HIGHWAYS, BRIDGES AND BROADBAND

BREAKING DOWN THE $1.2 T INFRASTRUCTURE BILL

NOVEMBER 19, 2021
OVERVIEW

THE INFRASTRUCTURE INVESTMENT AND JOBS ACT
Infrastructure Investment and Jobs Act (IIJA)

- Major component of Biden’s Build Back Better Agenda
- $1.2T investment over 5 years
  - Largest ever federal investment in public transit
  - Largest federal investment in passenger rail since Amtrak’s creation
  - Largest bridge investment since construction of the interstate highway system
  - Largest investment in clean drinking water and waste water infrastructure in U.S. history
  - Largest investment in clean energy and EV infrastructure in history, including development of a resilient, clean electric grid
  - Ensures every American has access to reliable high-speed internet
Where Is Money Being Invested?

ROADS & BRIDGES
TRANSIT
RAIL
ENERGY EFFICIENCY
WATER
PIPELINES
PORTS & AIRPORTS
BROADBAND
TRANSPORTATION

SURFACE TRANSPORTATION AND PUBLIC TRANSIT
Historic Investments in Infrastructure

• Highways: $351B over 5 years
  ▪ 50% increase above the Fixing America’s Surface Transportation Act
  ▪ Vast amount of highway funding would continue to be apportioned to the states
  ▪ Several new grant and pilot programs

• Bridges: Nearly $40B over 5 years
  ▪ Competitive grant program to assist in repair and replacement of deficient and outdated bridges;
  ▪ Fix 10 of the most economically significant bridges, repair 15,000 smaller
Historic Investments in Infrastructure

- Rail: $66B (passenger and freight) over 5 years
  - Eliminate AMTRAK maintenance backlog and fund new rail cars
  - Modernize the Northeast Corridor
- Public Transit: $90B (largest federal investment in history)
  - $39b of new investment to modernize transit and improve accessibility for elderly and disabled
  - Reduce current backlog by 15% and replace more than 1700 subways, light rail, commuter rail cars
Authorizations Include

- Surface Transportation Reauthorization Act, S. 1931
- Surface Transportation Investment Act, S. 2016
- Drinking Water and Wastewater Infrastructure Act, S. 914
- Energy Infrastructure Act, S. 2377
Other Programs

• Safety
  ▪ $11B in safety programs including new $5B ‘Safe Streets for All’ program

• Congestion
  ▪ Provides flexibility to states for alternative transportation projects (bike share, trails, etc.) to mitigate congestion, improve air quality

• Access

• Research
  ▪ Establishes the Advanced Research Projects Agency-Infrastructure (ARPA-I) to fund R&D
Implementation Priorities/Principles

Executive Order on Implementation of IIJA (November 15)

- Establishes interagency task force, infrastructure coordinator
- Prioritizes investments that:
  - Avoid waste, have measurable outcomes
  - Increase domestic competitiveness (e.g., Buy America)
  - Create jobs with high labor standards, prevailing wages
  - Emphasize equity (e.g., Justice 40 Initiative)
  - Promote resiliency, help combat climate change
  - Reflect coordination with sub-federal stakeholders
WATER

DRINKING WATER AND WASTEWATER
Drinking Water and Wastewater

• $55B for **drinking and wastewater** over 5 years

• Drinking water includes:
  - $11.7B for Drinking Water State Revolving Funds (SRF)
  - $15B for lead contamination mitigation and lead pipe removal
  - $4B for emerging contaminants, including per- and polyfluoroalkyl substances (PFAS)

• Wastewater includes:
  - $11.7B for Clean Water State Revolving Funds (SRF)
  - $1B for emerging contaminants, including per- and polyfluoroalkyl substances (PFAS)
PORTS, WATERWAYS & AIRPORTS
Ports, Waterways and Airports

- $17B for *port infrastructure and waterways* and $25B for *airports*
  - $3.42B to build and repair CBP stations and land ports-of-entry
  - $2.25B for Maritime Administration’s port infrastructure development program
  - $80M per year for DOT-led competitive grant program to reduce port-related emissions from idling trucks
  - $9.5B for Army Corps of Engineers infrastructure priorities; and $429M for Coast Guard infrastructure priorities
  - $15B for Airport Improvement Program projects; $5B for airport terminal development; and $5B for FAA facilities and equipment
ENERGY

GRID RESILIENCY AND RELIABILITY, CLEAN ENERGY, EFFICIENCY AND ENVIRONMENT
Energy Investments

• Grid resiliency and security
• Clean energy supply chains
• Fuels and technology infrastructure
• Carbon capture
• Hydrogen fuels
• Energy efficiency and building infrastructure
Grid Resiliency and Security

- $65B for grid infrastructure, including:
  - $5B for DOE-led grant program to enhance grid resiliency against “disruptive events” such as extreme weather, wildfires, and natural disasters
  - $5B for R&D grants to states and utilities for innovative approaches to upgrade transmission, storage, and distribution infrastructure; additional $1B for reliability and resiliency efforts in rural or remote areas
  - $2.5B revolving loan fund to allow DOE to serve as an “anchor-tenant” for a new or upgraded transmission line where DOE may buy up to 50% of planned capacity
  - $3B for a Smart Grid Investment Matching Grant Program to support the deployment of technologies to enhance grid flexibility
Supply Chains for Clean Energy Tech

- $140M for new DOE rare earth demonstration facility, including integrated rare earth element extraction and separation facility and refinery

- $3B to establish a DOE Battery Material Processing Grant program to ensure the U.S. has a viable battery materials processing industry and advanced battery manufacturing

- $3B for Battery Manufacturing and Recycling Grants administered by DOE's for construction of commercial scale advanced battery and component manufacturing and recycling facilities

- $200M for electric drive vehicle battery recycling and second-life applications program
Fuels and Technology Infrastructure Investments – Carbon Capture, etc.

