

Infrastructure Investment and Jobs Act: An Overview and Perspective

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Introduction

On November 15, President Biden signed the Infrastructure Investment and Jobs Act (IIJA or "Act") into law. The IIJA reauthorizes surface transportation programs for five years and provides new investments in transportation, energy, water, buildings and other programs to improve America's infrastructure.

The IIJA contains \$550 billion in new spending over five years. It provides new federal funding to support roads and bridges, public transit, freight and passenger rail, ports and airports; investment in broadband infrastructure; water systems; modernizing the power sector; and improving climate resilience. In addition to authorizing these programs, the IIJA also provides \$113.3¹ billion in advance general fund appropriations to allow agencies to begin funding infrastructure improvements before the fiscal year 2022 appropriations process is completed.

Above baseline investments for sectors addressed in IIJA include²:

Transportation: \$284 billion

Water: \$55 billionBroadband: \$65 billionEnergy & Power: \$73 billion

Environmental remediation: \$21 billion
 Western water infrastructure: \$8.3 billion

- **Resiliency:** \$46 billion

The IIJA emphasizes investments in equity and measures to mitigate climate change, while safety remains a top priority for the US Department of Transportation (USDOT). The IIJA includes separate sections for equity, climate and safety programs that impact the provision of funding for transportation, energy, water and other programs in the Act. Many of the investments in the IIJA

will be used to meet the Justice40 goals of Executive Order 14008. The Federal agencies overseeing these programs will be updating their policies to include these crosscutting requirements in their regulations, guidance, future Notices of Funding Opportunities (NOFOs) and project rating criteria in the months ahead.

This paper provides an overview of the IIJA funding programs based on information available as of November 2021. For funding levels, we generally report the amounts included in the authorizing language. For some programs, we also include the amounts made available by the advanced appropriations. WSP will keep our clients informed of funding opportunities as the Federal agencies allocate the funds to these programs. We provide an overview of the equity, climate and safety provisions in the Act, then provide more detailed summaries of the funding available in the transportation, water and energy sections of the paper.

As the Federal agencies update their polices, WSP experts will be working with our clients to position them to successfully deliver the new infrastructure funded by the IIJA.

¹Support Builds For Senate's \$1.2T Bipartisan Infrastructure Bill, <u>editor@asashto.org</u>, August 6, 2021 https://aashtojournal.org/2021/08/06/support-builds-for-1-2t-bipartisan-infrastructure-bill-in-senate/
²National Association of Counties, <u>Legislative Analysis for Counties</u>: <u>The Infrastructure Investment & Jobs Act (naco.org)</u>



Equity

Recognizing that past infrastructure investments have often had negative impacts on minority and low-income communities, Congress drafted the IIJA to address equity in almost every section of the Act. Opportunities to enhance equity are embedded in the following areas: safety, public transportation, broadband, water Infrastructure, resilience, the reconnecting communities pilot program, programs to address legacy pollution, the national motor vehicle per-mile user fee pilot program and Tribal Transportation programs. Examples of programs emphasizing equity include:

Reconnecting Communities Pilot Program, USDOT (\$1 billion)

- Eligible entities may apply for planning funds to study the feasibility and impacts of removing, retrofitting, or mitigating existing transportation facilities that create barriers to mobility, access, or economic development.
- Program includes construction funds to carry out projects to remove, retrofit or mitigate an eligible facility and, if appropriate, to replace it with a new facility.

Healthy Streets Program (\$500 million)

- The healthy streets program establishes a
 discretionary grant program to provide grants to
 eligible entities to deploy cool pavements and porous
 pavements and to expand tree cover.
- The goals of the program are to mitigate urban heat islands, improve air quality, and reduce the extent of impervious surfaces, storm water runoff and

- flood risks, and heat impacts to infrastructure and road users.
- According to the Senate website, "Grants would be prioritized for low-income communities and disadvantaged communities."

Justice 40 Initiative

Executive Order (E.O.) 14008 created the Justice40 Initiative which looks at "how certain Federal investments might be made toward a goal that 40 percent of the overall benefits flow to disadvantaged communities. The recommendations shall focus on investments in the areas of clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; the remediation and reduction of legacy pollution; and the development of critical clean water infrastructure."

