyflouroalkyl substances (PFAS). Funding is directed through a grant program for small and disadvantaged communities, as modified by DWWIA, with additional flexibility (\$5B); the emerging contaminants program with a focus on PFAS in the Drinking Water SRF (\$4B); and the Clean Water SRF to address emerging contaminants (\$1B).

\$2.5B to fully fund all currently-authorized Indian Water Rights Settlements. Provides \$2.5 billion for the Department of Interior to complete all currently-authorized Indian water rights settlements. The legislation also allows these funds to meet funding requirements for settlements for grant programs administered by the Bureau of Reclamation or Bureau of Indian Affairs.

\$1.8B to Indian Health Service Sanitation Facilities Construction. \$1.8 billion from the Water Working Group will be added to \$1.7 billion from the Resiliency Working Group, for a combined total of \$3.5 billion in IHS sanitation facilities. This will help connect communities and residences to drinking and sewer water systems.

\$1.274B on Tax Treatment for Water/Sewer Utilities. Prior tax law treated donations of funds or other resources from governments, civic groups, or developers to facilitate construction or remediation of water or sewer infrastructure as non-taxable to water and sewer utility companies. Current law requires these “contributions to capital” be counted as taxable revenue. This proposal restores the deduction.

Section by Section Summary of the Carper-Capito Substitute to S. 914, the Drinking Water and Wastewater Infrastructure Act of 2021 (as reported on April 27, 2021)

Title: To amend the Safe Drinking Water Act and the Federal Water Pollution Control Act to reauthorize programs under those Acts, and for other purposes.

Short Title; Table of Contents

- This Act may be cited as the “Drinking Water and Wastewater Infrastructure Act of 2021.

Definition of Administrator

- In this Act, the term “Administrator” means the Administrator of the Environmental Protection Agency.

Drinking Water

Technical Assistance and Grants for Emergencies Affecting Public Water Systems

- This section extends an expired authority in the Safe Drinking Water Act (SDWA), 42 U.S.C. 300j–1, to provide resources to communities that face a public water system emergency. The fund will help mitigate drinking water threats to public health, and is amended to expand the definition of emergency situations to include an intrusion of lead into the drinking water supply or an emergency situation resulting from a cybersecurity event. The program is reauthorized at \$35 million for each of fiscal years from 2022 through 2026.
- In addition, this section also extends the \$15 million authorization for technical assistance to public water systems for five years, from fiscal years 2022 through 2026.
- The section also makes nonprofit organizations eligible recipients of funding to provide technical assistance to small public water systems in order to achieve compliance with the SDWA. Nonprofits that receive funding under this section are required to consult with the State in which the assistance is to be expended or otherwise made available before carrying out its planned activities.
- This section also requires the Administrator to evaluate, using compliance data from the agency’s Safe Drinking Water Information System, the compliance of community water systems and wastewater systems with environmental, health, and safety requirements under SDWA and CWA.

Drinking Water State Revolving Loan Funds

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section reauthorizes the Drinking Water State Revolving Loan Funds (DWSRF) and increases the minimum percentage of additional subsidy that must go to disadvantaged communities from 6 percent to 12 percent. This section also broadens the discretionary authority of states to assist disadvantaged communities with grants, negative interest loans, forgiveness of principal, and loan forgiveness. States may also buy, refinance, or restructure the debt of a disadvantaged community.

- This section also reauthorizes a provision in SDWA that allows for up to 2 percent of the DWSRF to be used by nonprofit organizations to provide technical assistance for small systems in order to achieve compliance.
- This section also makes permanent the American Iron and Steel requirement for the Drinking Water State Revolving Loan Fund, also known as the “Buy America” requirement.
- Under this section DWSRF is reauthorized at a level of \$2.4 billion in fiscal year 2022, \$2.75 billion in fiscal year 2023, \$3 billion in fiscal year 2024, and \$3.25 billion for fiscal years 2025 and 2026.

Source Water Petition Program

- The section reauthorizes the Source Water Petition Program, which allows owners and operators of community water systems, municipal or local governments, and political subdivisions of a state to submit a source water quality protection partnership petition to the State requesting that the State assist in the local development of a voluntary, incentive-based partnership among the owner, operator, relevant stakeholder or government. These petition partnerships are created to help affected parties reduce drinking water contaminants, obtain financial or technical assistance, or develop recommendations for the long-term protection of a community water system’s source water.
- This section also amends the program to allow states to designate a county to act on behalf of an unincorporated area in the petition, should the unincorporated area choose to enter such a partnership, solely for the purpose of pursuing a source water petition for a specific matter.
- This program is reauthorized through 2026 at the current funding level of \$5 million annually.

