

Infrastructure Investment and Jobs Act
Washington's Second Congressional District
Report
U.S. Representative Rick Larsen

February 2022

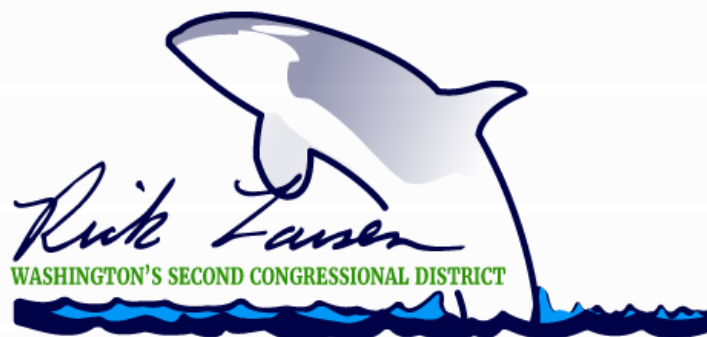


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Introduction

President Biden signed the bipartisan *Infrastructure Investment and Jobs Act* (IIJA) into law on November 15, 2021. The law makes bold, long-term investments in the nation's infrastructure and creates well-paying jobs to drive economic recovery and growth. The IIJA invests \$1.2 trillion in infrastructure and transportation, including \$550 billion in new funding for the nation's roads and bridges, water infrastructure, public transportation, ports, airports, waterways, power grid, broadband, resiliency and more.

In Washington's Second Congressional District, transportation means jobs, and Rep. Larsen is determined to help the Pacific Northwest and Puget Sound Region fully capitalize on this once-in-a-generation federal investment in infrastructure. Since the IIJA was enacted, he has met with elected officials and stakeholders to survey the Second District's infrastructure needs and is working to identify specific funding pathways available to address these needs. This report is organized by category of infrastructure and describes each funding source that applies to each category.

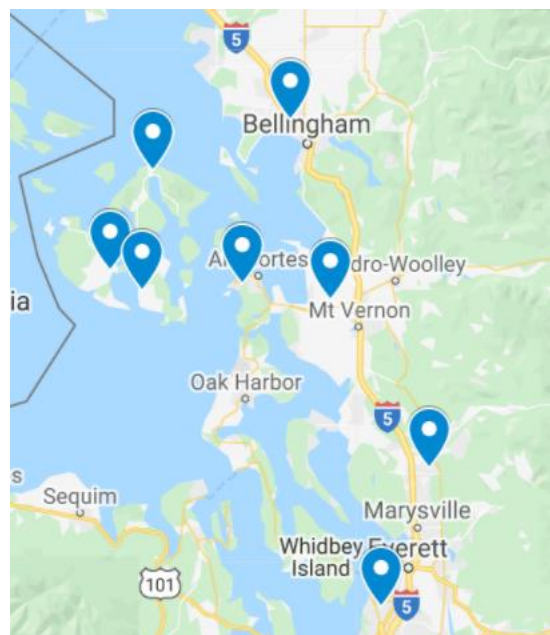
Aviation

The IJA invests \$25 billion in the nation’s airports for improvements to runways and taxiways, terminal and gate construction, multi-modal projects, low-emission ground service vehicles and noise-reduction projects. Washington airports expect to receive approximately \$385 million over five years from the IJA.

See the appendix for additional aviation funding opportunities.

District Background: Aviation

Northwest Washington airports include Paine Field (Everett), Arlington Municipal Airport, Bellingham International Airport, Skagit Regional Airport (Burlington) and several others, depicted on the map below:



Paine Field

By 2040, passenger demand at Paine Field (PAE) will grow to more than 4 million passengers—four times the number of passengers that used the airport in 2019. To accommodate this increase, Paine Field must improve and expand. The airport’s needs include an improved airfield system with runways, taxiways and apron areas, access roads to and from the passenger terminal with links to transit and light rail, corporate and private hangars, an additional passenger terminal and expanded air cargo facilities.



Image Source: Snohomish County Paine Field Passenger Terminal website

Paine Field is not just an airport; it is a global center for aerospace manufacturing. Snohomish County owns and operates the airport while Propeller Airports runs the passenger terminal. PAE has the highest economic impact of any airport in Washington, directly and indirectly responsible for 158,227 jobs and a total economic impact of nearly \$60 billion annually. Paine Field is home to the Boeing Everett Factory, the primary assembly location for Boeing’s 747, 767 and 777 aircraft, and numerous other aerospace manufacturing businesses. PAE facilitates an average of 315 aircraft operations per day, which includes general aviation, commercial air service and Boeing operations.

The airport will receive approximately \$16 million in IJA funds over the next five years, which could be used for runway, taxiway and apron construction, safety improvements, access roads, or other priority needs. The IJA also includes a \$5 billion discretionary grant program for terminal development to accommodate future growth.

Arlington Municipal Airport

The City of Arlington owns and operates the Arlington Municipal Airport (AWO), which expects to receive approximately \$1.5 million in formula funding from the IJA. This money could be used for runway construction, a new FAA-approved perimeter security fence, electrical



Image Source: City of Arlington website

improvements, safety improvements, access roads or other priority needs. The airport is also interested in adding electric vehicle charging stations, which could be funded through the National Electric Vehicle Formula Program for states, local governments and other public transportation entities to build electric vehicle charging infrastructure. AWO previously used Airport Improvement Program funding to install LED lights along the taxiway and runway in 2020.

Bellingham International Airport

The Port of Bellingham owns and operates Bellingham International Airport (BLI), a full-service commercial airport that serves more than 800,000 travelers each year, including many Canadians from nearby Vancouver, British Columbia. BLI expects to receive \$13.7 billion in formula funding from the IIJA, which could support removal and relocation of airport taxiway connections, improve runway shoulders and blast pads, and construction of equipment storage facilities. Additionally, BLI seeks to rehabilitate its control tower, modernize its air traffic control technology and install airport surveillance radar. The IIJA includes \$5 billion for Air Traffic Facilities and Equipment, of which \$200 million must go toward contract tower facilities. Currently BLI is the nation’s only airport without U.S. radar coverage, which hinders controllers’ ability to direct air traffic.



Image Source: Port of Bellingham website

Skagit Regional Airport

The Port of Skagit owns and operates the Skagit Regional Airport (BVS), a general aviation facility with two paved runways, terminal facilities, aviation fueling and a variety of aircraft maintenance and related services. The airport is an uncontrolled field (i.e., no control tower) open 24 hours a day, 7 days a week with services from U.S. Customs and Border Protection. Business aviation is the airport’s primary focus. It expects to receive approximately \$1.5 million in IIJA formula funding for runway construction, safety improvements, access roads or other priority needs. BVS received a \$1.95 million grant from the FAA in September 2020 to expand its existing apron. This expansion allows BVS to handle eight additional mid-sized business aircraft or four large business jets. Remaining needs include future runway extension to accommodate larger jets.



Image Source: Port of Skagit website

Certification Reform

Following investigations into FAA's certification of the Boeing 737 MAX aircraft, Congress passed the Aircraft Certification, Safety, and Accountability Act in the Consolidated Appropriations Act of 2021. The law authorized more than \$75 million over three years for the FAA to recruit and retain engineers, safety inspectors and other qualified technical experts. The law also included several provisions to increase transparency and accountability in the certification process, including increased oversight over individuals assigned to certify on behalf of the FAA, requiring aviation manufacturers to adopt safety management systems and expanding whistleblower protections.

Highways and Transit

Roads and Bridges

The IJA invests \$110 billion over five years for roads and bridges nationwide. Washington expects approximately \$5.3 billion in formula funding for its roads and bridges, and an additional \$40 million for the highway safety traffic program. In addition, the IJA will help build out a network for electric vehicle charging.

See the appendix for additional highway and bridge funding opportunities.

District Background: Roads and Bridges

Washington state has more than 5,400 miles of highway and at least 416 bridges in poor condition. Crumbling roads cost the average Washington driver an estimated \$659 extra per year and have increased commute times almost 13 percent since 2011, according to the U.S. Department of Transportation (USDOT).

Snohomish County

Snohomish County identified at least \$3.8 billion in unfunded priority road and bridge projects, including \$2.3 billion for projects in the Second Congressional District. This includes replacing the aging US-2 westbound trestle, which is seismically vulnerable according to the Snohomish County Public Works Department. The replacement would expand the bridge to three lanes, including one managed lane to bypass general purpose traffic, helping to reduce congestion and collisions. The project would also provide SR 204, 20th Street SE and US 2 with their own lanes onto the trestle, further relieving congestion. State and local governments can compete for grants under the \$12.5 billion Bridge Investment Program, which will fund rehabilitation or replacement of economically significant bridges.



