



About HDR's Advisory Services

The Advisory Services team has over 250 management consultants with premium, strategic advice that is rooted in the practical, solid-state service that our infrastructure clients around the world have come to expect. We have expertise in funding and finance, economics and decision analysis, strategic planning and policy, sustainability and resiliency, strategic communications and business improvement.

HDR's Advisory Services professionals review infrastructure policy developments and prepare summaries of key provisions to keep our clients informed of the dynamic landscape in Washington, D.C.

Ports and Freight Provisions

Infrastructure Investment and Jobs Act Advisory Services Policy Brief #6

The supply-chain crisis has put in clear focus the need to invest in our nation's ports and our system of goods movement. The Infrastructure Investment and Jobs Act (IIJA) makes a generational investment of \$17 billion over five years in these critical components of our nation's transportation network that, when coupled with the Biden administration's efforts to address ongoing port congestion, present tremendous opportunities for a variety of freight stakeholders. This Policy Brief summarizes current efforts by the federal government to advance port improvements and breaks down a few of the key provisions of the IIJA affecting ports and freight movement.

Action Plan for America's Ports and Waterways

The White House recently announced a series of actions to accelerate investment in ports, waterways and freight networks¹. This action plan consists of immediate, near-term and future steps including:

- Accelerating Port Infrastructure Development Program (PIDP) grant awards for Fiscal Year (FY) 2021
 - On December 23, 2021, the U.S. Department of Transportation (USDOT) announced \$241 million in funding for 25 grant recipients²
- Allowing recipients of port infrastructure funding to reallocate project cost savings toward "tackling supply chain challenges," rather than requiring that grantees return those funds to the government
- Issuing a Notice of Funding Opportunity (NOFO) for port funding available through the IIJA within 90 days of enactment (by February 13, 2022)
- Developing a playbook for states on how to use USDOT grant and loan programs to support goods movement and help alleviate freight bottlenecks
- Updating and reissuing guidance on state freight plans that incorporate best worldwide freight planning practices

¹ <https://www.maritime.dot.gov/newsroom/press-releases/biden-harris-action-plan-americas-ports-and-waterways>

² <https://www.maritime.dot.gov/ports/port-infrastructure-development-program/2021-port-infrastructure-development-program-grant>



USDOT Port Investments in the IIJA

Port Infrastructure Development Program

Funded at \$450 million per year, nearly double the \$230 million funded for FY 2021, the Maritime Administration's Port Infrastructure Development Program is one of only a few programs focused on port investments. In appropriating \$2.25 billion for the program over five years, the IIJA specifies certain eligibilities such as "projects that improve the resiliency of ports to address sea-level rise, flooding, extreme weather events, earthquakes, and tsunami inundation as well as projects that reduce or eliminate port-related criteria pollutant or greenhouse gas emissions," including:

- Port electrification or electrification master planning
- Harbor craft or equipment replacements/retrofits
- Development of port or terminal micro-grids
- Idling reduction infrastructure
- Cargo handling equipment and related infrastructure
- Worker training to support electrification technology
- Port bunkering facilities from ocean-going vessels for fuels
- Electric vehicle charge or hydrogen refueling infrastructure for drayage, and medium- or heavy-duty trucks and locomotives that service the port and related grid upgrades
- Other projects related to port activities including charging infrastructure, electric rubber-tired gantry cranes, and anti-idling technologies

\$2.25 billion
available

Reduction of Truck Emissions at Port Facilities

Administered by the Federal Highway Administration (FHWA), the Reduction of Truck Emissions at Port Facilities Program is funded at **\$400 million over the five-year term of the bill**. Through this program, the FHWA will "coordinate and provide funding to test, evaluate, and deploy projects that reduce port-related emissions from idling trucks, including through the advancement of port electrification and improvements in efficiency, focusing on port operations, including heavy-duty commercial vehicles, and other related projects."

\$400 million
available

Discretionary Programs with Port and Freight Eligibility

Beyond funding programs targeted at port infrastructure, many discretionary programs administered by USDOT include ports and related projects as eligible project types. Key programs are summarized below.