Assistance for Small and Disadvantaged Communities

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section addresses multiple programs that fall under Section 1459A of SDWA (42 U.S.C. 300j–19a).
- The first part of this section reauthorizes and modifies the Assistance for Small and Disadvantaged Communities Program. This program provides grants to disadvantaged communities or communities with a population of under 10,000 that lack household drinking water or wastewater services or that are served by a public water system that violates or exceeds a requirement of the national primary drinking water regulations. Grants can be used to assist communities in coming into compliance with drinking water regulations, to provide programs for household water quality testing, or to provide assistance that directly and primarily benefits the disadvantaged community on a per-household basis.
- Specifically, this section expands the program to allow for the use of funds to purchase filters and filtration systems that remove contaminants of concern from public drinking water systems and for providing information regarding proper filtration use and maintenance and options regarding replacing lead service lines or other sources of lead from water systems and technical assistance. Further, the section changes the required non-federal cost match for the grant from 45 percent to

10 percent and allows that 10 percent to be waived at the discretion of the Administrator if the Administrator determines that an eligible entity is unable to pay, or would experience significant financial hardship if required to pay, the non-Federal share. This section authorizes the program for \$70 million in fiscal year 2022, \$80 million in fiscal year 2023, \$100 million in fiscal year 2024, \$120 million in fiscal year 2025, and \$140 million in fiscal year 2026.

- The second part of this section reauthorizes the existing Drinking Water Infrastructure Risk and Resiliency program for small communities. Funds under this program can be used to address threats from natural hazards or extreme weather events (including extreme weather events that are related to climate change). The program is reauthorized from 2022 through 2026 at a level of \$25 million per year. The section includes a non-federal cost share of 10 percent that can be waived by the Administrator.
- Third, this section also instructs the Administrator to create a grant program to provide grants to a utility or nonprofit organization to voluntarily connect a low-income household to a municipal public drinking water system. This program is authorized at \$20 million per year for each of fiscal years 2022 through 2026.
- Finally, this section creates an additional competitive grant program administered by the EPA and distributed to states that have demonstrated high numbers of underserved communities. This grant program is authorized at \$50 million for each of fiscal years 2022 through 2026.

Reducing Lead in Drinking Water

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section reauthorizes EPA's lead reduction projects grant program under 42 U.S.C. 300j-19b and increases the program's authorization to \$100 million annually through fiscal year 2026. It also amends the grant program to clarify that the program is intended for the replacement of any lead service line, and that eligible entities shall give priority for lead pipe service line replacement to disadvantaged communities based on the affordability criteria established by the applicable State under section 1452(d)(3), low-income homeowners, and landlords or property owners providing housing to low-income renters.
- This section also requires that eligible entities offer to cover the total cost of replacing a lead service line for low-income homeowners. It also requires eligible entities to demonstrate that they have considered feasible alternatives to lead line replacement for reducing the concentration of lead in drinking water, and requires the eligible entity to notify the state of any planned replacement of lead service lines under this program and to coordinate, where practicable, with other relevant infrastructure projects.
- This section also amends SDWA to create a pilot program for water systems that have conducted lead inventorying to conclude that the system has, or is suspected to have, at least 30 percent of service lines containing lead, based on available data, information or resources, including existing lead inventorying. Two years after the first grant is awarded, the EPA must submit a report to Congress describing the recipients of this grant money, the type of lead inventorying used, and the accuracy and utility of the inventorying in locating lead service lines. The pilot program is authorized for \$10 million and the funds are to remain available until expended.

Operational Sustainability of Small Public Water Systems

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section establishes an operational sustainability program under SDWA for small public water systems, including those owned by an Indian Tribe. The program is designed to help improve the ability of these systems to respond to water infrastructure failures through asset management of drinking water systems, pumps, wells, valves, treatment systems and other pertinent activities. These activities include, but are not limited to, identification and prevention of potable water loss due to leaks, breaks and other metering or infrastructure failures. It also allows for the deployment of strategies, techniques, and technologies to enhance operational sustainability and effective use of water resources through water reuse.
- This program has a waivable non-federal share of 10 percent and is authorized at \$50 million for each of fiscal years 2022 through 2026.

Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section creates a grant program to assist midsize and large drinking water systems with increasing their resilience to natural hazards, cybersecurity vulnerabilities, and extreme weather events.
- Funds may be used to promote water conservation enhance water-efficiency, create desalination facilities, relocate or renovate existing vulnerable water systems, enhance water supply, and implement measures to increase resiliency to natural hazards, cybersecurity vulnerabilities, or extreme weather events, including extreme weather events that are a result of climate change. Funds can also be used for the formation of regional water partnerships to collaboratively address documented water shortages.
- Of the funding provided, 50 percent must be used to provide grants to eligible entities serving a population of 10,000 to 100,000. The remaining 50 percent is to be used for eligible entities that serve populations equal to or greater than 100,000.
- This program is authorized at \$50 million for each of fiscal years 2022 through 2026.