Picture of the underside of the US-2 westbound Trestle, showing the bend in the pillars

Washington is estimated to receive \$4.7 billion in funding for highways, which could help several of Snohomish County's priority projects. One such project would widen SR 531, which connects I-5 to SR 9, to accommodate growth and reduce congestion in the Cascade Industrial Center in Arlington. Similarly, city officials in Arlington seek to complete a missing roadway segment of 169th St, which would connect the Cascade Industrial Center to Smokey Point Boulevard and I-5. Because the Washington State Department of Transportation (WSDOT) categorizes 169th street as a major collector road, it qualifies for the highway funding. Other priority projects in Lynnwood, Everett and Arlington are eligible for highway funding, including projects to widen roads, reduce congestion and improve transit access.

City of Everett officials have designs on replacing two bridges, the Edgewater Bridge and the Merrill & Ring Creek Bridge. Both bridges are structurally deficient and seismically vulnerable, according to the City's assessment. The Edgewater Bridge has already received both federal and local funding and is nearing the end of its design phase. The Merrill & Ring Creek Bridge, meanwhile, could receive funding via Washington's \$605 million allocation for critical bridge repairs.

Island County and Deception Pass Bridge

The two bridges that span Canoe Pass and Deception Pass serve as a vital economic link between Whidbey Island and the mainland. The project, completed in 1935 as part of President Franklin D. Roosevelt's Public Works Administration, are examples of the New Deal-era infrastructure investments that Americans still enjoy today.

Crews recently completed a preservation project on Deception Pass Bridge by repairing corroded areas of the structure to preserve its integrity. The project repaired or replaced 80 structural steel members and required roughly 4,000 gallons of paint. In addition, WSDOT is currently working on a soil abatement project to clean up lead from old paint on the bridge that flaked off and leached into nearby soil.



Rep. Larsen speaks with WSDOT officials at Deception Pass Bridge on December 20, 2021

Transit

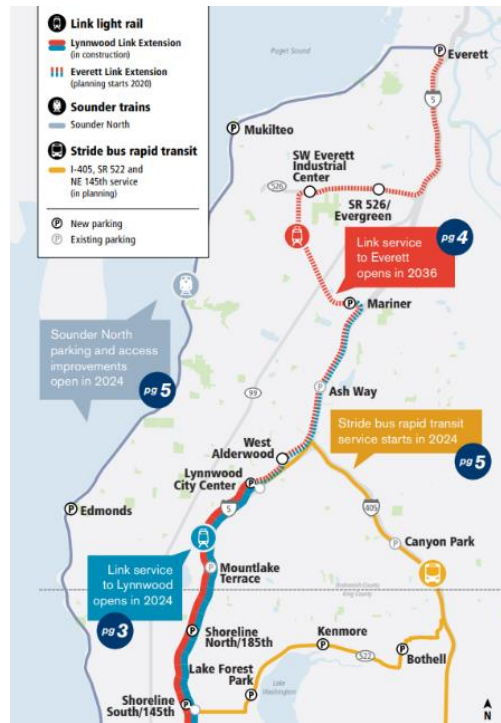
For public transportation, Washington will receive approximately \$1.9 billion in formula funding. The IIJA also authorizes an additional \$2.2 billion nationwide to improve transit accessibility for seniors and persons with disabilities. More broadly, the law will help fund cleaner and greener public buses, school buses and ferries.

See the appendix for additional transit funding opportunities.

District Background: Transit

Sound Transit

Voters approved Sound Transit 3 (ST3), a ballot measure to expand the regional Sound Transit system, in November 2016. This expansion will bring light rail to Snohomish County through the Lynnwood and Everett Link extensions. Construction on Lynnwood Link began in 2019 and is expected to be completed in 2024. Lynnwood Link will be partially funded up to \$1.17 billion from the Capital Investment Grant (CIG) program and a \$658 million low-interest loan under the Transportation Infrastructure Finance and Innovation Act (TIFIA). In November 2021, Lynnwood Link reached the 50% completion point for civil construction.



Map Source: Sound Transit 2020 Progress Report: Snohomish

The Everett Link Extension will bring light rail further north into Snohomish County, providing fast and reliable transit to one of the region's most congested freeway corridors. The link from Lynnwood to Southwest Everett is expected to be completed by 2037. The next segment, from Southwest Everett to downtown Everett is also targeted for completion in 2037

but may be delayed until 2041 unless project leaders can find an additional \$600 million in funding, either through the CIG program or TIFIA loans, or possibly additional state funding.

Community Transit

Community Transit (CT) is the public transportation authority for Snohomish County, excluding the City of Everett. It operates local and commuter buses, paratransit and vanpool services within Snohomish County and as far south as Seattle. CT is also exploring options to add low- and no-emission buses to its fleet.

CT currently has two Swift Bus Rapid Transit (BRT) routes and is in the process of adding more (see graphic below). The agency is expanding its Blue Line and adding Orange and Gold lines. CT expects completion of the Blue Line expansion in 2024; the new Orange Line has a 2024 projected completion. The new Gold Line has a 2027 projected completion.



Left: Map Source: Community Transit 2021-2026 Transit Development Plan

Bus service will connect riders between the expanded Orange and Blue lines and the Lynnwood Link light rail station. Construction for the Orange Line is expected to begin in early 2022. The total project budget is \$81 million, including \$37.1 million in CIG funding for construction. The Blue Line expansion is partially funded through a \$3.2 million Congestion Mitigation and Air Quality Improvement (CMAQ) grant through the Federal Highway Administration (FHA).

The future Gold Line will begin at Smokey Point Transit Center in Arlington and end at Everett Station. It will provide service for the Cascade Industrial Center, which is expected to generate thousands of jobs in the coming years. CT plans to apply for federal grants like CIG to help build the Gold Line.

Everett Transit

The City of Everett owns and operates Everett Transit (ET) and offers local fixed-route and paratransit services within the city.



Proterra Electric Bus; Image Source: Everett Transit website

ET is a leader for low- and no-emission bus service in the region. It received its first four electric buses in 2018, and now has seven electric buses. Its fleet also includes 10 diesel-electric hybrid buses. Everett Transit received electric bus grants of \$3.3 million in 2016 and \$1.3 million in 2021 to replace diesel buses under the Federal Transit Administration's (FTA) Low and No Emission (Low-No) Vehicle Grant Program.

ET recently applied for a grant of \$8.9 million from the FTA's Buses and Bus Facilities Grant Program to swap out 10 diesel buses already beyond their service life with new, fully electric buses. With these new buses, ET's fleet would be 71% electric and 24% hybrid electric, with only two diesel buses remaining.

The IIJA expanded both the Low-No program and the Buses and Bus Facilities grant program, providing future opportunities for ET and other transit authorities to electrify their fleets and build accompanying infrastructure.

Skagit Transit

Skagit Transit (ST) operates 17 fixed routes (including 3 commuter routes), paratransit services and vanpool groups in Skagit County. ST is securing funding to complete its new maintenance, operations and administration base, which will enable it to operate at the same facility and expand capacity to handle future growth. To complete the third and final phase of the base, ST seeks \$16 million, including \$10 million through the FTA's Buses and Bus Facilities grant program. Once the new base is completed, Skagit Transit will explore installment of electric bus charging stations.



The facility acquired for Skagit Transit's Maintenance, Operations and Administration Base; Image Source: Skagit Transit Maintenance, Operations and Administration Facility Project Description

Whatcom Transit

Whatcom Transportation Authority (WTA) provides public transportation services throughout Whatcom County. Its services include fixed routes, paratransit, zone service and a vanpool program. WTA was awarded a \$2.29 million Low-No grant in 2019 to cover the purchase of two buses and accompanying chargers. It recently requested \$7.9 million in funding through the FTA's Buses and Bus Facilities grant program, which would go toward replacing diesel buses at the end of their service life with six new electric buses and associated charging infrastructure. Other needs include development of WTA's electric bus facility.



WTA's Lynden Hop on-demand ride-share van, electric bus and charging station.

Island Transit

Island Transit is a zero-fare transit system that serves Whidbey and Camano islands. The system consists of fixed-route bus service, paratransit and vanpools. Before the pandemic, total ridership in 2019 was 761,383. Since then, annual ridership dropped considerably, with 335,875 total riders in 2021. In Island County, a 0.9 percent sales tax funds Island Transit, along with state and federal grants. Island Transit signed onto FTA's "*Sustainable Transit for a Healthy Planet*" challenge, which will guide the agency's conversion to zero-emission vehicles. Via WSDOT, Island Transit is requesting \$987,412 for five new zero-emission battery electric vehicles to be used in an on-demand pilot project. Currently Island Transit does not operate on Sundays or holidays, but the agency is considering service expansion to include adding

Sunday service and trips later in the evening to serve essential workers. Also, seasonal service on routes that connect the state parks on central Whidbey Island would reduce single-occupant vehicle traffic around those popular areas.



Rep. Larsen rides with the Island Transit Director on December 20, 2021

Washington State Ferries

Washington has the largest ferry system in the United States, which provides a vital service for residents, particularly those who live or work on islands in Puget Sound. Throughout the pandemic, Washington State Ferries (WSF) continually faced significant crewing shortages, which compounded existing worker shortages and led to canceled routes and unreliable service.