Consolidated Rail Infrastructure and Safety Improvements Program (CRISI)

Administered by the Federal Railroad Administration (FRA), the CRISI program funds projects that improve the safety, efficiency and reliability of intercity passenger and freight rail³. The IIJA provides advance appropriations of **\$1 billion per year, for a total of \$5 billion, and also authorizes an additional \$1 billion per year, making \$10 billion potentially available over the five-year term of the bill**. Eligible freight-related projects include:

\$10 billion
potentially available

- Deployment of railroad safety technology
- Capital projects, including those at ports, that:
 - Address congestion or safety challenges affecting rail service
 - Improve short-line or regional railroad infrastructure
- Highway-rail grade crossing improvements
- Rail line relocation and improvement projects
- Trespass prevention projects
- Preparing emergency plans for communities through which hazardous materials are transported
- Rehabilitating, remanufacturing, procuring or overhauling locomotives to produce significant emissions reduction

The Nationally Significant Multimodal Freight and Highway Projects Program — INFRA

The program known as INFRA is authorized and appropriated with **\$8 billion for the first five years and the potential for up to \$14 billion through annual appropriations**. Of the funds available each year, the IIJA also modifies the cap for spending on intermodal freight projects from \$600 million to 30% of funds available each year. The INFRA program seeks to:

\$14 billion
potentially available

- Improve the safety, efficiency, and reliability of the movement of freight and people
- Generate national or regional economic benefits and an increase in the global economic competitiveness
- Reduce highway congestion and bottlenecks
- Improve connectivity between modes of freight transportation
- Enhance the resiliency of critical highway infrastructure and help protect the environment
- Improve roadways vital to national energy security
- Address the impact of population growth on the movement of people and freight

Freight-related eligible projects include:

- Highway freight projects
- Grade separations
- Port infrastructure



National Infrastructure Project Assistance — New MEGA Projects

The National Infrastructure Project Assistance program is a new funding program targeting the largest transportation projects in the most need of federal assistance. Referred to as “MEGA Program” by USDOT, the program has **\$5 billion available through the IJIA and up to \$10 billion potentially available through future appropriations.**

\$10 billion
potentially available

Grants may be single- or multiyear agreements exceeding \$100 million of the total capital costs projects that USDOT has determined to be in need of significant federal funding. Projects must also be cost-effective and have one or more stable and dependable sources of funding and financing available. Eligible costs include development phase activities, construction activities, and interest and other financing costs. The maximum grant amount may not exceed 60% of total project costs, though additional federal assistance in the form of financing may be used to cover up to 80% of the project costs.

Half of the available funding is for projects with total costs between \$100 million and \$500 million. Freight intermodal or freight rail projects that provide a public benefit are eligible for funding.

Local and Regional Project Assistance (aka RAISE)

The RAISE Program is codified in statute and funded with **\$1.5 billion per year through the IJIA, totaling \$7.5 billion with the potential for an additional \$1.5 billion per year through future appropriations for up to \$15 billion.** Grants awarded under the program must be at least \$1 million for rural areas and \$5 million for urban areas with no more than 15% of the funds available going to any one state in a single year. Additionally, the program requires a 50-50 split between urban and rural projects and requires that at least 1% of available funds go toward projects in historically disadvantaged communities or areas of persistent poverty. Port infrastructure including inland ports and land port-of-entry are eligible project types under this program.

\$15 billion
potentially available

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program

The PROTECT program provides grants for resilience improvements through formula funding, competitive planning grants and competitive resilience improvement grants to protect surface transportation assets by making them more resilient. The program will also protect communities through resilience strategies that allow for the continued operation or rapid recovery of transportation systems. Eligible projects under this program include:

\$1.4 billion
available

- Highway projects
- Public transportation facility or service
- Port facilities

Railroad Crossing Elimination Program

This competitive grant program, administered by the FRA, is intended to eliminate highway-rail grade crossings that are frequently blocked by trains; improve the health and safety of communities; reduce the impacts that freight movement and railroad operations may have on underserved communities; and improve the mobility of people and goods. **The program is funded at \$300 million per year for a total of \$1.5 billion** and eligible projects include:

\$1.5 billion
available

- Grade separation or closure, including bridges, embankments, and tunnels
- Track relocation
- Improvement or installation of protective devices, signals, signs, or other measures to improve safety
- Other means to improve the safety and mobility of people and goods at highway-rail grade crossings
- The planning, environmental review, and design of a project described above

Annually, at least 20% of grants must go to projects in rural areas or on tribal lands; 5% must go toward projects in counties with 20 or fewer residents per square mile. Additionally, at least 25% of grant funds must go to planning grants. Grants must be at least \$1 million.