Needs Assessment for Nationwide Rural and Urban Low-Income Community Water Assistance

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section requires the Administrator, in consultation with relevant stakeholders, to study the prevalence of municipalities, public entities, or tribal governments that are serviced by large, medium and rural service providers that service a disproportionate percentage of qualifying households with need or that have taken on an unsustainable level of debt due to customer nonpayment. This report to Congress must include a definition of the term “affordable access to water services” and “lack of affordable access to water services” as well as recommendations on the best methods to reduce the prevalence of a lack of affordable access to water services.
- This section authorizes \$5 million, to remain available until expended, to conduct the study.

Rural and Low Income Water Assistance Pilot Program

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section directs the Administrator to establish, not later than two years after the date of enactment of this Act, a pilot program to address water affordability. The pilot program will award grants to eligible entities to develop and implement programs to assist qualifying households with need in maintaining access to drinking water and wastewater treatment.
- Types of assistance could include direct financial assistance, a lifeline rate, bill discounting, special hardship provisions, a percentage-of-income payment plan, or debt relief for the eligible entity of the community water system owned by the eligible entity for arrears payments if it is determined by the Administrator to be in the interest of public health.
- The section directs the Administrator to award a maximum of 40 grants under the pilot program, 8 for eligible entities that operate or exercise primary enforcement over responsibility over a rural water service provider; 8 for eligible entities that own or operate a medium water service provider; 8 for eligible entities that own or operate a large water service provider of not more than 500,000 people; and 8 for eligible entities that own or operate a community water system, treatment works, or municipal separate storm sewer system that services a disadvantaged community. For these projects, priority shall be given to eligible entities that serve a disproportionate percentage, as determined by the Administrator, of qualifying household with need; are subject to State or Federal enforcement actions relating to compliance with the Clean Water Act or the Safe Drinking Water Act; or maintain or participate in an existing community assistance program with objectives similar to the objectives of the pilot program.
- The section requires the Administrator to submit an annual report that summarizes the use of grant funds by eligible entities not later than two years after the grants are first distributed to eligible entities on the results of the pilot program. Eligible entities must also submit annual reports to the Administrator that summarize key features of the assistance provided by the eligible entities, including sources of funding used to supplement federal funds, and eligibility criteria.

Lead Contamination in School Drinking Water

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section amends the existing Voluntary School and Childcare Lead Testing Grant Program to make public water systems and eligible nonprofit organizations that service schools and childcare locations eligible grant recipients. It also expands the program to allow funds to be used for compliance monitoring as well as lead reduction projects.
- The program is authorized for \$30 million for fiscal year 2022, \$35 million for fiscal year 2023, \$40 million for fiscal year 2024, \$45 million for fiscal year 2025 and \$50 million for fiscal year 2026.

Indian Reservation Drinking Water Program

- This section amends the Tribal Drinking Water Program to require that 50 percent of the program funds be used nationally, while the other 50 percent of the funds must be used to fund fifty projects equally divided between the Missouri River Basin, Upper Rio Grande River Basin, the Columbia River Basin, the Lower Colorado River Basin, and the Arkansas-White-Red River Basin. In addition, two projects in the Missouri River Basin must go to a reservation that serves more than one federally recognized tribe.

- The program is also amended to include sanitation projects, and directs the Administrator to give priority to projects that respond to emergency situations occurring due to, or resulting in a lack of, access to clean drinking water that threatens the health of Tribal populations; that would serve a Tribal population that would qualify as a disadvantaged community based on the affordability criteria established by the applicable State under section 1452(d)(3) of the Safe Drinking Water Act (42 U.S.C. 300j–12(d)(3)); or that would address the underlying factors contributing to an enforcement action commenced pursuant to the Safe Drinking Water Act (42 U.S.C. 300f et seq.) against the applicable public water system (as defined in section 1401 of that Act (42 U.S.C. 300f)) as of the date of enactment of the Drinking Water and Wastewater Infrastructure Act of 2021.
- The program is authorized for \$50 million for each of fiscal years 2022 through 2026.