Mukilteo Ferry Terminal, opened in December 2020; Image Source: WSDOT website

WSF plans to expand and electrify its aging fleet, which is the largest consumer of diesel fuel in Washington state government. More than half of the vessels in the current fleet are over 30 years old, and three are over 50. WSF already retired three other ferries and currently does not have a relief ferry to maintain service during unplanned repairs. In 2018, WSF announced plans to electrify its fleet under its 2040 Long-Range Plan. WSF is building its first hybrid-electric ferry, which is scheduled to begin service in 2025, as well as planning to convert three of its current vessels. By 2040, WSF plans to have a fleet with 22 of its 26 vessels being plug-in, hybrid-electric vessels.

The IJA established a new \$250 million program to support the transition of passenger ferries to low- or no-emission technologies and build accompanying infrastructure. In Washington, this funding could be used for shoreside electric infrastructure or propulsion systems; however, it cannot be used to build new electric ferries due to state-mandated provisions to “Build in Washington.”

Guemes Island Ferry, Skagit County

The Guemes Island ferry operates 365 days a year and transports roughly 200,000 vehicles and 400,000 passengers annually between Anacortes and Guemes Island. Studies suggest an all-electric propulsion system is feasible for the Anacortes-Guemes Island route and will reduce operational and maintenance costs, as well as reduce harmful CO₂ air emissions by almost 620,000 kg, the equivalent of 135 passenger vehicles driven for one year. Skagit County plans to replace its Guemes ferry vessel with a fully electric one. The county seeks federal funding to close the current \$10 million gap for new vessel construction.



Image Source: Guemes Island Ferry Replacement Preliminary Design Report

Railroads, Pipelines and Hazardous Materials

The IIJA invests \$66 billion in new spending to modernize, expand and improve the safety of passenger and freight rail. It also invests \$11 billion in funding for pipeline safety and repair.

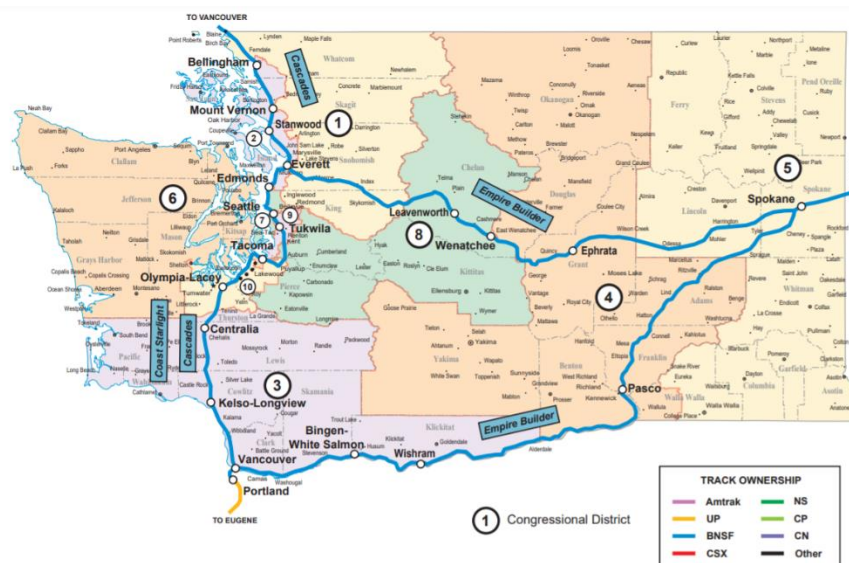
See the appendix for additional rail, pipeline and hazardous materials funding opportunities.

District Background: Rail

Amtrak operates two national routes through Washington: Empire Builder and Coast Starlight. Empire Builder travels daily from Chicago to Seattle, including a stop in Everett. Coast Starlight travels daily from Seattle to Los Angeles and does not include any Second District stops.

Washington also operates a state-supported route called Cascades, which travels from Vancouver, B.C. to Eugene, Oregon, including stops in Everett, Stanwood and Bellingham. Amtrak and Sound Transit also operate Sounder commuter trains, including four round-trip trains every weekday between Everett and Seattle with stops in Mukilteo and Edmonds.

The IIJA includes \$16 billion in grants for Amtrak’s national network and \$12 billion for Federal-State Partnership for Intercity Passenger Rail Grants, which could help Amtrak expand its service and invest in its infrastructure, equipment, stations, facilities and information technology.



Washington Amtrak routes; Image Source: Amtrak Fact Sheet: Fiscal Year 2019: State of Washington

In the Second District, BNSF Railway owns the railroad tracks, which are used for both passenger rail and freight. By statute, BNSF is required to give preference to Amtrak trains over freight railcars. The BNSF network could benefit from the IIJA’s \$14 billion for

Infrastructure for Rebuilding America (INFRA) grants that steer funding to state and local governments for highway and rail infrastructure projects of regional or national significance.

Landslides occasionally disrupt passenger and freight trains in the region. As a safety precaution, anytime a landslide reaches the tracks, it triggers a 48-hour moratorium for passenger rail service. This significantly disrupts train service and forces passengers to find alternate transportation. WSDOT recently applied for \$3.8 million from the Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant program to mitigate landslide risks at sites near Seattle, Mukilteo and Everett. WSDOT previously received CRISI grants of \$3.7 million in FY 2020 and \$2 million in FY 2017 for landslide mitigation at three other locations within the Pacific Northwest Rail Corridor. Likewise, the IIA's \$5 billion investment in CRISI grants could fund future safety and reliability projects for freight and passenger rail service.

District Background: Pipelines

Investing in pipeline safety measures enhances public safety and reduces the risk of environmental catastrophe. The IIA includes \$11 billion for pipeline safety and repair as part of its broader funding for highway and pedestrian safety programs. Washington state has 32 pipeline operators with 41,000 miles of pipeline; 21 pipelines carry various gases and 11 carry hazardous liquids such as gasoline, jet fuel, and crude oil.

In June 1999, the Olympic Pipeline exploded at Whatcom Falls Park, killing 3 people. A 16-inch rupture in the pipeline released approximately 237,000 gallons of unleaded gasoline into Whatcom Creek, causing almost two miles of the creek to burst into flames and burning about 25 total acres. Priority pipeline safety measures include requiring enhanced pipeline testing, mandating automatic shut-off valves on new and replacement pipelines and holding pipeline operators more accountable.



Olympic Pipeline Explosion, June 10, 1999; Image Source: City of Bellingham website

Coast Guard and Maritime Transportation

The IJA invests \$17 billion in funding for port infrastructure, waterway and coastal infrastructure, inland waterway improvements and land ports of entry through the Army Corps of Engineers, USDOT, Coast Guard, General Services Administration and Department of Homeland Security.

See the appendix for additional Coast Guard and maritime transportation funding opportunities.

District Background: Ports

Port of Everett

The Port of Everett is the third largest container port in the state of Washington and supports over \$20 billion in U.S. exports annually. As of 2019, the Port of Everett provided a total of 39,225 direct and indirect jobs. In October 2021, the Maritime Administration granted the Port of Everett a Strategic Seaport Designation, making it one of 18 Strategic Seaports nationwide.

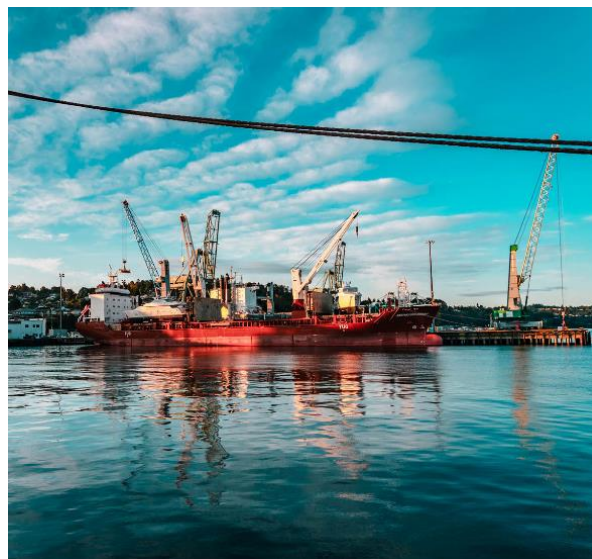


Image Source: Port of Everett website

Federal infrastructure investments helped the Port significantly increase capacity, easing port congestion on the West Coast. The total number of containers that moved through the port increased more than 400% in 2021 compared to 2020, and almost 250% compared to 2019. In early 2021, the Port of Everett completed its South Terminal modernization, strengthening its existing wharf, acquiring two container cranes and upgrading the dock's electrical capacity. These upgrades allow the Port to better support larger ships and heavier cargo. The Port of Everett received a \$10 million TIGER grant (now called RAISE), a \$1.8 million FASTLANE grant (now called INFRA) and a \$5.2 million Rail Rehabilitation Innovation Financing loan to fund its South Terminal modernization.