- While forthcoming grant criteria are unknown, we expect the Federal agencies to include criteria that will help them in meeting the goal set out in E.O. 14008.
- Those Justice 40 Federal investments are expected to align with, and complement, the advancement of racial equity and support for underserved communities, as set out under E.O. 13985.

As WSP partners with our clients to build back better with federal infrastructure funds, we launched an Equity Center of Excellence designed to help our clients turn the corner from equity discussion to delivery.

³The Bipartisan Infrastructure Investment and Jobs Act of 2021, U.S. Senate Committee On Environment And Public Works, https://www.epw.senate.gov/public/_cache/files/2/e/2e879095-7fcd-4f6e-96fd-a4ad85afa0cc/7D48782E0BEB430002A767AC75961EB0.bif-highway-one-pager-final-2.pdf ⁴E.O. 14008 Executive Order on Tackling the Climate Crisis at Home and Abroad | The White House



Safety

The IIJA includes funding for several surface transportation safety programs and initiatives. Existing programs will receive additional funding and have broadened eligibility requirements to include more safety improvements. Several new competitive grant programs have been created. The list below summarizes a few of the new grant programs addressing surface transportation safety:

Highway Safety Improvement Program (\$15.5 billion)

- The Highway Safety Improvement Program
 (HSIP) has expanded eligibility to cover non infrastructure activities and behavioral safety
 projects, such as traffic safety education and
 enforcement, and allows states to spend up to 10% of
 funds on such projects.
- The HISP now has expanded eligibility to include pedestrian and cyclist safety measures. If 15%+ of roads deaths are pedestrians, cyclists, or people using mobility-assistive devices, the state must spend 15% of its HSIP funds to address vulnerable user safety.

NHTSA Safe Streets and Roads for All Grant Program (\$6 billion)

- Authorized for appropriation of \$200M/year, FY22- FY26.
- Appropriated (through 5-year advanced appropriations) at \$1B/year, FY22 - FY26
- States, Indian Tribes, MPOs, and political subdivisions are eligible to apply.
- Provides funding for developing comprehensive safety action plans based on "Vision Zero" or "Toward Zero Deaths" that have a goal and timeline for eliminating highway fatalities, location/severity

- analysis, and data-driven approach to identifying strategies to prevent fatalities and serious injuries.
- Provides funds for planning and construction projects to carry out strategies identified in the comprehensive safety action plan.

FRA Railroad Crossing Elimination Program (\$5.5 billion)

- Authorized for appropriation of \$500M/year, FY22 - FY26.
- Appropriated (through 5-year advance appropriations) at \$600M/year, FY22 - FY26
- The program's purpose is to eliminate highwayrail grade crossings that are frequently blocked by trains, improve health and safety of communities, reduce freight movement/rail operation impacts on communities, and improve mobility.

FHWA Wildlife Crossing Pilot Program (\$350 million)

- 60% of grant funds are reserved for rural areas.
- Requires a Federal Highway Administration (FHWA) study that assesses causes of wildlife-vehicle collisions and their impacts on wildlife, highway safety, traffic, and habitat connectivity. The study shall assess solutions and best practices for reducing wildlife-vehicle collisions and improving habitat connectivity.

WSP experts will continue to update our clients as federal agencies update their policies and Notices of Funding Opportunities to include these new safety activities.



Climate

The IIJA makes significant investments to reduce carbon emissions and build resilience into our energy, transportation, building and water infrastructure. The Act includes more than \$10 billion for carbon capture, direct air capture and industrial emission reductions. ⁵ The IIJA includes investments in electric vehicles (EV), EV charging infrastructure, energy efficiency in buildings, the battery supply chain, and improvements to the electric grid. A few of the notable programs include:

Airports, Ports and Waterways (\$42 billion)

- Approximately \$17 billion will be invested in ports and waterways infrastructure.
- \$25 billion in airports to help modernize and address the aging infrastructure at the nation's airports.
- This significant investment will include strategies to reduce carbon emissions and transition vehicles to electric and other low-carbon propulsion systems.