Advanced Drinking Water Technologies

- This section requires the Administrator to carry out a study, within one year of the date of enactment of the bill, to examine the state of existing and emerging technologies that could address cybersecurity vulnerabilities, or enhance or could enhance the treatment, monitoring, affordability, efficiency, and safety of drinking water and wastewater provided by public water systems.
- This section also creates a grant program for public water systems that serve a population of 100,000 or fewer people or disadvantaged communities. The grant program is designed to identify and/or deploy drinking water infrastructure technology that is new or emerging, but proven to enhance the treatment, monitoring, affordability, efficiency, and safety of the drinking water provided. There is a waivable 10 percent non-federal share, and a single grant cannot exceed \$500,000.
- This program is authorized at \$10 million for each fiscal year 2022 through 2026.

Cybersecurity Support for Public Water Systems

- This section requires the Administrator to develop a Prioritization Framework to identify public water systems (including sources of water for those public water systems) that, if degraded or rendered inoperable due to an incident, would lead to significant impacts on the health and safety of the public. In developing the Prioritization Framework, the Administrator shall coordinate with the Director of the Cybersecurity and Infrastructure Security Agency, and shall consider whether cybersecurity vulnerabilities for a public water system have been identified under 42 U.S.C. 1433; the capacity of a public water system to remediate a cybersecurity vulnerability without additional Federal support; whether a public water system serves a defense installation or critical national security asset; and whether a public water system, if degraded or rendered inoperable due to an incident, would cause a cascading failure of other critical infrastructure.
- Additionally, not later than 270 days after enactment the Administrator shall develop a Technical Cybersecurity Support Plan for public water systems. In developing the Technical Cybersecurity Support Plan for public water systems, the Administrator shall coordinate with the Director of the Cybersecurity and Infrastructure Security Agency, and shall use existing authorities of the Administrator and the Director for providing voluntary support to public water systems and the Prioritization Framework.
- In developing both the Prioritization Framework and the Support Plan, the Administrator shall consult with such Federal or non-Federal entities as determined to be appropriate by the

Administrator. The Administrator must also submit a report on the Framework and the Plan to Congress.

State Response to Contaminants

- The section amends the State Response to Contaminants program created in SDWA. Specifically, it expands the provision from covering just underserved communities to also include small or disadvantaged communities. This will allow communities that are financially unstable who cannot afford to address the contamination or small (meaning less than 10,000 in population) to qualify for grants to address contaminants in their drinking water.

Annual Study on Boil Water Advisories

- This section directs the Administrator to conduct a study on the prevalence of boil water advisories issued in the United States. The Administrator shall submit to Congress a report describing the results of the most recent study, including a description of the reasons for which boil water advisories were issued during the year covered by the report, as part of the annual budget request transmittal.

Clean Water

Research, Investigations, Training, and Information

- This section increases the authorization of appropriations under the Federal Water Pollution Control Act, more commonly known as the “Clean Water Act” (CWA), for technical assistance grants to nonprofit agencies assisting rural, small, and tribal municipalities.
- These activities include providing technical assistance and training on water quality; ways to achieve and maintain compliance with laws and regulations; assisting utilities with financing opportunities; and providing information regarding planning, design, construction, and operation of treatment works and decentralized wastewater systems. Nonprofits that receive funding under this section are required to consult with the State in which the assistance is to be expended or otherwise made available before carrying out its planned activities.
- It also requires the Administrator to submit a report to Congress describing the implementation of the grants no later than two years after the date of enactment.
- This section extends the authorization to fiscal year 2026 and increases authorized appropriations to \$75 million annually.

Wastewater Efficiency Grant Pilot Program

- This section creates an EPA pilot program to assist with fifteen projects by publicly-owned treatment works to create or improve waste-to-energy systems. Grants may be awarded for sludge collection systems, anaerobic digesters, methane capture or transfer, and other emerging technologies that transform waste to energy. It requires the EPA to submit to Congress a report every two years regarding who received these grants, what activities these funds covered, and the impacts of these projects.
- This section authorizes appropriations for the program of \$20 million for each of fiscal years 2022 through 2026.

Pilot Programs for Alternative Water Source Projects

- This section reauthorizes an existing grant program for alternative water source projects. The grants may be used for engineering, design, construction, and final testing of alternative water source projects designed to meet critical water supply needs.
- Alternative water source projects include those projects that provide alternative sources of water through conserving, managing, reclaiming or reusing water, wastewater, or stormwater for groundwater recharge, potable reuse, or other purposes.
- The program is also amended to clarify that a project that has received construction funds under the reclamation and reuse program conducted under the Reclamation Projects Authorization and Adjustment Act of 1992 (43 U.S.C. 390h et seq.) shall not be eligible for grant assistance under this section.
- The program is authorized for \$25 million for each of fiscal years 2022 through 2026.

