U.S. Chamber of Commerce

Leading Business and Labor Groups Supporting Bipartisan Infrastructure Agreement

- U.S. Chamber of Commerce
- Business Roundtable
- National Association of Manufacturers
- AFL-CIO
- National Retail Federation
- Airports Council International - North America
- American Association of Port Authorities
- American Consulting Engineers Council
- American Public Transportation Association
- American Road & Transportation Builders Association
- American Society of Civil Engineers
- American Trucking Associations
- Association of American Railroads
- Association of Equipment Manufacturers
- Bipartisan Policy Center
- International Union of Operating Engineers
- Laborers' International Union of North America
- National Asphalt Pavement Association
- National Association of Wholesaler-Distributors
- National Stone, Sand, and Gravel Association
- No Labels
- North America's Building Trades Unions
- Portland Cement Association
- Transportation Trades Department, AFL-CIO

Bipartisan *Infrastructure Investment and Jobs Act* Summary

A Road to Stronger Economic Growth

Table of Contents

Topline Summary

- Historic investment in the nation's core infrastructure priorities– including roads and bridges, rail, transit, ports, airports, water systems, and broadband.
- No tax hikes on everyday Americans.
- Includes bipartisan Senate-passed *Drinking Water and Wastewater Infrastructure Act* and bipartisan committee-passed surface transportation reauthorizaiont bills from the Commerce Committee and the Environment and Public Works Committee along with the *Energy Infrastructure Act* approved by the Energy and Natural Resources Committee
- Improves permitting by including enhancements to FAST-41, which has substantially reduced the permitting timeline for larger infrastructure projects.
- 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.
- New spending paid for with CBO/JCT scores, CBO estimates & OMB estimates.

$550 Billion In New Spending Over 5 Years

Roads, Bridges, & Major Projects: $110B above baseline - 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 tradition of significant federal highway aid to states.

Passenger and Freight Rail: $66B - Provides funding for the Amtrak National Network, expands intercity passenger rail and dedicates funding to the Northeast Corridor, which has incurred a severe repair backlog after Hurricane Sandy. Increases funding for freight rail and safety at rail-highway grade crossings.

Safety: $11B - Funds highway & pedestrian safety programs, including a significant investment in Safe Streets program that prevent death and serious injury on roads and streets.

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, supports broadband affordability expands eligible private activity bond projects to include broadband infrastructure, and supports middle-mile deployment efforts.

Ports and Waterways: $17.3B - Funding for waterway and coastal infrastructure, inland waterway improvements, port infrastructure, and land ports of entry through the Army Corps, DOT, Coast Guard, GSA, and DHS.

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. Improves Air Traffic Control infrastructure.

Water Infrastructure: $55B - Includes $23.4B for the bipartisan Drinking Water and Wastewater Infrastructure Act. Provides additional funding to address PFAS and for lead remediation. 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: $73B - Includes the bipartisan Energy Infrastructure Act, which includes funds for grid reliability and resiliency; critical minerals and supply chains for clean energy technology; critical energy technologies like carbon capture, hydrogen, direct air capture, and energy efficiency; and energy demonstration projects from the bipartisan Energy Act of 2020. It also includes the 48C Advanced Manufacturing Tax Credit.

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

Low-Carbon and Zero-Emission School Buses & Ferries: $7.5B - Increases funding for the EPW's Electric Vehicle Charging and Fueling grant program, designed to strategically deploy EV, hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure. Includes a state formula program for EV charging infrastructure deployment.

EV and Low-Carbon School Buses & Ferries: $7.5B - Funds the production and procurement of electric vehicle and low carbon school buses and ferries, to include hydrogen fuel cells, liquefied natural gas, and other alternative fuel technologiess.