Transportation Formula Programs with New Port Eligibilities

The federal aid program administered by the FHWA includes several programs that provide new opportunities to fund port and port-related projects.

Formula Programs

These programs distribute funds from the federal Highway Trust Fund to states according to a “formula” established in statute – in this case, the IIJA. For the amounts available to each state and territory, under each formula program, see the FHWA announcement [here](#).

Congestion Management and Air Quality Program (CMAQ)

The CMAQ program supports surface transportation projects and other related efforts that contribute to air quality improvements and provide congestion relief. The IIJA expanded eligibilities for the use of CMAQ funds to include **“modernization or rehabilitation of a lock and dam that is functionally connected to the federal-aid highway system” as well as projects “on a marine highway corridor, connector, or crossing” that is functionally connected to the federal-aid highway system.** The statute limits the amount of CMAQ funding available for locks, dams and marine highways to no more than 10% of available funds for a fiscal year.

Carbon Reduction Program

The IIJA creates a new formula program that distributes federal aid funds to states for projects that reduce transportation emissions. Projects eligible to be funded through this program include:

- Efforts to reduce the environmental and community impacts of freight movement
- A project that reduces transportation emissions at port facilities, including through the advancement of port electrification

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation Program (PROTECT)

In addition to establishing a suite of discretionary programs under the PROTECT umbrella, the IIJA establishes a PROTECT formula program. States may use apportioned funding under the PROTECT program for both planning and capital improvements that use natural infrastructure or the construction or modification of storm surge, flood protection, or aquatic ecosystem restoration elements that are functionally connected to a transportation improvement. This could include a port facility, including a facility that connects a port to other modes of transportation, that improves the efficiency of evacuations and disaster relief or aids transportation.



Other Notable USDOT Policy Updates

The legislation addresses freight policy through several provisions that make minor changes to freight planning, create new offices, or codify existing programs in statute. Below are a few of the more notable changes to freight policy made by the IIJA.

New Office of Multimodal Freight Infrastructure and Policy

The IIJA creates a new Office of Multimodal Freight Infrastructure and Policy that is responsible to:

- Carry out the national multimodal freight policy⁴, including:
 - Developing and managing the national freight strategic plan and overseeing the development and update of state freight plans⁵
 - Developing and managing the Multimodal Freight Network⁶
- Administer and oversee certain multimodal freight grant programs, including the following programs with port and freight project eligibility:
 - Nationally Significant Freight and Highway Projects Program (INFRA)
 - National Infrastructure Project Assistance (MEGA)
 - Local and Regional Project Assistance (RAISE)
- Promote and facilitate the sharing of information between the private and public sectors with respect to freight issues
- Conduct research on improving multimodal freight mobility, and oversee the freight research activities of the various agencies within USDOT
- Assist cities and states in developing freight mobility and supply chain expertise
- Coordinate with other federal departments and agencies

This new office could be a game-changer for port and freight projects as it provides a point of contact within the Office of the Secretary that can coordinate actions by the various modal administrations and be a champion for breaking down institutional barriers to project development. The Maritime Administration has never been adequately resourced to effectively promote intermodal projects, and this new office could provide much-needed leadership and support to project sponsors.