Sewer Overflow and Stormwater Reuse Municipal Grants

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This section reauthorizes the existing sewer overflow and stormwater reuse municipal grants program. These grants may be used for the planning, construction and design of treatment works for municipal combined sewer overflows, sanitary sewer overflows, or stormwater, and any measures to manage, reduce, or recapture stormwater or subsurface drainage. This section also adds notification systems that provide information on dangerous water conditions to communities as an allowable use for grants.
- In addition, the section creates a new 25 percent set-aside for projects in rural or financially distressed communities, to the extent there are sufficient applications. It also requires the Administrator, to the maximum extent practicable, to work with States to prevent the non-Federal share requirements from being passed on to rural and financially distressed communities. The Administrator must also include in the report a description of the extent to which States pass costs associated with the non-Federal share requirements to local communities, with a focus on rural and financially-distressed communities.
- The program is reauthorized with increased funding of \$280 million for fiscal years 2022 through 2026.

Clean Water Infrastructure Resiliency and Sustainability Program

- The section establishes a “Clean Water Infrastructure Resiliency and Sustainability Program,” to address rising threats to clean water infrastructure from climate change. An owner or operator of a publicly-owned treatment works can use the grants to assist in the planning, design, construction, implementation, operation, or maintenance of a program or project to increase the resiliency or adaptability of water systems to natural hazards, cybersecurity vulnerabilities, or extreme weather events, including those related to climate change. The section establishes two non-federal cost shares: a 10 percent non-federal cost-share for small or disadvantaged communities and a non-federal cost-share of 25 percent for all other communities.
- The program is authorized for \$25 million for fiscal years 2022 through 2026.

Small and Medium Publicly-Owned Treatment Works Circuit Rider Program

- This section creates a circuit rider program that awards grants to provide on-site technical assistance to owners and operators of small and medium publicly-owned treatment works. The program was created as a result of a decrease in technical assistance grants to local, on-site technical assistance providers.
- The section requires nonprofits that receive funding under this section to consult with the State in which the assistance is to be expended or otherwise made available before carrying out its planned activities.
- This section also requires the EPA to submit to Congress an annual report regarding grant recipients and activities covered by the grants.
- This section authorizes appropriations for the program of \$10 million for each of fiscal years 2022 through 2026.

Small Publicly-Owned Treatment Works Efficiency Grant Program

- This section creates an EPA grant program, subject to appropriations, to assist small publicly-owned treatment works that serve fewer than 10,000 people, or a disadvantaged community, with replacing or repairing equipment to increase water efficiency or energy efficiency. It also requires that not less than 15 percent of funds made available under the program be used for grants to publicly-owned treatment works that serve fewer than 3,300 people.
- Owners or operators of small publicly-owned treatment works and nonprofit organizations that seek to assist small publicly-owned treatment works are eligible to receive funding under this program.
- The Administrator must also submit a report to Congress not later than two years after the Administrator establishes the efficiency grant program describing the recipients of each grant and a summary of the activities carried out under the grant program.

Grants for Construction and Refurbishing of Individual Household Decentralized Wastewater Systems for Individuals with Low or Moderate Income

- This section creates a grant program that allows nonprofit organizations to receive funds for the construction, repair, or replacement of decentralized wastewater systems for low or moderate income households, or groups of such households. The program gives priority to households that do not have access to sanitary sewer disposal systems.
- This section requires that EPA submit a report to Congress on the results of the program within two years of enactment of the Act.
- This section authorizes appropriations for the program of \$50 million for each of fiscal years 2022 through 2026.

Connection to Publicly-Owned Treatment Works

- This section creates a grant program that allows the EPA to provide grants to publicly-owned treatment works or nonprofit organizations to cover the costs incurred from connecting a household to a municipal or private wastewater system.
- This section authorizes appropriations for the program of \$40 million for each of fiscal years 2022 through 2026.

Clean Water State Revolving Funds

- This section of the substitute incorporates technical changes to S. 914, as reported that were requested by the Environmental Protection Agency.
- This reauthorizes the Clean Water State Revolving Loan Fund (CWSRF). It also amends the CWA to require, to the extent there are sufficient applications, a minimum of 10 percent of a state's CWSRF to be used for grants, negative interest loans, and loan forgiveness, or to buy, refinance or restructure debt for disadvantaged communities as determined by the state. The section also specifies that the amount of its capitalization grant a state can spend for additional subsidies may not exceed 30 percent.
- This section also allows for up to two percent of a state's CWSRF to be used by nonprofit organizations to provide technical assistance to small, rural and tribal publicly-owned treatment works.
- The CWSRF is reauthorized at \$2.4 billion in fiscal year 2022, \$2.75 billion in fiscal year 2023, \$3 billion in fiscal year 2024, and \$3.25 billion for fiscal year 2025 and 2026.