New Spending Pay-Fors

- $205 billion from repurposing of certain unused COVID relief dollars (Source: CBO score & CBO estimate)
- Funding from recouping fraudulently-paid benefits from enhanced federal UI supplement (Awaiting CBO Letter)
- $49 billion from delaying Medicare Part D rebate rule (Source: CBO score)
- $53 billion from certain states returning unused enhanced federal UI supplement (Source: CBO estimate)
- $20 billion from sales of future spectrum auctions (Source: CBO score) and $67 billion from proceeds of the February 2021 c-band auction (Source: CBO estimate)
- $56 billion in economic growth resulting from a 33 percent return on investment in these long-term infrastructure projects (Source: CBO analysis)
- $28 billion from applying information reporting requirements to cryptocurrency (JCT score)
- $21 billion from extending fees on GSEs (Source: CBO Score)
- $13 billion from reinstating certain Superfund fees (Source: JCT score)
- $8.7 billion from the mandatory sequester (Source: CBO score)
- $6 billion from extending customs user fees (Source: CBO score)
- $6 billion in sales from the Strategic Petroleum Reserve (Source: CBO score)
- $3 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: CBO Score)

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 and the Commerce committee-passed Surface Transportation Investment Act.

- **<u>Increased Contract Authority – $55.48B</u>**

- **<u>Supplemental appropriations – $55.52B</u>**

  - ***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.
- ***Culvert Removal, Replacement, and Restoration – $1B***
  - This new program will provide grants to states for the removal, replacement, and restoration of culverts to address flow of water through roads, bridges, railroad tracks, and trails.

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.

- **<u>Restoration and Enhancement Grants - $50M</u>**
  - 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.

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 projects with capital costs less than $300 million, Core Capacity for projects related to corridor development, and projects with combined system goals.

- **Enhances Mobility for Seniors & Disabilities - $2B**
  - The Enhances Mobility for Seniors & Disabilities program makes federal resources available to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options. This program supports transportation services in all areas – large urbanized, small urbanized, and rural.

- **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.

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.

- **<u>$2.24B in increased contract authority for FMCSA and NHTSA</u>**
  - **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.
- **<u>$8.27 in supplemental appropriations</u>**
  - **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 Highway Safety Programs – $1.1B**
    - This program provides grants to states to improve driver behavior and safety
  - **FMCSA Motor Carrier Safety Assistance Program – $467.5M**
    - The program supports State and local law enforcement agencies through funding to mitigate crashes and hazardous materials incidents involving commercial motor vehicles (CMVs).

- **High Priority Grant Program – $200M**
  - This competitive grant program supports commercial vehicle safety plan activities, including data collection, public awareness campaigns, technology demonstration, and other safety related efforts.
- **PHMSA Modernization – $1B**

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: $40 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.
    - States would be required to have enforceable 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.

- **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"**
    - This provision would create a state 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 introduced by Senators Murray, Portman and King 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. The legislation 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**
    - This provision would devote additional funds to the FCC's Emergency Broadband Benefit (EBB) program, which subsidizes broadband service for eligible households—defined as those that suffered income loss during the pandemic or meet other need-based criteria, such as eligibility for school lunch programs. This program is being renamed the Low-Income Broadband Benefit and the subsidy will be provided at a lower rate (down to $30 from an original $50 per month), to extend its longevity across the 5-year budget window.

Power Infrastructure

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

Jurisdictional to ENR, included in ENR bill			
	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	

Power Infrastructure Items, non-Jurisdictional to ENR, not included in ENR bill			
	Authorized	**To be funded**	
Hydropower		$ 1,600,000,000	Straight appropriations for existing programs.
48C Tax Credit	$ 8,000,000,000	$ 8,000,000,000	

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

Sec. 1001. 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.

Sec. 1002. 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.

Sec. 1003. 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.

Sec. 1004. 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.

Sec. 1005. 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.

Sec. 1006. 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.

Sec. 1007. 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.

Sec. 1008. 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.

Sec. 1009. 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.

Sec. 1010. 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.

Sec. 1011. 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.

Sec. 1012. 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.

Sec. 1013. 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.

Sec. 1014. 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

Sec. 1101. 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.

Sec. 1102. 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.

Sec. 1103. 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.

Sec. 1104. 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.

Sec. 1105. 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.

Sec. 1106. 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.

Sec. 1107. 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

Sec. 2001. 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.

Sec. 2002. 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.