The Port also received a \$17.75 million BUILD grant (now called RAISE) to transform the former Kimberly-Clark mill site into a new maritime hub called the Norton Terminal. This adds 40 acres of additional upland capacity to enhance cargo movement and improve the environment. The Port broke ground on the Norton Terminal project in July 2021.

The Port of Everett could receive funding from the \$2.25 billion investment in the Port Infrastructure Development Program, which funds infrastructure projects that improve the safety, efficiency or reliability of the movement of goods into and out of ports.

Port of South Whidbey

The Port of South Whidbey encompasses 65 miles of shoreline, six public beaches and six public boat ramps. The Port manages six different facilities on South Whidbey Island: South Whidbey Harbor at Langley, Whidbey Island Fairgrounds and Events Center, the Humphrey Road Ferry parking lot, the Bush Point Boat Ramp, Possession Beach Waterfront Park and Clinton Beach Park, Pier and Dock. The Port is also interested in improving the Clinton-area transportation infrastructure to construct a passenger-only ferry (POF) dock. Also, shoreside electrification at WSF's Clinton Terminal would support the full hybrid-electric propulsion on Hybrid Electric Olympic (HEO) class ferries.



The Port of South Whidbey is also proposing to build affordable workforce housing units on the upper level of renovated concession stands at the Island County Fairgrounds. Townhouse-style housing above fair booth areas could add 10-20 housing units for area workers.

Rep. Larsen reviews drawings for affordable workforce housing with Port of South Whidbey Commissioners during a visit on December 20, 2021.

Port of Anacortes

The Port of Anacortes plans shore-to-ship power systems at its permanent dock facilities so ships can maintain full electrical services without running their shipboard generators. This reduces noise, air pollution and diesel consumption while a ship is in port. The electrical demand on shore-to-ship systems depends greatly on the size and class of ship, as well as the equipment on board. The Port estimates the cost of providing shore-to-ship power at all three piers to be \$3.1 – \$4.7 million. One possible funding pathway is the IJJA's additional \$455 million per year for five years for USDOT's Port Infrastructure Development Program and Marine Highways Program.



Rep. Larsen meeting with the Port of Anacortes Director of Operations to learn about the Port's shore-to-ship charging infrastructure on January 5, 2022.

Water Resources and Environment

Washington can expect to receive approximately \$882 million in formula funding to ensure safe drinking water and improve related water infrastructure. These drinking water provisions fall under the jurisdiction of the House Energy and Commerce Committee. The IIJA also includes significant investments in stormwater and wastewater infrastructure, habitat restoration, coastal protection and salmon recovery.

Washington State will benefit from an additional \$89 million in Environmental Protection Agency (EPA) grants for Puget Sound restoration.

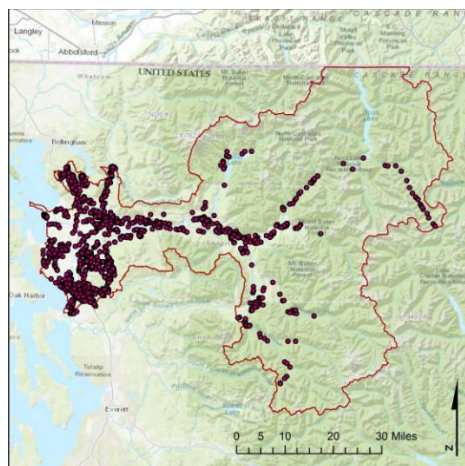
See the appendix for additional water resources and environment funding opportunities.

District Background: Environment

Skagit County Culverts

The IIJA includes a \$1 billion grant program to remove, replace or restore culverts, improving fish passage and fostering salmon recovery in the Skagit Basin and throughout the Second District. The average culvert costs \$1 million to design, permit and replace.

Skagit County intends to direct about \$1.8 million in state and local funding to design and replace its 11 highest-priority culverts sometime in 2022. These projects account for 67% of the culverts that currently block fish passage. Once fully designed, these culverts will be shovel-ready and ideal candidates for the IIJA's new Culvert Grant program.



All known culverts in the Skagit River Basin; Image Source: Skagit Basin Barrier Culvert Analysis: Public and Private Stream Crossings

Lake Ballinger Restoration Project

Mountlake Terrace was awarded \$3.25 million for the Lake Ballinger ecosystem restoration project under the IIJA's Army Civil Works Program. Human-made structures in and around Ballinger Park degraded the environment and encroached on the flood plain. This project will preserve critical habitat for native fish, migratory birds and other wildlife in a

rapidly developing urban area. The estimated cost of the project is \$5 million, and the U.S. Army Corps of Engineers has determined it meets federal interests because it improves the environment and positively impacts ecosystem resources.



Ballinger Park; Image Source: Mountlake Terrace website

District Background: Water Resources

Skagit PUD Judy Reservoir to Mount Vernon Transmission Pipeline

Skagit PUD plans several major capital projects in 2022, including a \$35.6 million transmission pipeline from Judy Reservoir to Mount Vernon. The PUD operates Skagit County’s largest water system, which provides nine million gallons of piped water to approximately 80,000 people every day. It maintains more than 650 miles of pipeline with over 31 million gallons of storage volume. Skagit PUD has received \$5 million in project funding from EPA’s Drinking Water State Revolving Fund. This project may be paid for in part by the IIJA’s \$23.4 billion for Drinking Water and Clean Water State Revolving Funds.

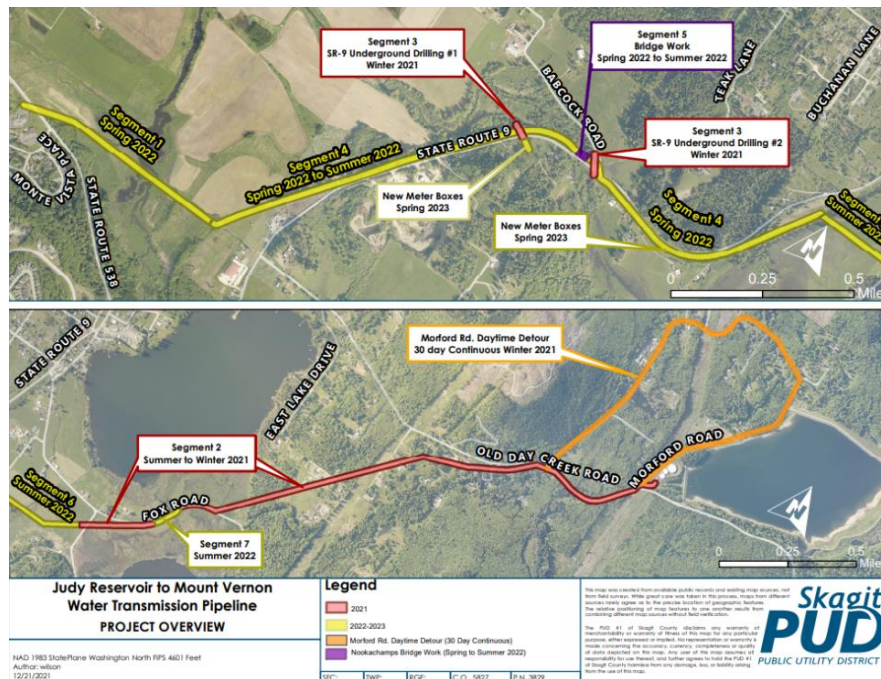
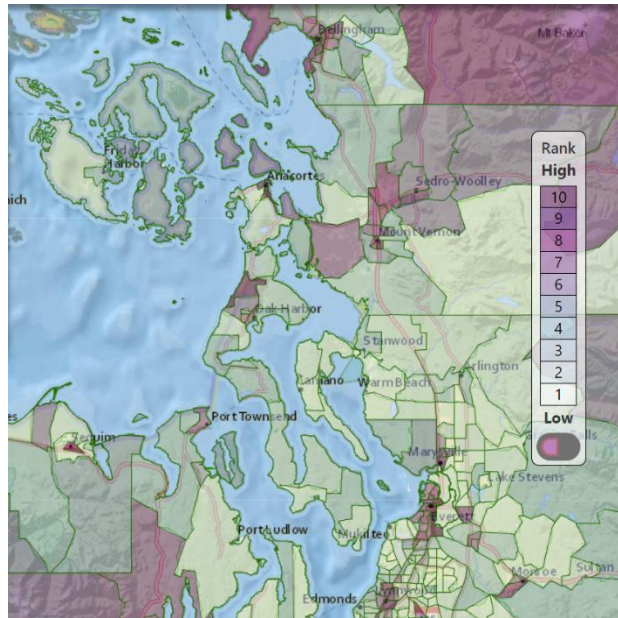


Image Source: Skagit PUD website

Lead-based Service Line Abatement

Lead-based paint and service lines pose serious health risks, particularly for children. A 2016 water utilities survey estimated between 1,000 and 2,000 active lead service lines and 8,000 active lead components in Washington. To protect against contaminated drinking water, the IJIA provides Washington state with more than \$63 million to replace lead service lines. Additionally, the state can replace lead service lines by requesting up to \$63 million in low-interest loans for water utilities.