Innovative Water Infrastructure Workforce Development Program

- This section reauthorizes an existing competitive grant program to promote workforce development in the water utility sector. The section modifies the program to make public works departments and agencies eligible for these grants in addition to schools. It also amends the program to align water and wastewater utility workforce recruitment efforts, including the promotion of diversity, training programs, retention efforts, and community resources with water and wastewater utilities.
- This section also directs the Administrator to create a federal interagency working group to address recruitment, training and retention challenges in the water and wastewater utility workforce. In carrying out the duties of the working group, the working group is required to consult with State operator certification programs.
- Not later than one year after the date of enactment, the Administrator, in coordination with the working group, shall submit to Congress a report describing the potential solutions to recruitment, training, and retention challenges in the water and wastewater utility workforce.
- This section increases the grant program's authorization to \$5 million for fiscal years 2022 through 2026.

Grants to Alaska to Improve Sanitation in Rural and Native Villages

- This section reauthorizes a program that provides grants to the State of Alaska for the benefit of rural and Alaska Native Villages for the development and construction of public water systems and wastewater systems to improve the health and sanitation conditions in the villages. It also increases the federal cost share for projects under this program from 50 percent to 75 percent.
- This section reauthorizes appropriations for the program at \$40 million for fiscal years 2022 through 2024, \$50 million for fiscal year 2025, and \$60 million for fiscal year 2026.

Water Data Sharing Pilot Program

- This section amends the CWA to require EPA to establish a pilot program for states to encourage intrastate and interstate information sharing.
- The grant program funds information sharing among communities regarding water quality, water infrastructure needs, and water technology. Eligibility for funding is available to states, and

regional consortia of states, that have either a coastal watershed that has significant pollution levels, a water system with significant pollution levels, or a substantive wastewater infrastructure deficit.

- This section also authorizes funds to assist states in the creation of multi-state consortiums to exchange water data; share information regarding water practices, protocols, technologies, and procedures; and establish regional intended use plans.
- Finally, this section requires the Administrator to submit a report to Congress of the awarded grants and recipients.
- This section authorizes appropriations for the grant program of \$15 million for each of fiscal years 2022 through 2026.

Final Rating Opinion Letters

- This section changes the WIFIA requirement that mandates each WIFIA project applicant must provide two final agency rating opinion letters. Under this section, project applicants will only need to provide one final agency rating opinion letter, similar to the requirements of other federal loan programs, prior to final acceptance and financing of the project.

Water Infrastructure Financing Reauthorization

- This section reauthorizes WIFIA through 2026 at the current funding level of \$50 million annually. It also adds a requirement that, not later than 180 days after enactment, the Administrator, in consultation with relevant Federal agencies, develop and begin implementation of an outreach plan to promote financial assistance available under this subtitle to small communities and rural communities.

Small and Disadvantaged Community Analysis

- This section requires EPA to do an analysis of the historical distribution of funds to low-income, rural, and minority communities, as well as communities of indigenous peoples, under SDWA and CWA programs. The EPA is also required to analyze new opportunities and methods to improve the distribution of funds under these programs to those same communities, and must include an analysis, to the extent practicable, of communities in the United States that do not have access to drinking water or wastewater services.
- EPA must submit a report to Congress upon completion of the analysis describing the results of the analysis and the criteria used by the Administrator in carrying out the analysis.

Stormwater Infrastructure Technology

- This section creates a grant program to assist research institutions, nonprofits, and institutions of higher education with research on new and emerging stormwater control technology. The goal of the program is to improve the effectiveness, cost efficiencies, and protections of public safety and water quality in their operations. The eligible research includes stormwater and sewer overflow reduction, project enhancement, and other infrastructure.
- The section authorizes appropriations of \$5 million for each of fiscal years 2022 through 2026 to establish Centers of Excellence for stormwater control infrastructure and create a public website to share the results of the research.
- This section also creates a grant program to fund the development of standards, create fee structures, and develop and deliver training and educational materials for stormwater.

- This section authorizes appropriations for the grant program of \$10 million for each of fiscal years 2022 through 2026 at a 20-percent non-federal cost share.

Water Reuse Interagency Working Group

- This section instructs the EPA to establish a Water Reuse Interagency Working Group to develop and coordinate actions, tools, and resources to advance water reuse across the United States. It directs the working group to implement EPA’s February 2020 National Water Reuse Action Plan, which creates opportunities for water reuse in the mission areas of each of the federal agencies. Every two years, the Administrator shall publish a report on the activities and findings of this Working Group. This group shall sunset in six years, unless the Administrator chooses to extend the Working Group.