Transportation Resilience (\$8.7 billion)

- A new Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant program in the USDOT.
- Combination of formula and discretionary grants.
 - · Competitive planning grants to enable communities to assess vulnerabilities to current and future weather events and natural disasters.
 - Competitive resilience improvement grants to protect surface transportation assets by making

the assets more resilient to current and future weather events and natural disasters.

- · Evacuation planning and preparation grants.
- $\boldsymbol{\cdot}$ Grants for At-Risk Coastal Infrastructure projects.

Vehicles (\$10.8 billion)

- \$5.6 billion for low or no emission transit buses.
- \$5 billion for electric and low emissions school buses.
- \$250 million for clean ferries.

EV Infrastructure (\$7.5 billion)

- The IIJA seeks to invest \$7.5 billion to create a network of EV chargers throughout the U.S. along high-traveled corridors increasing accessibility to charging infrastructure.
- Investment will be focused on rural, disadvantaged, and "hard-to-reach communities."

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 $^{^5 \}text{US Department of Energy, https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0 and the state of th$



Transportation

The IIJA reauthorizes surface transportation programs for five years and provides the largest increase in federal highway, bridge, and transit funding in more than six decades, including \$284 billion in above baseline investments for Transportation. Several new surface transportation grant programs will be established by the Act, and many existing programs have been renamed, received increased funding or seen modifications to funding requirements specific to federal match or eligibility criteria.

The subsections below outline each new program and existing programs with significant increases in funding and/or policy changes, separated out by the following transportation modes:

- Multimodal
- Roads and Bridges
- Transit
- Passenger and Freight Rail
- Airports and Aviation
- Ports and Waterways

MULTIMODAL

The USDOT will make available over \$150 billion of discretionary funding for projects—a large increase from previous years. This funding is a mix of increases in funding for existing programs as well as funding for new programs. Here are two examples:

RAISE (formerly BUILD) – renamed to Local and Regional Project Assistance Program (\$7.5 billion)

- The IIJA increases funding, with program requirements remaining largely the same.
- Limits individual grants to \$25 million and provides an equal split between rural and urban areas.

National Infrastructure Project Assistance (NIPA) (\$15 billion)

- Supports multi-modal, multi-jurisdictional projects generating national or regional economic, mobility, or safety benefits.
- Eligible projects include highway and bridge projects, at-grade rail crossings, intercity passenger rail and public transit.
- 50% of funds are set aside for projects with a cost between \$100 million and \$500 million.

ROADS AND BRIDGES

The IIJA authorizes Highway Trust Fund contract authority for highways, roads and bridges at the following levels over five fiscal years:

- FY 2022: \$52.49 billion
- FY 2023: \$53.54 billion
- FY 2024: \$54.61 billion
- FY 2025: \$55.70 billion
- FY 2026: \$56.81 billion

Many existing formula programs will see large increases in funding and expanded eligibility for projects incorporating EV charging infrastructure, resiliency features and projects in low-income communities. For example, the National Highway Performance Program has expanded eligibility to include resiliency and mitigation of climate risks and extreme weather, cybersecurity, and undergrounding of utility infrastructure. The Congestion Management and Air Quality Improvement Program and the Surface Transportation Block Grant Program now allow EV charging infrastructure as eligible for grant funding.

The existing INFRA competitive grant program has been renamed the Nationally Significant Multimodal Freight and Highway Program (NSMFHP). Funding has been

increased to \$8 billion and the Federal share for small projects is raised to 80%.

The IIJA creates several new grant programs. Here are a few examples:

Carbon Reduction Program (\$6.4 billion)

- States must develop carbon reduction programs in consultation with MPOs.
- Grants will fund eligible projects reducing transportation emissions, including traffic management, public transportation, pedestrian and cyclist trails, advanced congestion management technologies, and street lighting retrofits.

Bridge Investment Program (\$12.5 billion)

- Authorized at \$3.265 billion over FY 22 FY 26.
- The Act provides \$9.235 billion in advanced appropriations.
- Supports projects reducing the number of bridges in poor or vulnerable condition and those not meeting current design standards or that have weight restrictions.
- 50% federal share for large projects (>\$100 million),
 80% all others.