Lead Exposure Risk; Image Source: Washington Tracking Network via the Washington State Department of Health

Economic Development, Public Buildings and Emergency Management

By investing in critical infrastructure, the IJA will strengthen the foundations on which communities spur economic development and create high-skilled, high-wage jobs. Washington state is projected to receive \$39 million to protect its infrastructure against wildfires and some portion of the IJA's \$3.5 billion is designated to help low-income American families weatherize their homes to reduce energy costs and improve health and safety.

See the appendix for additional funding opportunities for economic development, public buildings and emergency management.

District Background: Economic Development

In addition to broader infrastructure spending throughout the IJA, tribes, counties, cities, ports, universities and workforce development organizations can leverage funding opportunities through the U.S. Economic Development Administration (EDA) to enhance infrastructure that supports economic opportunity and growth. Some examples include:

- **Sedro-Woolley Innovation for Tomorrow (SWIFT) Center:** The Port of Skagit is redeveloping the SWIFT Center, located on the former Northern State Hospital campus in Sedro-Woolley, into a center for innovation and technology to bring new family-wage professional jobs to Skagit County. The Port has applied for EDA funding for constructing site improvements for future manufacturing buildings and business incubator space. The Port was also awarded an EPA Brownfields Assessment Grant of \$195,000 in 2017 to complete Phase I and II environmental assessments at the SWIFT Center. In 2019, the EPA awarded a Brownfields Cleanup Grant of \$395,000 for contaminated soil and ground water.



SWIFT Center in Sedro-Woolley; Image Source: Port of Skagit SWIFT Center Fact Sheet

- **North Stillaguamish Valley Economic Recovery Plan:** EDA awarded a grant to the Economic Alliance of Snohomish County (EASC) for an economic redevelopment plan for the North Stillaguamish River Valley designed to address long-term

socioeconomic challenges and the devastation following the March 2014 landslide near Oso, Washington. EASC partnered with Arlington, Darrington, Snohomish County, Washington State University and Workforce Snohomish, among others. Arlington and Darrington have leveraged this study to pursue additional federal and other grant opportunities.¹

District Background: Emergency Management

Climate change has increased the frequency and severity of flooding, wildfires, landslides, winter storms and extreme heat. Larger storm events can exceed the capacity of local governments' ability to respond. In these cases, coordination with the Federal Emergency Management Agency (FEMA) and the National Guard can be crucial to protecting local communities. For example, Whatcom and Skagit Counties experienced three “atmospheric rivers” in November 2021 that resulted in historic flooding and significant damage to homes, farms and roads. The Biden Administration declared a major disaster for Whatcom and Skagit counties, the Lummi Nation and the Nooksack Tribe that activated FEMA assistance for public entities and individuals. These storms also caused significant damage to roads, drainage areas and culverts in San Juan County.



Right: Rep. Larsen and Skagit County Dike District #12 Operations Manager survey flood damage along the Skagit River, December 4, 2021.

¹ https://s3.wp.wsu.edu/uploads/sites/2158/2016/08/CAI.-N.-Stillaguamish-Valley-Economic-Redevelopment-Plan-2015-1026_Low-R....pdf

Broadband and the Digital Divide

Washington will receive a minimum allocation of \$100 million for broadband coverage across the state. The Affordability Connectivity Benefit will help about 1.4 million low-income Washingtonians, or 19 percent, afford internet access.

See the appendix for additional broadband funding opportunities.

District Background: Broadband

Broadband access is critical to businesses, schools, health care workers and every person trying to stay connected, but a significant number of households in the district have limited or no access to the internet. The pandemic shined a spotlight on this lack of reliable coverage as workers and students were forced to stay home, and many essential services were only provided online. In April 2020, the Washington State Broadband Office initiated a comprehensive survey and mapping project to identify the gaps in broadband access and quality. The table below lists the results of that survey for the five counties in the Second District. The speeds listed in red text indicate either no service or low-speed internet as defined by the FCC.

Download Speeds					
	Island	San Juan	Skagit	Snohomish	Whatcom
No Service	9.6%	4.5%	8.5%	8.2%	15.5%
0-10 Mbps	39.8%	40.1%	36.1%	34.6%	36.4%
10-25 Mbps	15%	32.5%	15%	18.2%	18%
25-150 Mbps	29.7%	20.4%	33.3%	30.2%	26.2%
150+ Mbps	5.9%	2.5%	7.1%	8.8%	3.8%
Upload Speeds					
No Service	9.6%	4.5%	8.5%	8.2%	15.5%
< 3 Mbps	42.5%	53.5%	41.4%	38.2%	36.3%
3-10 Mbps	33.1%	14.6%	31.1%	27.2%	34.3%
10-25 Mbps	11.8%	12.7%	14.7%	17.7%	10.4%
25-100 Mbps	2.4%	14%	3.5%	7.7%	2.8%
> 150 Mbps	0.7%	0.6%	0.9%	1.1%	0.5%

Private broadband providers serve a majority of residents in the Second District. Some of the main providers include Comcast, Zply Fiber and Wave. Several smaller providers also serve the area, including Whidbey Telecom in Island County and Rock Island Communications in San Juan County.

Some public ports have also undertaken broadband projects to expand coverage in rural communities. The Ports of Skagit and Bellingham, for instance, are installing fiber-optic broadband across Skagit County and Whatcom County, respectively. The ports themselves are not retail service providers, and currently six internet service providers rely on the Port of Skagit's infrastructure. The City of Anacortes established its own municipal

fiber network, Anacortes Access Fiber, and continues to expand this service to residents and businesses. Anacortes recently received a \$2.3 million grant from the EDA to support additional broadband infrastructure construction.

IIJA Challenges

A major concern from broadband stakeholders throughout the Second District is the lack of accurate FCC maps and the corresponding concern that this may negatively impact the region's ability to access federal funding for broadband infrastructure. The IIJA allocates \$65 billion to improve broadband, but the FCC's inaccurate map data stands as a critical obstacle to these investments. The maps consistently overestimate the number of Americans with reliable internet connections because they are based on census data that lumps together households in a statistical area that, for a rural area, could treat dozens of square miles as one single block. Broadband leaders in the Second District propose substituting more reliable map data, as are available in Washington state, in place of the FCC data.

In 2020, the Broadband DATA Act was signed into law, requiring broadband providers to collect more granular service availability data and instructing the FCC to develop a system for state and local governments to report verified coverage data. It also required the FCC to conduct regular audits on information submitted by providers and develop a process by which individuals may submit information to verify and supplement the providers' data. The FCC is expected to release updated maps in Spring 2022 that will determine broadband funding levels for each state.

Power Infrastructure and Clean Energy

The IIJA includes roughly \$65 billion nationwide for clean energy transmission, including upgrades to power infrastructure and research in new clean energy technologies.

See the appendix for additional funding opportunities for power infrastructure and clean energy.

District Background: Power Infrastructure

Bonneville Power Administration

Bonneville Power Administration (BPA) is a federal power marketing administration within the U.S. Department of Energy. BPA markets wholesale electrical power sourced from 31 federal dams, one non-federal nuclear plant and several small non-federal power plants at cost to power utilities across the Pacific Northwest. BPA supplies almost 30% of the electric power generated in the Pacific Northwest, and nearly 80% of the power in Snohomish County. In addition, BPA operates and maintains over 15,000 circuit miles of high-voltage transmission lines in its service area, as seen below. Because hydroelectric dams are the primary source of power, BPA power is nearly carbon-free.



Image Source: Bonneville Power Administration Fiscal Year 2020 fact sheet

Research Opportunities

The Second District is home to multiple businesses and research institutions with capacity to leverage IIJA funding for clean energy deployment and research. For example, the Joint Center for Deployment of Earth-Abundant Materials in Everett is focused on stimulating innovation in the use of earth-abundant materials to accelerate the development of next generation clean energy and transportation technologies. The IIJA establishes new grant programs for critical mineral mining, recycling, and reclamation research and development.

Tribal Investments

American Indian tribes are recognized under treaties and federal law as sovereign governments with powers of self-rule similar to those of the federal government and the states. The U.S. Government articulates the sovereign status of tribes through treaties, federal statutes, and federal case law. The IJA recognizes this relationship and, in certain provisions, makes infrastructure funding available exclusively for tribal governments.

The Second District includes tribal reservations and communities of five main tribes: Tulalip, Stillaguamish, Swinomish, Samish and Upper Skagit. Nearby in the region are the Lummi, Nooksack and Sauk-Suiattle tribes as well. These tribal nations are the descendants of the Coast Salish people, who are the original occupants of these lands.