Advanced Clean Water Technologies Study

- This section directs the Administrator within one year after the date of enactment, and subject to the availability of appropriations to carry out a study that examines the state of existing and potential future technology, including technology that could address cybersecurity threats, or that enhances or could enhance the treatment, monitoring, affordability, efficiency, and safety of wastewater services provided by a treatment works. The Administrator shall submit a report on the study to Congress.

Clean Watersheds Needs Survey

- This section requires the Administrator to conduct and complete an assessment of wastewater system capital improvement needs of all treatment works in the United States that are eligible for assistance from State water pollution control revolving funds established under the CWA. The report must be completed not later than 18 months after the date of enactment of this Act, and not less frequently than once every four years thereafter.
- A report must be submitted to Congress describing the results of the assessment.
- This section authorizes \$5 million, to remain available until expended, to carry out the initial needs survey.

Water Resources Research Act Amendments

- This section builds on an existing grant program for research institutions for projects regarding water supply reliability and other water issues. This section strikes “water phenomena” as a potential field for research and replaces it with the more general term, “water resources.” This section sets the cost-share for funding to a 50 percent non-federal match. This section requires that every five years each institution that receives these grants be reevaluated on the relevancy, quality, and effectiveness of the work performed with this funding.
- This section reauthorizes the grant program for \$12 million for each fiscal year 2022 through 2025. This section also provides additional authorization of appropriations of \$3 million for each fiscal year 2022 through 2025 for research focused on interstate water problems.

Enhanced Aquifer Use and Recharge

- This section requires the Administrator, subject to the availability of appropriations, to provide funding to carry out groundwater research on enhanced aquifer use and recharge in support of sole-source aquifers. Specifically, this section requires that the Administrator shall use not less than 50 percent of any funding made available to provide one grant to a state, unit of local

government, or Indian Tribe to carry out activities that would directly support that research. The remainder of the funding shall be provided to one research center, which shall establish a formal research relationship for the purpose of coordinating efforts under this program.

- The program is authorized for \$5 million for each fiscal year 2022 through 2026.

State and Tribal Assistance Grants: Brownfields

Funding Table:

State and Tribal Assistance Grants: Brownfields \$1.5 billion	
\$1,200,000,000	Brownfields Competitive Grants
\$300,000,000	Brownfields Categorical Grants

Section-by-Section:

\$1.5 billion equally distributed over 5 years for State and Tribal Assistance Grants: Brownfields

This section of the bill would provide significant investment into the Brownfields program to help communities, States, Tribes and others to assess, safely clean up, and sustainably reuse contaminated properties.

It provides **\$1.2 billion** for the **Brownfields competitive grants** while raising grant caps for half of the competitive grant funding under this section (\$600 million).

The remaining **\$300 million** has been dedicated for **Brownfields categorical grants** to support the development and progress being made under state-led Brownfields efforts. All state cost share requirements for this section have been waived.

Superfund: Remedial

Funding Table:

Superfund : \$3.5 billion	
\$3,500,000,000	Superfund: Remedial

Section-by-Section:

\$3.5 billion available for 5 years for the Remedial account within the Hazardous Substance Superfund. This section of the bill would allow the Environmental Protection Agency to invest in clean-ups and continue moving forward on remedial actions for Superfund sites. This section also waives the state cost-share requirements and encourages the Administrator to consider the unique needs of Tribal communities with Superfund sites, without changing the process for prioritizing Superfund clean-up sites.

Private Sector Leveraging Provisions in the Bipartisan Infrastructure Framework

This infrastructure framework creates various programs which leverage additional private sector investment in infrastructure programs to create jobs and strengthen the economy. These bonds create the following benefits:

- Stretches federal money by allowing private parties to issue tax-free bonds
- Brings private sector efficiency and decision-making – ensuring projects are completed more efficiently, quickly, and for less money. This will also ensure selection of economically efficient projects.

As currently written, there are no Davis-Bacon* or prevailing wage provisions.

Broadband – JCT estimate \$566 million

The bipartisan Rural Broadband Financing Flexibility Act (S.1676) is the template for adding broadband as an allowable use for private activity bonds (PABs). This would allow states to issue PABs to finance broadband deployment, specifically for projects in rural areas where a majority of households do not have access to broadband. Adding broadband build outs in unserved areas as a qualified use will attract capital and businesses in areas that otherwise may not be attractive to investment.

Carbon Capture – JCT estimate \$242 million

The bipartisan Carbon Capture Improvement Act (S. 1829) allows carbon capture and direct air capture (DAC) technologies to be eligible for PAB financing. Carbon capture removes carbon dioxide from an emissions stream at a power plant or industrial facility reducing emissions from energy-intensive industries. DAC is an innovative emerging technology that removes carbon dioxide directly from the atmosphere. These technologies allow us to reduce emissions and protect the environment while continuing to use our natural resources, but first generation facilities can cost upwards of \$1 billion. Private activity bond financing encourages commercial deployment, which is essential for bringing costs down and developing these technologies to scale.