Rural Surface Transportation Grant Program (\$2 billion)

- Improve and expand surface transportation infrastructure in rural areas to increase connectivity, improve safety and reliability of the movement of people and freight, and generate regional economic growth and quality of life improvements.
- \$25 million minimum award. 80% federal share, with higher share (up to 100%) for projects on the Appalachian Development Highway System.

TRANSIT

The IIJA provides \$108 billion for public transit, a large increase from levels authorized under the FAST Act. The IIJA largely continues policies enacted by the FAST Act, though some important amendments have been made. Changes to existing competitive grant programs are as follows:

Capital Investment Grants (\$23 billion)

- \$8 billion is provided in advanced appropriations
 (\$1.6 billion/year from FY 22 FY 26).
- \$15 billion is authorized (\$3 billion/year from FY 22 - FY 26).
- The total maximum allowable cost of Small Starts
 Projects is raised from \$300 million to \$400 million,
 with the CIG share capped at \$150 million.
- The IIJA extends the time period for Core
 Capacity projects to be at or near capacity from

- 5 to 10 years without regard to any temporary measures undertaken.
- The Program of Interrelated Projects has been replaced by provisions allowing applicants to bundle multiple projects as they enter project development to be considered for future funding.
- Before and After Studies are no longer required.
- CIG project sponsors will need to show progress in implementing their Transit Asset Management Plans.

Bus and Bus Facilities Grants (\$8 billion in competitive grants, \$3 billion in formula funds)

- Program includes formula and competitive grants.
- The rural areas set aside increased to 15%.
- Includes \$2.34 billion in authorizations for 5339(b) competitive grant funding for Bus and Bus Facilities, and
- \$375 million in authorizations and \$5.250 billion in advance appropriations for 5339(c) No or Low Emissions Bus competitive grants, for a total of \$5.625 billion.
 - · 25% of competitive grant funds are reserved for low-emission bus projects.
 - Zero-emission fleet transition plans, including workforce transition plans, are required for zeroemission vehicle grants.

In addition, the IIJA creates several new competitive grant programs:

State of Good Repair Rail Vehicle Replacement Grants (\$1.5 billion)

- A new competitive grant program to replace rail rolling stock.
- Limited to 3 new awards each year.
- Awards may be made through multi-year grant agreements.

All Stations Accessibility Program (\$1.75 billion)

- Funded by advanced appropriations of \$350 million/ year for FY 22 - FY 26.
- Provides grants to upgrade legacy rail and subway stations to ADA standards.
- Eligible applicants include a state or local government authority.

Ferry Grant Programs (\$1.6 billion)

- Title 23 USC is amended to include as an eligible cost the construction of ferry boats and ferry terminal facilities (including ferry maintenance facilities), whether toll or free, and the procurement of transit vehicles used exclusively as an integral part of an intermodal ferry trip.
- Through September 30, 2025, a project to replace or retrofit a diesel fuel ferry vessel that provides substantial emissions reductions may have a Federal share of up to 85 percent.

- The Electric or Low-Emission Competitive Grants (\$250 million) program provides funds for a pilot program for the purchase of electric or low-emitting ferries.
- The Ferry Service for Rural Communities (\$1 billion) program provides funds to defray operating costs for existing ferry systems that serve at least two rural areas at least 50 miles apart.

WSP has significant experience in delivering transit projects. Our services include alternatives analysis, service planning, fare strategy, ridership forecasting, capital and operating costing, funding and financing plans, cost allocation, organizational assessment, grant strategies and applications, environmental, design, and program management.