⁴ 49 U.S.C. 70101

⁵ 49 U.S.C. 70102

⁶ 49 U.S.C. 70103

Changes to Freight Plans

The IIJA makes several changes to freight planning requirements including:

- Updating the requirements of the national freight plan to include:
 - Best practices for reducing environmental impacts of freight movement
 - Strategies to increase the resilience of the freight network
 - Strategies to promote economic growth
 - Consideration of potential unique impacts of the national freight system on rural and other underserved and historically disadvantaged communities
 - Strategies for decarbonizing freight movement
- Increasing the amount of mileage that a state can propose adding to the National Multimodal Freight Network from 20% to 30% of total miles designated in the state
- Requiring state freight plans to be updated every four years rather than five and include:
 - Supply chain cargo flows
 - Inventory of commercial ports
 - Findings and recommendations from any multi-state freight compacts
 - Impacts of e-commerce on freight infrastructure, consideration of military freight
 - Assessment of truck parking facilities in the state
- Authorizing states and certain other local governmental entities to enter into multi-state compacts to promote the improved mobility of goods

United States Army Corps of Engineers Port Investments

In addition to increasing the available funding for USDOT-administered programs, the IIJA also provides funding to the U.S. Army Corps of Engineers (USACE) for construction activities totaling **\$11.6 billion**. Of those funds:

\$11.6 billion
investment in ports
and waterways

- \$1.5 billion is for major rehabilitation, construction, and related activities for rivers and harbors
- \$200 million is for water-related environmental infrastructure assistance
- \$2.5 billion is for construction, replacement, rehabilitation and expansion of inland waterways
- \$465 million is for flood control investments
- \$1.5 billion is for aquatic ecosystem restoration projects⁷
- \$2.6 billion is for coastal storm risk management, hurricane and storm damage reduction projects, and related activities targeting states that have been impacted by federally declared disasters over the last six years
- \$2.5 billion is for inland flood risk management projects

An additional \$808 million is available for “Mississippi River and Tributaries,” funding emergency situations at USACE facilities caused by natural disasters as well as new construction projects as described in a required spend plan, prepared by the Chief of Engineers.

7 33 U.S.C. 2330

What This Means and How We Can Help

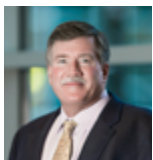
The IIJA makes substantial investments in port infrastructure through increases in existing programs such as the Port Infrastructure Development Program and expanding eligibilities in formula programs, such as CMAQ or the new Carbon Reduction Program. Within these new funding opportunities is the clear direction from Congress and the Biden administration that new investments should be resilient, reduce greenhouse gases and minimize environmental and social impacts. These policy directives are not new, but their emphasis on funding decisions is new. These provisions will require applicants to integrate congressional, administrative, and other considerations to be competitive among the discretionary programs and to be compliant with formula programs.

As a leading ports and maritime planning and design firm, we provide every aspect of maritime facility planning and design, from waterside to landside, grant application and administration, to rail and environmental. Our ability to provide programmatic management and life-cycle expertise sets us apart. HDR is prepared to support your programs and projects as you journey through the revised equity and environmental justice opportunities. Below are just some of the areas where our experienced team of professionals are prepared to step up:

- Program management
- Construction engineering and inspection
- Grant writing, administration, and NEPA documentation
- NEPA, regulatory coordination and permitting
- Bulk liquid, liquid natural gas, dry bulk, break bulk, cruise and container terminals
- Bulkhead and retaining structures
- Commercial fishing harbors
- Conditions surveys, inspections and failure analysis
- Container yard sizing and layout
- Design-build and integrated delivery support
- Dock damage and rehabilitation assessments
- Dry dock facilities
- Environmental support and land recovery
- Fabrication and manufacturing facilities
- Heavy load foundations
- Industrial facilities
- Intermodal facilities
- Lift equipment analysis and selection
- Marinas
- Channel and navigational improvements including dredging
- Maritime transportation
- Master and strategic planning
- Mooring analysis and design
- Multipurpose, general cargo and heavy lift facilities
- Offshore fabrication facilities and support bases
- Port operations analysis
- Freight rail and intermodal planning, engineering and operations
- Scour protection design
- Ship motion dynamic berthing analysis

With engineering services provided on more than 450 marine terminals across the world, our knowledge is deep — ranging from ship docks to shoreline protection, dredging and industrial facilities, plus unique projects such as the berthing of historic ships. We offer significant experience planning and designing container terminals and have the top-tier freight rail experts to complement this work.

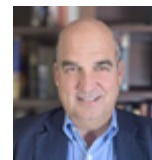
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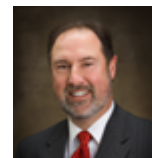
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