The IJA designates specific investments for tribal communities in areas like transportation, broadband internet, drinking water, wastewater and sewer, climate resilience and environmental cleanup from hazardous materials. Along with the tribal-specific programs, Native American communities are also eligible for the same IJA grants and funds available to other entities for projects like road and bridge maintenance, culvert repair, zero-emission school buses and expedited environmental repair.

On transportation and culverts, the IJA adds \$3 billion for the Tribal Transportation Program, which provides safe and adequate public road access to Indian reservations and Indian lands. The Bridge Formula Program provides \$26.675 billion in new spending, of which \$80 million is set aside for tribes. The National Culvert Removal, Replacement, & Restoration Grant provides \$1 billion, and the popular RAISE grant program, which allows USDOT to invest in road, rail, transit and port projects that promise to achieve national objectives, is funded for \$7.5 billion.

For broadband, the IJA funds expanded access and helps build out critical broadband infrastructure in Indian Country. The IJA establishes several new broadband programs to be administered under the National Telecommunications and Information Administration (NTIA). These include the Tribal Broadband Connectivity Program at \$2 billion, the Broadband Equity, Access, and Development (BEAD) Program at \$42.5 billion, the ReConnect Program at \$2 billion, the Enabling Middle Mile Broadband Infrastructure program at \$1 billion, and the Digital Equity Act at \$2.75 billion.

Additionally, the USDA, FCC and FEMA have each boosted funding through the IJA for their broadband programs. The USDA's Distance Learning, Telemedicine and Broadband Program is funded for \$2 billion, and the FCC's Affordable Connectivity Fund at \$14.2 billion helps ensure that households can afford the broadband they need for work, school, and other activities. The State, Local, Tribal, and Territorial (SLTT) Grant Program provides \$1 billion to enhance energy security, cybersecurity and emergency preparedness.

The IJA funds several drinking water programs, including the Indian Health Service (IHS) Sanitation Facilities Construction program at \$3.5 billion for water infrastructure in tribal communities. The Indian Reservation Drinking Water Program receives \$50 million each year through 2026 under the IJA and directs the EPA

Administrator to prioritize projects that respond to emergency situations involving clean drinking water for tribal populations.

Two IJA programs specifically address wastewater and sewer infrastructure. The IHS Water and Sewer program provides \$3.5 billion for sanitation facilities for tribal communities. The IHS Sanitation Facilities Construction Enhancement program provides \$1.7 billion for planning, design, construction, modernization, improvement, and renovation of water, sewer, and solid waste sanitation facilities funded by IHS.

Finally, the IJA recognizes the grave threat of climate change and the damage it is causing to coastal areas, shorelines and rivers. Tribes in the Second District are particularly vulnerable to the adverse impacts of climate change, given the geography of the region and the tribes' locations near rivers and low-lying coastal areas. IJA programs to address this threat include \$618 million for Watershed Flood Prevention Operations and the Watershed Rehabilitation Program, both of which help federal, state, local and tribal governments protect and restore watersheds up to 250,000 acres. The IJA also provides \$216 million for tribal climate resilience, adaptation, and community relocation projects that address the challenges tribal communities face.

See the appendix for additional tribal funding opportunities.

District Background: Tribal Investments

The Tulalip Tribes have two transportation proposals for road improvements on major highways to improve public safety, control traffic and reduce congestion. A top priority project for the Samish Tribe is the construction of a roundabout at the intersection of State Route 20 and Lake Campbell Road. Reconstruction of the Tommy Thompson trail to replace the trestle and remove the current causeway at Fidalgo Bay is another project of interest for the Samish.



The Tommy Thompson Trail over Fidalgo Bay near Anacortes

The Lummi Nation, meanwhile, faces constant threat of flooding due to the low-lying nature of its reservation land on the Nooksack River floodplain. During recent flooding in

November 2021—the rainiest five day stretch on record, according to the National Weather Service—flows in the Nooksack River reached record levels, forced dozens of families to evacuate their homes, and caused extensive damage. Moreover, the extreme flood event likely destroyed countless vulnerable salmon eggs in the Nooksack basin as floodwaters eroded the riverbed and damaged the nests where female salmon lay their eggs.

Equity

The IIJA includes certain measures designed to achieve a more equitable distribution of infrastructure spending when it comes to disinvested communities, particularly communities of color. But where the IIJA does not specifically target funding for these communities, states and local policymakers must work to ensure that equity is infused into the projects and processes during implementation. Equity requires deliberate and constant focus.

Historically, transportation projects like Interstate highways in urban areas were often built through predominantly Black neighborhoods. For this reason, the IIJA establishes a \$1 billion program to reconnect communities separated by these thoroughfares. It also includes \$21 billion nationwide in environmental remediation and funding to clean up Superfund and brownfield sites, reclaim abandoned mine land and cap orphaned gas wells. These investments will address pollution and environmental concerns that disproportionately harm communities of color.

Under the IIJA, formula funding dwarfs competitive grant dollars by a factor of about three to one. It is imperative, therefore, that states and local policymakers commit to prioritizing investments equitably for communities most in need. Officials can focus competitive grants on historically disinvested communities in the way they review and score proposals. They can require genuine community engagement in proposal narratives and ask grant applicants to demonstrate how disinvested communities will benefit. Where the IIJA lacks specificity in equity-promoting programs, local leaders can still make progress in the way they award competitive grant funds.

See the appendix for additional equity funding opportunities.

Transportation and Infrastructure Workforce

The IJA helps support well-paying union jobs in clean energy, construction, environmental remediation, domestic manufacturing and other related sectors. It also invests in apprenticeship and pre-apprenticeship programs to build up the transportation and infrastructure workforce.

See the appendix for additional funding opportunities for transportation and infrastructure workforce.

District Background: Labor

The Washington and North Idaho District Council of Laborers has more than 10,000 active and retired members and represents seven unions across the region. The Council is a member of the Laborers' International Union of North America (LIUNA) and represents a wide variety of sectors: construction, healthcare, public employees and public schools. Laborers Local 292 represents workers in building, heavy civil and highway construction in Snohomish, Skagit, Whatcom, and San Juan Island counties. In a meeting with Rep. Larsen, representatives from Laborers Local 292, Washington and North Idaho District Council of Laborers and LIUNA stressed the need for Washington Governor Jay Inslee to outline a specific plan to fully capitalize on this historic infrastructure investment. Offering the public specific information as to how the state will prioritize distribution of IJA funds will help ensure Washington spends this money in the most effective and efficient manner.



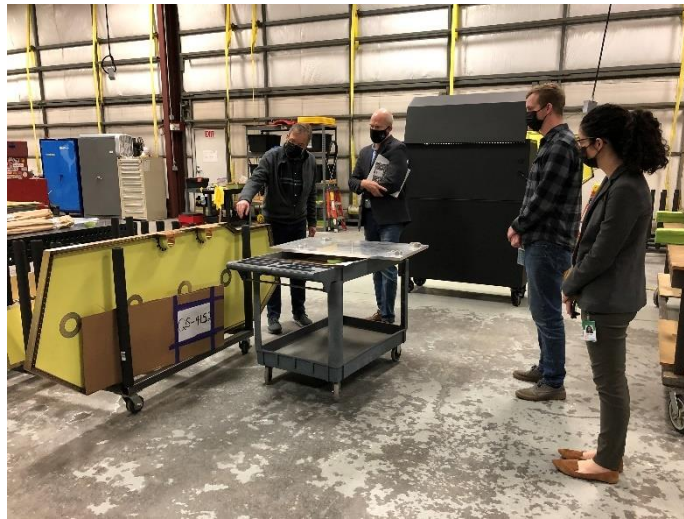
Image Source: Laborers' International Union of North America website

The IJA makes important investments in the aerospace workforce, too. Market analysis from the Teal Group in 2018 and 2019 ranked Washington state as the most competitive state for aerospace manufacturing. Incidentally, infrastructure was the one category in which Washington was not ranked in the top 10. In a meeting with representatives from the Society of Professional Engineering Employees in Aerospace (SPEEA) and its parent union, the International Federation of Professional and Technical Engineers (IFPTE), Rep. Larsen heard examples of why updating Washington's infrastructure will be critical to retaining and attracting new aerospace jobs. From roads, bridges and transit to get employees to and from work, to airports, rail and waterways to move products to market, and broadband and workforce development that invests in human capital, the Puget Sound Region's top-flight aerospace industry is poised for even more growth.

IIJA includes several provisions that will help workforce development and support high-wage union backed jobs. The overwhelming majority of IIJA spending will require that workers on federally-funded projects receive a prevailing wage. In addition, the law includes major investments in registered apprenticeship and pre-apprenticeship programs in fields including energy efficiency, trucking, green manufacturing and the transportation industry.

District Background: Aerospace Companies

The aerospace industry accounts for 1,300 Washington businesses, many of which reside in the Second District. Rep. Larsen recently visited some of these companies to discuss how the IIJA's investments will help create more jobs and support the region's robust aerospace industry.