Sec. 2003. 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.

Sec. 2004. 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.

Sec. 2005. 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.

Sec. 2006. Critical minerals supply chains and reliability. This section creates improvements to the Federal permitting process with respect to critical mineral production on Federal land.

Sec. 2007. 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.

Sec. 2008. 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.

Sec. 2009. 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.

Sec. 2010. 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.

Sec. 2011. 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

Sec. 3001. Findings. This section expresses Congress' findings regarding the importance of carbon capture, utilization, storage and transport technologies and infrastructure to meeting emissions reductions goals.

Sec. 3002. 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.

Sec. 3003. 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.

Sec. 3004. 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.

Sec. 3005. 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.

Sec. 3006. 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.

Sec. 3007. 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.

Sec. 3008. 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

Sec. 3101. 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.

Sec. 3102. Definitions. The section sets a definition for "clean hydrogen" and "hydrogen."

Sec. 3103. 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.

Sec. 3104. 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.

Sec. 3105. 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-CO_2/kg-H_2), 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

Sec. 3201.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.

Sec. 3202. 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.

Sec. 3203. 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

Sec. 3301. Hydroelectric production incentives. This section authorizes $125,000,000 for FY22 for hydroelectric production incentives until expended.

Sec. 3302. Hydroelectric efficiency improvement incentives. This section authorizes $75,000,000 for FY22 for hydroelectric efficiency improvement incentives until expended.

Sec. 3303. 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.

Sec. 3304. 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.

Sec. 3305. 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.

Sec. 3306. 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

Sec. 3401. 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.

Sec. 3402. 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.

Sec. 3403. 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

Sec. 4001. 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

Sec. 4101. Definitions. This section provides definitions for the Energy Information Administration subtitle.

Sec. 4102. 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.

Sec. 4103. 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.

Sec. 4104. 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.

Sec. 4105. 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.

Sec. 4106. 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.

Sec. 4107. 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.

Sec. 4108. 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.

Sec. 4109. 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

Sec. 4201. 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.

Sec. 4202. 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.

Sec. 4203. 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.

Sec. 4204. 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.

Sec. 4205. 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.

Sec. 4206. 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

Sec. 5001. Definitions. This section provides definitions for the Residential and Commercial Energy Efficiency subtitle.

Sec. 5002. 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.

Sec. 5003. 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

Sec. 5101. 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.

Sec. 5102. 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.

Sec. 5103. 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.

Sec. 5104. 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

Sec. 5201. 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.

Sec. 5202. 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

Sec. 5211. Definitions. This section provides definitions for the Smart Manufacturing subtitle.

Sec. 5212. 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.

Sec. 5213. 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.

Sec. 5214. 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.

Sec. 5215. 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

Sec. 5301. 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.

Sec. 5302. 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

Sec. 5401. Weatherization assistance program. This section authorizes $3,500,000,000 for FY22 for the Weatherization Assistance Program.

Sec. 5402. 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.

Sec. 5403. 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.

Sec. 5404. 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.

Sec. 5405. 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.

Sec. 5406. 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

Sec. 6001. 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

Sec. 7001. Abandoned Mine Reclamation Fund authorization of appropriations. This section authorizes $11,293,000,000 in funds for the Abandoned Mine Land Reclamation Fund.

Sec. 7002. 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.

Sec. 7003. Amounts distributed from Abandoned Mine Reclamation Fund. This section extends the dates that amounts are to be distributed until 2036.

Sec. 7004. 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

Sec. 8001. 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.

Sec. 8002. 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.

Sec. 8003. 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.

Sec. 8004. 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.

Sec. 8005. 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.

Sec. 8006. 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.

Sec. 8007. 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

Sec. 9001. 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.

Sec. 9002. Water storage, groundwater storage and conveyance projects. This section clarifies eligibility and requirements for feasibility studies and construction funding for storage and conveyance projects.

Sec. 9003. Small water storage and groundwater storage projects. This section authorizes $100 million for a new competitive grant program for small water storage projects.

Sec. 9004. 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.

Sec. 9005. 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.