PASSENGER AND FREIGHT RAIL

The IIJA provides \$66 billion in new funding for passenger and freight rail, a large increase from current levels. Amtrak receives increased funding in the Northeast Corridor Grant (NEC) Program and for the National Network. Other significant rail programs include:

Consolidated Rail Infrastructure and Safety Improvement (CRISI) (\$5 billion)

- The purpose of CRISI grants is to improve safety, efficiency, and reliability of intercity passenger and freight rail.
- The IIJA expands eligibility to projects that prevent trespassing, incorporate innovative rail technologies, improve hazmat response plans, and rehabilitate, remanufacture, procure or overhaul locomotives, provided there is a reduction in emissions.
- Expands list of eligible recipients to the District of Columbia, Indian tribes, and an association representing Class II and III railroads

Federal-State Partnership for Intercity Passenger Rail Grants (\$43.5 billion)

- Authorized for appropriation of \$1.5B/year, FY22 - FY26.
- Appropriated (through 5-year advance appropriations) at \$7.2B/year, FY22 - FY26.
- Improve safety, efficiency and reliability of intercity passenger and freight rail.
- The IIJA broadens this existing program to include performance improvements or new service, including privately operated passenger rail service if an eligible applicant is involved.
- It expands eligibility to include state of good repair projects and planning, environmental studies and final design phases.
- At least 45% of funds go to NEC projects; at least 45% of funds go to non-NEC projects. For projects not on

the NEC, prioritizes projects for which Amtrak is not the sole applicant.

Amtrak Capital Funding (\$41.2 billion)

- The Act authorizes grants to Amtrak for the Northeast Corridor (\$6.6 billion) and for the National Network (\$12.6 billion) over 5 years.
- The IIJA provides advanced appropriations for Amtrak's Northeast Corridor (\$6 billion), \$1.2 billion/ year FY 22 - FY 26.
- The Act also provides advanced appropriations for the National Network (\$16 billion), \$3.2 billion/year FY 22 - FY 26.
- More than doubles funding from FAST Act.
- Up to 10% of National Network funds may be used for corridor services.
- Provides greater opportunity for Amtrak to address its backlog and pursue mega projects.
- Expands Amtrak's ability to pursue state-sponsored services.

WSP has significant expertise developing and executing intercity passenger rail strategies for Amtrak, state departments of transportation and private operators. Our services include alternatives analysis, service planning, fare strategy, ridership forecasting, capital and operating costing, funding and financing plans, cost allocation, organizational assessment, grant strategies and applications, environmental, design and program management.

AIRPORTS AND AVIATION

The IIJA provides \$25 billion in additional funding over the previous baseline. The **IIJA adds aviation projects** to the scope of eligible projects under the TIFIA program, a key federal financing program that supports transportation infrastructure projects by offering long-term flexible, low-cost financing. Significant aviation related funding in the IIJA includes:

Airport Infrastructure Grants (\$15 billion)

- The Act provides advanced appropriations of \$3 billion/year, FY 22 - FY 26.
- Expands eligibility to airside and landside needs, including runways, taxiways, noise reduction, multimodal terminal development and airportowned towers.
- Funds are distributed as follows:
 - \$2.48 billion per year for primary airports and certain cargo airports: formula-driven not subject to reduced apportionments based on PFCs collected and with no maximum apportionment limit.
 - \$500 million per year for GA and non-primary commercial service airports: apportioned

based on the categories published in the most current NPIAS.

• \$20 million per year in competitive grants for airports in the contract tower program and the contract tower cost share program.

Airport Terminal Program (\$5 billion)

- The IIJA creates a new competitive grant program for airport terminal development projects, including passenger terminal buildings, airport terminal access roads, multimodal projects, and projects for on-airport rail access.
- Discretionary funds of \$1 billion will be made available each fiscal year from 2022 through 2026.
 Additional considerations regarding the funds are sumarized below:
 - Not more than 55 percent shall be for large-hub airports
 - Not more than 15 percent shall be for mediumhub airports
 - Not more than 20 percent shall be for smallhub airports
 - Not less than 10 percent shall be for non-hub and non-primary airports.
- Grant priorities include: increasing capacity and passenger access, replacing aging infrastructure, achieving compliance with the Americans with Disabilities Act, improve airport access for historically disadvantaged populations and improving energy efficiency.

FAA Facilities and Equipment (\$5 billion)

 Funding for FAA-owned Air Traffic Control facilities, including FAA-owned contract towers and equipment.