Rep. Larsen meeting with employees at the AeroTEC Manufacturing Center on December 21, 2021. The Manufacturing Center is based at Arlington Municipal Airport and offers capabilities in precision machining, parts assembly and aerospace coatings.

In the wake of the pandemic, aerospace companies currently struggle with a lack of available and qualified employees. Many companies were forced to shutter, and even as demand begins to rise again, the aerospace workforce is severely diminished due to layoffs, furloughs, retirement or employees moving to other industries. Companies now compete for labor in a much-diminished pool of qualified applicants.

Aviation Manufacturing Jobs Protection Program

Although not included in IIJA, the Aviation Manufacturing Jobs Protection Program (AMJP) is a new program established under the American Rescue Plan that guards against layoffs in the aerospace supply chain. The provision helps these aerospace companies pay salary and benefits for employees who were furloughed or at risk of being furloughed due to the COVID-19 pandemic. During the first two rounds of AMJP applications, 17 companies in the Second District received a total of \$23.4 million, which saved at least 1,255 jobs. The AMJP will offer one final round for applicants, but the application deadline has not yet been announced.

Conclusion

The *Infrastructure Investment and Jobs Act* reminds us that America's ability to grow and prosper depends on public spending oriented toward the future. From the Erie Canal to the Transcontinental Railroad to the New Deal and the Interstate Highway System, physical infrastructure investments like highways, bridges, ferries, airports and waterways are hugely important to get people and goods where they need to go. Meanwhile, modern investments in broadband, workforce development and climate resiliency are critical in moving the country forward and maintaining competitiveness on a global scale.

The IJA is historic not only for the magnitude of the investment but also for the breadth of infrastructure it targets. The unprecedented nature of this level of infrastructure investment makes it vital for Members of Congress to maintain oversight during implementation. Congress must ensure state and local governments spend public funds effectively and efficiently. To achieve this, Members should communicate early and often with local leaders and stakeholders to ensure that worthy projects get the investment they need.

Appendix

New Programs

Department of Commerce

Broadband Equity, Access & Deployment Program (BEAD)

Appropriates \$42.45 billion for states, territories, the District of Columbia (D.C.), and Puerto Rico (P.R.) to utilize for broadband deployment, mapping, and adoption projects. Each state, D.C., and P.R. will receive an initial allocation of \$100 million -- and \$100 million will be divided equally among the United States Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands -- to support planning efforts including building capacity in state broadband offices and outreach and coordination with local communities. States, territories, D.C., and P.R., leveraging initial planning funds that will be made available through the program, will submit a 5-year action plan in collaboration with local and regional entities. The remaining funding will be distributed based on a formula that considers the number of unserved and high-cost locations in the state, based on new FCC maps. In order of priority, funding is for: (1) providing broadband to unserved areas (those below 25/3 Mbps) (2) underserved areas (those below 100/20 Mbps) (3) serving community anchor institutions (1/1 Gbps).

State Digital Equity Capacity Grant Program

Will allocate \$2.75 billion in federal grant funding for digital equity over a five-year period. Consists of measuring broadband availability and cost, and then expanding access to digital devices and digital training to underserved communities.

- \$60 million for state planning grants
- \$1.44 billion for state implementation grants
- \$1.25 billion (\$250 million a year for 5 years) for competitive grant program

Digital Equity Competitive Grant Program

\$1.25 billion discretionary grant program distributed via annual grant programs over 5 years. Awards grants to support efforts to achieve digital equity, promote digital inclusion activities, and spur greater adoption of broadband among underserved populations. Examples of initiative implementing training programs for underserved populations that cover basic, advanced, and applied skills; or other workforce development programs or providing equipment, instrumentation, networking capability, hardware and software, or digital network technology for broadband services to underserved populations at low or no cost. Eligible applicants include specific types of political subdivision, agency, or instrumentality of a state; tribal governments; nonprofit entities; community anchor institutions; local educational agencies; and entities that carry out workforce development programs.

Middle Mile Broadband Infrastructure (Grant) Program

\$1 billion program to improve and build middle mile (any broadband infrastructure that does not directly connect to an end-user location) fiber. Aim is to reduce the cost of connecting unserved and underserved areas. Eligible applicants include States, political subdivisions of a State, tribal governments, technology companies, electric utilities, utility cooperatives, public utility districts, telecommunications companies, telecommunications cooperatives, nonprofit foundations, nonprofit corporations, nonprofit institutions, nonprofit associations, regional planning councils, Native entities, or economic development authorities.

Department of Energy

Preventing Outages and Enhancing the Resilience of the Electric Grid Program

Part of DoE's new "Building a Better Grid" Initiative. Allocates \$5 billion in grants to eligible entities, States, and Indian Tribes to carry out activities to strengthen the electric grid, reduce the risk of power lines causing wildfires, and increasing the ability of utilities to reduce the likelihood and consequences of disruptive events. The grants may be used for activities, technologies, equipment, or hardening measures that reduce the likelihood and consequences of disruptive events. That includes more innovative practices and technologies like weatherization, use of fire-resistant technologies and construction of microgrids. But also has traditional and existing activities in scope like vegetation management, pole management, and even replacement of old overhead conductors and overhead cables.

Energy Efficiency Revolving Loan Fund Capitalization Grant Program

Appropriates \$250 million over five years for the establishment of this grant under the State Energy Program for states to conduct commercial or residential energy audits or upgrades and retrofits. Funding will go through the state energy offices with priority given to achieving energy efficiency improvements in states with the poorest building efficiency. 60% is allocated to the highest per-capita energy-using states with the remaining 40% distributed to all states. Midwestern states ranking as the country's top energy users per capita include North Dakota, Iowa and South Dakota. Further, there is an additional \$250 million per year through FY2026 that DOE can allocate on a competitive basis to distribute loans to eligible business- and homeowners. 25% of this additional funding can be used for direct grants to small businesses and low-income homeowners.

Energy Infrastructure Federal Financial Assistance Program

Allocates \$5 billion in grants for innovative approaches to the development of electric transmission, storage and distribution infrastructure.

Transmission Facilitation Program

DOE can enter capacity contracts with and offer loans from a \$2.5 billion revolving loan fund to transmission developers to provide financial stability to proposed transmission projects.

Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program

Allocates \$250 million to provide grants and technical assistance for utilities to protect against, detect, respond to, and recover from cybersecurity threats.

Carbon Dioxide Transportation Infrastructure Finance and Innovation (CIFIA) program

Provides flexible, low-interest loans for CO₂ transport infrastructure projects. Funding for the CIFIA program is \$2.1 billion total, \$600 million per year for FY 2022 and FY 2023 and \$300 million per year for FY 2024 through FY 2026.

Eligible CIFIA projects must have project costs more than \$100 million. While public entities submit program application, the ultimate obligor must be a private entity through a P3.

Carbon storage validation and testing program

Includes commercial large-scale carbon sequestration projects focused on feasibility, site characterization, permitting and construction. Congress appropriated \$2.5 billion for the program over FY22-FY26. The Department of Energy will manage the program funding, establish an application process, and select the projects for funding.

Clean Hydrogen Manufacturing and Recycling Program

Provides \$500 million in grants between 2022-2026 at \$100 million each fiscal year to the Office of Energy Efficiency and Renewable Energy for governments to award multiyear grants for research, development, and demonstration projects which:

- advance new clean hydrogen production, processing, delivery, storage, and use equipment manufacturing technologies and techniques
- create innovative and practical approaches to increase the reuse and recycling of clean hydrogen technologies.

Clean Hydrogen Electrolysis Program

Requires the Department of Energy, within 90 days after IJA passage, to establish a program to reduce the cost of producing hydrogen through electrolyzers. The goal of the program is to reduce the cost of producing hydrogen through electrolyzers (clean hydrogen) to less than \$2 per kilogram by 2026, and \$1. Grants will be awarded through the Department of Energy's Office of Energy Efficiency and Renewable Energy on a competitive basis.

Clean Energy Demonstration Program on Current and Former Mine Lands

Managed under DOE's new Office of Clean Energy Demonstrations. Authorizes \$500 million for demonstration projects on the economic and technical viability of clean energy to ensure it is compatible with existing operations on current and former mine land.

Battery Material Processing Grant Program

The Program will fund research, development, and demonstration to create innovative and practical approaches to increase the reuse and recycling of batteries. Funding is available for 50% of project costs, and eligible activities are addressed in link of program above.

Eligible battery materials processing projects will include one or more demonstration projects, creation of a new commercial-scale facility, and retrofit or expansion of an existing facility.

DOE will establish the program by May 14, 2022. Funding will be available through fiscal year 2026.

Battery Collection Recycling Grant Program

Competitive grant program for retailers that sell eligible batteries or battery-containing products to establish and implement a system for the acceptance and collection of batteries and battery-containing products, as applicable, for reuse, recycling, or proper disposal. The recycling system must be available as no cost to the consumer and on a regular, convenient, and accessible basis.