Surface Transportation – JCT estimate \$514 million

The framework increases the current cap of tax-exempt highway or surface freight transfer facility bonds from \$15 billion to \$30 billion as proposed by the bipartisan BUILD Act (S.881). Currently, \$14,989,529,000 billion of the \$15 billion cap has been issued or allocated. Increasing the cap will allow state and local governments to enter into additional public-private partnerships to supplement future surface transportation projects with private investment.

Asset Concession Incentives:

\$100 million equally distributed over 5 years for technical assistance grants for organizational capacity and grants for expert services. This funding will help communities engage in Public-Private-Partnerships (P3s) like asset recycling that generate new revenue and make infrastructure more efficient. It provides \$100 million for grants to facilitate access to expert services and grants to communities to enhance their technical capacity to participate in public private partnerships. This program would be administered by the Department of Transportation (DOT) and would be used for projects eligible under the Transportation Infrastructure Finance and Innovation Act (TIFIA), which currently include highway, transit, railroad,

intermodal freight, and port access projects, and will include airport projects under authorization language included elsewhere in this package. Grantees must demonstrate robust safeguards to protect consumers and state governments from predatory public-private-partnership agreements.

Value for Money Analysis Requirement:

Requires applicants for TIFIA and Railroad Rehabilitation & Improvement Financing loans for projects over \$750 million in costs to conduct a Value for Money (VfM) analysis in order to evaluate the benefits of a P3 financing option for significant projects. While a majority of states have P3 enabling laws, financing a project through a P3 model can be complex and costly. This leads to the underutilization of the P3 option. Evaluating the value of the P3 model is an important step that is not always taken.

Conducting a VfM analysis helps a public entity explore the P3 model against traditional public-sector funding and financing. Through a review of projected, risk-adjusted life-cycle costs, a VfM ensures that states and localities are giving the P3 model a fair shot. Through focusing on those projects seeking TIFIA and RRIF loans, DOT will be able to report to Congress on the true utilization of the P3 financing model for those projects of which the P3 model is best suited.

Permitting Provisions

The infrastructure permitting provisions are based on S. 2324, the Federal Permitting Reform and Jobs Act, which will lift sunset on FAST-41, currently set to expire in December 2022, and expand and improve upon existing authorities. In 2015, Congress enacted into law as Title 41 of the Fixing America's Surface Transportation (FAST) Act. That law, now known as FAST-41, significantly reformed the federal infrastructure permitting process, while leaving environmental protections in place. Most significantly, it created the Federal Permitting Improvement Steering Council (Permitting Council), which brings together agencies at the start of the permitting process for some of the largest, most complicated infrastructure projects (covered projects), typically involving more than \$200 million in investment, to prepare a comprehensive plan for the permitting process across agencies. Projects from sectors including renewable and conventional energy production, electricity transmission, surface transportation, aviation, ports and waterways, water resource, broadland, pipelines, and manufacturing may apply to be covered through FAST-41 process.

The public can track the permitting progress for each of those projects at www.permits.performance.gov. And for covered projects only, FAST-41 reduced the statute of limitations for National Environmental Policy Act (NEPA) challenges from six years to two.

Since FAST-41 became law, the Permitting Council has helped more than 50 projects with their permitting processes, saved projects more than a billion dollars, reduced permitting timelines substantially, helped project sponsors create more than a hundred thousand jobs, and resolved numerous interagency conflicts.

The permitting provisions will make FAST-41 permanent; expand FAST-41 benefits to tribal projects; set a two-year goal for permitting covered projects; encourage federal agencies to use one document to track permitting decisions ("One Federal Decision"); and improve the Permitting Council's day-to-day operations.

Cryptocurrency

The provision applies information reporting requirements to digital assets (including cryptocurrency) to ensure they are properly reported to the IRS. The provision includes clarifying the definition of broker to reflect the realities of how digital assets are acquired and traded. The provision further makes clear that broker-to-broker reporting applies to all transfers of covered securities within the meaning of section 6045(g)(3), including digital assets. It imposes a new reporting requirement under 6045A(d) for transfers, other than sales, from brokers to non-brokers similar to the rules of 6045A. Additionally, digital assets are added to the current rules requiring businesses to report cash payments over \$10,000.

This provision will also make life easier for everyday Americans to accurately report their income from trading in cryptocurrencies. Brokers will provide the purchase price of cryptocurrencies as well as their gross proceeds to the IRS and provide that individual with a Form 1099-B. The same way it's done for stock trades. This will make it easier for individuals to determine their tax liability.