Sec. 9006. Drought contingency plan funding requires. This section clarifies how the drought contingency plan funding can be used.

Sec. 9007. 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.

Sec. 9008. Eligible desalination projects. This section provides a technical amendment to current law.

Sec. 9009. 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.

Sec. 9010. 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

Sec. 10001. 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.

Sec. 10002. 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

Sec. 10003. 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.

Sec. 10004. 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.

Sec. 10005. 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.

Sec. 10006. 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.

Sec. 10007. 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.

Sec. 10008. 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

Sec. 11001. 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

Sec. 12001. 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.

Sec. 12002. Extension of Secure Rural Schools and Community Self-Determination Act of 2000. This section extends the Secure Rural Schools and Community Self-Determination Act.

Dam Safety and Removal

Dam Safety and Removal: Includes funding for existing programs at FEMA, NOAA, the Army Corps, the U.S. Forest Service, and the U.S. Fish and Wildlife Service to support dam safety improvements, as well as for removing in-stream barriers to restore fish and wildlife passage and dams. Includes provisions to ensure that this funding provides no new authority to remove, breach, or otherwise alter the operations of a federal hydropower dam. Also includes provisions to ensure dam removal projects include written consent of the dam owner, if ownership is stablished.

48C Tax Credit

Section-by-Section:

$8 Billion in Energy-related Manufacturing and Industry:

- Available as a 30% investment tax credit to manufacturers and other industrial users to retool, expand, or build new facilities that make or recycle energy-related products or to reduce their process-related greenhouse gas emissions.
- Includes a $4 billion carve out for use in communities where coal mines have closed or coal power plants have retired (that have not previously received the §48C tax credit).

Build New or Retrofit Existing Manufacturing and Industrial Facilities to Produce or Recycle a Wide Range of Energy Products, Including:

- Advanced electric grid, energy storage, and fuel cell equipment;
- Equipment for the production of low-carbon, low-emission fuels, chemicals and products;
- Renewable energy and energy efficiency equipment, from insulation to geothermal drills;
- Products or technologies that capture, remove, use or store carbon dioxide; and,
- Advanced light-, med-, and heavy-duty vehicles, components, and related infrastructure.

Provides Assistance to Applicants and Creates Jobs Where the Tax Credits are Applied:

- Provides new guidelines and technical assistance to aid applicants in states that have not accessed the §48C manufacturing tax credit in the past.
- Promotes domestic job creation that draws on existing skilled workforces, particularly workers dislocated from manufacturing, coal mining, or retired coal power plants.
- Promotes reinvestment in communities experiencing high unemployment.
- Enables manufacturers with lower tax liability to elect a direct pay option capped at 85% of the tax credit amount.

Resiliency – Flood Mitigation

$7 billion for **Army Corps of Engineers** infrastructure priorities. This includes $150 million for Corps Investigations for technical assistance and to initiate or complete previously authorized studies. In addition, $6 billion is provided for Corps 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 Coastal Storm Risk Management/Hurricane and Storm Damage Reduction Projects, Inland Flood Risk Management Projects and Aquatic Ecosystem Restoration Projects. Within each of these construction project set-aside language is included that clarifies that a significant amount of this funding is to be reserved for multi-purpose projects/programs. Furthermore, Coastal Storm Risk Management/Hurricane and Storm Damage Reduction Projects would target States that have been impacted by federally-declared disasters over the last six years. In addition, $500 million is provided for Corps Mississippi Rivers and Tributaries (MR&T) Projects and $251 million is available for Corps Flood Control and Coastal Emergencies Projects. There is also $200 million for Corps General Expenses and Regulatory Needs which is split evenly between the Flood Resiliency and Ports and Waterways Working Groups.

$492M for the **National Oceanic and Atmospheric Administration (NOAA) National Coastal Resiliency Fund**, a partnership with the National Fish and Wildlife Foundation (NFWF). This program improves the resilience of coastal communities to flooding and inundation by restoring or expanding natural ecosystems, while enhancing fish and wildlife habitats and increasing protection for communities from coastal hazards.