- Investments in Carbon Capture, Utilization, Storage, and Transportation Infrastructure Programs
- Grant program for procurement of products that use or are derived from CO2 and reduce greenhouse gas emissions
- Loan program and grants for CO2 transportation infrastructure or associated equipment including pipelines, shipping, rail or other transportation infrastructure
- $2.5B grant program for large-scale commercialization of carbon capture technologies and associated transportation infrastructure
Fuels and Technology Infrastructure Investments

• $3.5B for four regional hubs to support direct air capture technology that would remove CO2 directly from the atmosphere and sequester it or incorporate it into usable products.

• $4.6B to support carbon capture pilot and demonstration projects
Fuels and Technology Infrastructure Investments - Hydrogen

• Federal support for use of hydrogen as energy source

• $8B grant program to support the development of at least four regional clean hydrogen hubs that demonstrate the production, processing, delivery, storage and end-use of clean hydrogen.

• Grants, contracts and cooperative agreements for research, development and demonstration projects to advance new clean hydrogen production, processing, delivery, storage and use equipment manufacturing technology and techniques

• Program to improve the efficiency, increase the durability and reduce the cost of producing clean hydrogen using electrolyzers
Fuels and Technology Infrastructure Investments - Hydropower

- DOE program to encourage new small hydropower generation on existing dams ($125M)
- DOE programs to improve hydro facilities efficiency
- Program for Hydropower Safety/Environmental Improvement Incentives to improve grid resiliency, maintain spillways and improve structures. ($553M)
Energy Efficiency and Building Infrastructure

- $250M revolving fund for grant program to make low interest loans to support commercial energy audits and make energy upgrades or retrofits
- $1.125B authorization to provide technical support to states to update building codes and to provide training to contractors, architects, engineers, and other building industry professionals in energy efficiency technologies
- $2.5B competitive grant program for the nation’s schools to support energy efficiency and other energy-related measures
- $3.5B grant program for low-income weatherization
- $250M in new funding for conservation technology grants to federal facilities
BROADBAND

BROADBAND DEPLOYMENT AND ADOPTION
Broadband Deployment, Adoption and Affordability (Division F)

- $65B for broadband deployment, adoption and affordability
  - (1) Title I Broadband Equity, Access, and Deployment Program ($42.45B): Formula-based grants to states to speed broadband deployment
    - (A) Minimum Allotment ($5.3B)
    - (B) High Cost Funding ($4.25B)
    - (C) Unserved Funding ($32.2B)
    - FCC Future of the USF report due 9 months after enactment
Broadband Deployment, Adoption and Affordability (Division F)

- **(2) Title III Digital Equity Act of 2021 ($2.75B)**
  - State Digital Equity Capacity Grant Program
  - Digital Equity Competitive Grant Program

- **(3) Title IV Enabling Middle Mile Broadband Infrastructure ($1B)**
  - Connect unserved and underserved areas; promote resiliency

- **(4) Title V Broadband Affordability ($14.2B)**
  - Replaces the temporary Emergency Broadband Benefit (EBB) with a permanent **Affordable Connectivity Program (ACP)** in the beginning of 2022
  - Provides up to $30/mo. ($75 Tribal or high cost) per eligible low-income household to discount broadband service
CYBERSECURITY
Cybersecurity

- State, Local, Tribal and Territorial Grant Program
  - $1B authorization over 4 years
  - Grants administered by FEMA
  - Applicants must submit “Cybersecurity Plan” to CISA

- Cyber Response and Recovery Fund
  - $140MM authorization / $100MM appropriation over 7 years
  - “Significant Incident” declaration
  - DHS / CISA support to public or private entities to respond to / recover from significant cyberattacks and breaches
Cybersecurity

- Additional Federal resources (supplemental approps)
  - Office of the National Cyber Director | $21MM to stand up office (FY22)
  - CISA Sector Risk Management | $35MM over 5 years
  - DHS Science and Technology Directorate for Research and Development | $157.5MM over 5 years

- Sector-specific cyber resiliency measures woven throughout the bill (water systems, power grid)
DOMESTIC PROCUREMENT
BUILD AMERICA BUY AMERICA
Domestic Procurement

• New statutory authorities to broaden domestic content preferences in infrastructure assistance and direct federal procurement:

  ▪ *Build America, Buy America*: New BA preferences for iron, steel, construction materials and manufactured products on federal infrastructure assistance awards

  ▪ *Make It in America*: Amends the BAA to improve and tighten waiver processes, codify a newly-established Made in America Office and paves the way for proposed increase to the BAA's domestic content requirements for direct federal procurement

  ▪ *BuyAmerica.gov*: Directs the establishment of a central and publicly available website related to Buy American waivers.