Through our extensive multi-disciplinary capabilities, WSP has been a leader in aviation for more than half a century providing comprehensive services in airport planning, environmental, design and program and construction management at every stage of an aviation project. Additionally, WSP provides a full range of airport financial consulting services, including financial feasibility analysis, strategic financial planning, competitive grant assistance, and alternative project delivery to support our airport and aviation clients through all aspects of airport infrastructure development.

PORTS AND WATERWAYS

The IIJA provides \$17.3 Billion in funding for waterway and coastal infrastructure, inland waterway improvements, port infrastructure, and land ports of entry through the Army Corps of Engineers (ACOE), Department of Transportation, Coast Guard, General Services Administration, and Department of Homeland Security. This includes:

Port Infrastructure Development Program (\$2.25 billion)

 The IIJA Increases funding for this existing competitive grant program to fund projects to improve port infrastructure, intermodal connections, enhance climate resiliency or reduce pollutants or greenhouse gas emissions.

Reduction of Truck Emissions at Port Facilities (\$400 million)

- New program authorized at \$50 million/year,
 FY 22 FY 26.
- The IIJA provides advanced appropriations of \$150 million.
- The IIJA creates a new program to fund projects that reduce port-related emissions from idling trucks.

Army Corps of Engineers Funding (\$9.55 billion)

 The IIJA appropriates supplemental funding for the Army Corps of Engineers, including \$5.15 billion for unfunded authorized projects and additional funding for navigation, inland waterways, environmental infrastructure, shore protection, Mississippi Rivers and Tributaries and dredging projects.

WSP offers a full range of services to port and marine terminal operators, including strategic planning, master planning, design, construction management, financial analysis and planning, environmental studies, operations planning, and facility maintenance/management. We help clients in all phases of development of waterfront industrial and marine terminal facilities while emphasizing sustainability in our approach to port development and modernization.



Water

The IIJA includes \$55 billion for water infrastructure. The water programs and initiatives can broadly be categorized into the following areas: Drinking Water, Water Infrastructure, Environmental Justice, Sustainability and Resiliency, and Data and Technology. Existing programs received increased funding and new programs have been created. Here are some of the water programs in the IIJA:

Reducing Lead in Drinking Water (\$500 million)

- Reauthorizes and increases funding for the Environmental Protection Agency (EPA)'s lead reduction projects grant program.
- Clarifies that eligible entities shall give priority to disadvantaged communities for lead pipe service line replacement.

Lead Contamination in School Drinking Water (\$200 million)

- This new EPA grant program aims to reduce lead in school drinking water.
- Provides grants to States to assist local educational agencies for voluntary testing and remediation of lead contamination in drinking water.

Western Water Infrastructure (\$8.3 billion)

 Title IX of the IIJA encompasses funding for water storage feasibility studies and projects, the creation of an aging infrastructure account and the establishment of a new competitive grant process run by the Bureau of Reclamation.

- The IIJA authorizes \$1.15 billion for water storage, groundwater storage and conveyance projects.
- The IIJA authorizes \$3.2 billion for the aging infrastructure account to fund major rehabilitation and replacement projects identified in the Asset Management Report of the Bureau of Reclamation dated April 2021.

Assistance for Small and Disadvantaged Communities (\$510 million)

 This competitive EPA grant program enhances the existing program available to states and non-profits to support lead pipe replacement and other means to remove lead and ensure safe drinking water.

Drinking Water State Revolving Loan Funds (\$14.65)

- The IIJA recapitalizes existing State revolving loan funds to fund new projects.
- The minimum percentage of funds to disadvantaged communities increases from 6 to 12 percent.

WSP provides integrated advisory, equity and engineering services, as well as permitting support, on complex water projects across the U.S. Additionally, we have experience in advanced water treatment technologies including desalination of seawater and brackish water and zero-effluent discharge systems for power facilities. We help clients anticipate needs and take action to optimize and ensure the reliability of the water supply.