$491M for the **NOAA Community-Based Restoration Project**. This program helps protect the safety and well-being of coastal communities by buffering shorelines from erosion, reducing flooding, and removing potentially hazardous structures.

$492M for **NOAA mapping, observations and modeling**. Investments in NOAA flood mapping and modeling programs can have significant benefits of protecting lives and property during extreme weather events. Specific programs funded include the Coastal Mapping Program, nextGen National Water Modeling framework, Atlas 14 & Probably Maximum Precipitation, and flood inundation maps (FIM) that depict the extent and depth of floods stemming from actual and forecasted events.

$25M for the **NOAA National Mesonet Program** for the acquisition and use of data generated by the Upper Missouri River Basin soil moisture and snowpack monitoring network, currently being implemented by the Army Corps of Engineers. This network was authorized by the Water Resources Development Act (WRDA) of 2020. The soil in the Upper Missouri River Basin has the capacity to store more than three times the water in the system's massive reservoirs. Without this monitoring system, forecasters and river managers are unable to adequately assess drought conditions or flood potential - both of which are critical to the protection of life and property in the entire Missouri River Basin.

$3.5B for **FEMA Flood Mitigation Assistance** program. This program helps provide financial and technical assistance to states and communities to reduce the risk of flood damage to homes and businesses through buyouts, elevation and other activities. These activities protect lives and property and help reduce future federal disaster expenditures.

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 fund 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 dam projects.

$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.

$500M over 5 years for the Low-Income Housing Energy Assistance Program (LIHEAP). This funding will provide low-income families in hot-weather states assistance with rising energy prices due to extreme heat and drought.

$500M over 5 years for the STORM Act – STORM was signed into law in January and created a new program at FEMA to help states establish revolving loan funds that could be used by local governments to carry out mitigation projects that reduce natural disaster risk. These low-interest loans would allow local governments to invest in resiliency and mitigation projects that help reduce loss of life and property, the cost of insurance, and disaster recovery payments. These loans would reach communities more quickly than FEMA's traditional grants and provide local communities with capital necessary to invest in more resilient infrastructure.

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)
$150,000,000	Ogallala Aquifer Initiative (USDA)
$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. Senator Hassan's team has received TA from Federal Emergency Management Agency (FEMA) and CISA, and has the support of Chairman Peters and RM Portman for inclusion. This will establish a new grant program and guard-rails 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 critical infrastructure 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.

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 low-emission (LNG, compressed natural gas, hydrogen, propane, biofuel) and zero-emission school 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, coal-derived liquid fuels, 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).

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 $600 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 $500 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 permitting provisions include the following components:

The bill includes S. 2324, the Federal Permitting Reform and Jobs Act, which will lift sunset on FAST-41, which is set to expire in December 2022, and expand and improve upon its current authorities. In 2015, Senators Portman and McCaskill co-sponsored the Federal Permitting Improvement Act, which Congress ultimately 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 to prepare a comprehensive plan for the permitting process across agencies. Those projects, known as covered projects, must be subject to NEPA and generally must be likely to require $200 million or more of investment, unless the Permitting Council believes a project would benefit from enhanced coordination and is likely to require authorizations from more than two federal agencies. The public can track the permitting progress for each of those projects at www.permits.performance.gov.

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. This bill 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.

The bill also includes the project delivery provisions of the Surface Transportation Reauthorization Act of 2021, which includes numerous permitting reforms for Title 23 highway projects. It will codify One Federal Decision for highway projects, which sets a two-year goal for completing the environmental review and permitting process for major projects and requires agencies to coordinate on a predictable, joint schedule. Federal agencies are also directed to adopt categorical exclusions that would improve the timeliness of the process. Additionally, the Secretary of the Department of Transportation will be charged with identifying impediments to the permitting process, developing best practices and improving transparency.

Cryptocurrency

The bipartisan infrastructure framework applies information reporting requirements to digital assets (including cryptocurrency) to ensure they are properly reported to the IRS. The provision includes updating 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.

Additionally, digital assets are added to the current rules requiring businesses to report cash payments over $10,000.