Energy

To invest in the energy transition and reduce the number of power outages, the IIJA will provide \$65 billion in clean energy generation and transmission improvements. The act creates a new Grid Deployment Authority to improve the reliability of the electrical distribution infrastructure and also creates a new Office of Clean Energy Demonstrations to deploy emerging clean energy technologies. The IIJA will fund a variety of programs including clean hydrogen hubs, carbon capture demonstration projects, energy storage pilot projects and construction of new electricity transmission lines. Some of the significant new programs in the IIJA are:

Preventing outages and enhancing the resilience of the electric grid (\$5 billion)

- \$2.5 billion competitive grant program to grid operators, transmission owners, electricity generators and other eligible entities to prevent disruptions or shut offs of the electric grid.
- \$2.5 billion formula grant program to States and Indian Tribes to prevent disruptions or shut offs of the electric grid.

Upgrading Our Electric Grid and Ensuring Reliability and Resiliency Program (\$6 billion)

- The purpose of the program is to demonstrate new and innovative approaches to enhance resilience and reliability of the electric grid.
- \$5 billion in competitive grants for States, Indian Tribes, local governments and public utilities.
- An additional \$1 billion is available in this program for rural or remote areas.

Smart Grid Investment Matching Grant Program (\$3 billion)

- Expands eligible activities under the existing
 Smart Grid Investment Matching Grant Program
 to include activities that allow increased integration
 of renewable energy, storage and mitigation of
 natural disasters to the electric grid.
- Allows grants for vehicle-to-grid storage and to support the reliability of electric grids to meet the increased demand from EV charging and electrification of appliances.

Hydrogen Research and Development (\$9.5 billion)

- Department of Energy (DOE) to develop 4 regional clean hydrogen hubs (\$8 billion).
- DOE to develop a clean hydrogen manufacturing and recycling program (\$500 million).
- DOE to develop a program to reduce costs of clean hydrogen production from electrolyzers (\$1 billion).

Carbon Capture, Utilization, and Sequestration (CCUS) (\$8.6 billion)

- DOE to develop 4 regional direct air capture hubs (\$3.5 billion).
- Grant programs to states and local governments to procure products with captured carbon (\$300 million).
- \$2.5 billion for carbon storage validation and testing.
- A new CO2 Infrastructure Finance and Innovation
 Act (CIFIA) program which will provide loans for CO2 transport infrastructure projects (\$2.1 billion).

Supply Chains for Clean Energy (\$8 billion)

- \$3 billion competitive grant program to build new or renovate existing material processing facilities to support the US supply chain for EV and grid storage batteries.
- \$3 billion competitive grant program to build new or retrofit existing battery manufacturing and recycling facilities.
- Additional research and programs to support mining and research and development.
- \$750 million competitive grants to build or retrofit manufacturing facilities to produce or recycle advanced energy products in communities where coal mines or coal power plants have closed.
- \$1.4 billion to fund programs that support the supply chain initiatives.

In addition to the grant programs highlighted above, funding will be available for energy efficiency, electricity generation, and transmission programs through expanded loan programs. WSP experts can help our clients with all phases of energy projects from feasibility, to securing funding, detailed designs and program management to deliver new clean energy infrastructure.

Conclusion

This paper highlights some of the most important infrastructure funding programs enhanced or created through the IIJA. In addition to the infrastructure funding highlighted in this paper, the IIJA revises policies that impact many federally funded programs. As the federal agencies update their policies, WSP experts will help our clients understand the new requirements and opportunities available to fund their projects.

WSP has the tools and experience to help your organization identify and apply for funding for infrastructure programs. Our team's national experience—combined with local knowledge—helps agencies devise a winning strategy. Over the past decade, WSP has helped our clients secure nearly \$31 billion in state and federal grants and loans for more than 140 infrastructure projects nationwide. For more information, visit our website.

References

The following documents prepared by national trade organizations, government officials and the Congressional Research Service provide additional information on specific amounts and programs:

AASHTO Comprehensive Analysis of IIJA

APTA Transit Funding by Program

ARTBA Highway Funding by Program

ARTBA Highway Funding by State

ARTBA IIJA Analysis

ARTBA Transit Funding by State

NACTO IIJA Overview for Cities

NACo Legislative Analysis for Counties - The IIJA

NARC Bipartisan IIJA Analysis

Passenger Rail Expansion in the Senate Infrastructure Bill

Senate Bill Section-by-section Summary

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