State and Local Battery Collection, Recycling, and Reprocessing Grant Program

Competitive grant program for states and local governments to assist in the establishment or enhancement of state battery collection, recycling, and reprocessing programs.

Battery Recycling Research, Development and Demonstration Grants Program

Competitive grant program will fund research, development, and demonstration to create innovative and practical approaches to increase the reuse and recycling of batteries. Funding is available for 50% of project costs, project idea criteria listed in link.

Electric Drive Vehicle Battery Recycling and Second-Life Applications Program

U.S. Department of Energy must carry out a research, development, and demonstration program of second-life applications for used electric drive vehicle batteries and technologies and processes for final recycling and disposal. The purposes of the battery recycling and second-life applications program are to improve the recycling rates and second-use adoption rates of electric drive vehicle batteries, establish alternative supply chains for critical materials, and improve the environmental impact of recycling processes. DOE must establish an electric drive vehicle battery recycling and second-life applications grant program to award multi-year grants on a competitive, merit-reviewed basis to eligible entities.

DOE must also address near-, mid-, and long-term challenges to the recycling of electric drive vehicle batteries. DOE must submit in November 2022 to Congress a report on the market opportunities available for the recycling, second use, and manufacturing of electric drive vehicle batteries in the United States.

Advanced Energy Manufacturing and Recycling Grant Program

Allocate \$750 million over five years on a competitive basis to small businesses that undertake eligible projects in communities suffering from closures of coal mines or coal-

fired power plants. Qualifying Advanced Energy Projects are defined as projects that: (1) re-equip, expand or establish a manufacturing or recycling facility to produce certain types of advanced energy property; or (2) re-equip a facility with equipment designed to substantially reduce greenhouse gas emissions. The manufacturer must produce "advanced energy property".

Critical Minerals and Metals Processing Grant Program

Grant program to finance pilot projects for the processing, recycling, or the development of critical minerals and metals in the United States. DOE must prioritize projects that process the critical minerals and metals domestically and are most economically viable long-term. Additionally, DOE must seek to award not less than 30% of total funding for projects related to secondary recovery of critical minerals and metals. A grant award may not exceed \$10 million.

Energy Auditor Training Grant Program

Establishes a competitive grant program under the State Energy Program for States to train individuals to conduct energy audits or surveys of commercial and residential buildings.

Cost-Effective Codes Implementation for Efficiency and Resilience

Provides \$225 million toward a competitive grants program through DOE's Building Technologies Office for states or regional partnerships to implement updated building energy codes, including through training and data collection.

Future of Industry Program and Industrial Research and Assessment Centers

Provides \$150 million over five years to establish a "Future of Industry" program that, among other activities, will set up academic centers to help manufacturers implement technologies for applications such as energy management, "smart" manufacturing, and cybersecurity.

Energy Efficiency Materials Pilot Program

Directs the Secretary of Energy to create a pilot program to help tax-exempt organizations increase the energy efficiency of buildings they own (specifically, targeting roofs, lighting, windows, doors, and HVAC systems).

Department of the Interior

Orphaned Well Site Plugging, Remediation, and Restoration Program

Grant program to establish programs to fund the proper closure and cleanup of orphaned wells and well sites on Federal, State, and Tribal lands. Three types of grants offered:

- State Regulatory Improvement Grants - States that improve plugging standards and procedures or increase bonding requirements or set up alternative orphaned well financing methods, can claim up to \$40 million
- State Matching Grants - Matches amount states spend on plugging orphaned wells above their 2010-2019 annual average (not to exceed \$30 million over life of program)

- Tribal Grants – Tribes can apply to receive grant to fund their own program or request DOI to administer a plugging program on Tribal lands.

Western Water Infrastructure Projects

Provides more than \$8 billion for projects that will enhance water supply reliability across the West, including repairing aging dams and canals, building new surface and groundwater storage and conveyance facilities, funding water conservation and recycling projects, and improving watershed and ecosystem management.

\$1 billion over five years go to water reclamation and reuse projects, including \$550 million for the [Title XVI Water Reclamation and Reuse Program](#) and \$250 million for [water desalination projects](#).

Department of Transportation

Carbon Reduction Program

allocates \$6.4 billion for states to use towards projects ranging from transit facilities to energy-efficient streetlights, greener highways

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

Would provide \$7.3 billion in formula funding and \$1.4 billion in competitive set-aside grants (over five years) for resilience improvements at the state and municipal levels. PROTECT grants are intended to incentivize state and local communities as they seek to improve the resiliency of natural infrastructure such as wetlands, floodplains and aquatic ecosystems.

Bridge Formula Program

Provides \$26.5 billion to states, the District of Columbia, tribes and Puerto Rico over five years and \$825 million to repair and rebuild bridges.

Electric Vehicle Formula Program

Allocate funds to states using certain pre-determined formulas based on state plans for building out EV charging infrastructure in designated “alternative fuel corridors.”

Airport Infrastructure Grants

\$15 Billion grants for projects such as runways and broader needs like terminal and gate construction, multi-modal projects, and low emission ground service vehicles. \$100M specifically for competitive grants for airport sponsors that participate in the contract tower program and contract tower cost share program to make improvements to contract towers.

Federal Aviation Administration (FAA) Terminal Program

Authorizes \$5B over five years for the Airport Terminal Program, a discretionary grant program for terminal development and other landside projects. Airports will be able to use this funding to increase passenger access, replace aging infrastructure, improve facilities to achieve ADA compliance, and allow for increased energy efficiency and upgrades that promote airports for LEED certification.

Air Traffic Facilities and Equipment

\$5 Billion to replace and improve air traffic control facilities and equipment, including landing and navigational aids. \$200M of this funding must be allocated to contract tower facilities.

Bridge Investment Program

The program represents the single largest dedicated bridge investment since the construction of the interstate highway system – providing \$26.5 billion to states, the District of Columbia and Puerto Rico over five years and \$825 million for Tribal transportation facilities. The total amount that will be available to states, D.C. and Puerto Rico in Fiscal Year 2022 is \$5.3 billion along with \$165 million for tribes.

Wildlife Crossings Pilot Program

350 million (over 5 years) in grants for projects that seek to reduce the number of wildlife-vehicle collisions while improving habitat connectivity for terrestrial and aquatic species.

Charging and Fueling Infrastructure Grants

\$2.5 billion discretionary grant program for state and local governments to improve public accessibility to electrical vehicle charging and hydrogen, propane and natural gas fueling stations, along designated alternative fuel corridors or other community locations accessible to drivers.

Reconnecting Communities Pilot Program

\$1 billion over five years competitive grant program for planning and projects aimed at either removing, retrofitting or mitigating pieces of highway and similar infrastructure that hampered the connectivity of communities, including affecting their economic development.

Congestion Relief Program

\$250 million over five years to States, local governments, and metropolitan planning organizations, for projects on congestion relief. Priority given to areas with high degree of congestion.

FTA All Station Accessibility Program

\$1.75 billion to reduce the number of legacy rail transit stations that remain inaccessible to individuals with disabilities.

Electric or Low Emitting Ferry Pilot Program

\$250 million to support the transition of passenger ferries to low- or zero-emission technologies.

MEGA Projects

\$5 billion fund to support multi-modal, multi-jurisdictional infrastructure projects of national or regional significance.

Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program

\$500 million in competitive grants to states, local governments, and tribes for technology projects that improve transportation safety and efficiency. The technology could range from transportation to energy efficiency to connectivity and grants would be distributed to a range of partners based on geography, size and effectiveness. The bill prohibits funds to be used on traffic enforcement or license plate readers.

National Culvert Removal, Replacement and Restoration Grant Program

Authorize \$1 billion for a National Culvert Removal, Replacement, and Restoration Program to provide grants to States, local governments, and Tribes to address anadromous fish passage as well as provide funding for certain freshwater impacts to marine fish and shellfish species.

Reduction of Truck Emissions at Port Facilities

\$450 million grant program to reduce truck idling at port facilities, including to study port electrification, study emerging technologies, and fund projects that reduce port-related emissions.

Railroad Crossing Elimination Grant Program

\$3 billion grant program for States, tribes and local governments to fund the planning and construction of highway-rail grade crossing separation projects to improve safety and mobility. Includes a small set-aside to carry out a highway-rail grade crossing safety information and education program.

Safe Streets and Roads for All Grant Program

\$5 billion grant program for Sub-state municipal governments, MPOs, and tribes to develop or implement Vision Zero plans (aim to reduce traffic deaths and life-changing injuries to zero).

There is no maximum or minimum grant size. The only restrictions are that no more than 15 percent of any year's grants can go towards grants in any one state and that the federal cost share of projects shall not exceed 80 percent.

Crash Data Modernization Grants

\$750 million for a new crash data collection system “to include the collection of crash report data elements that distinguish individual personal conveyance vehicles, such as electric scooters and bicycles, from other vehicles involved in a crash.” The new system is also supposed to “include the collection of additional crash report data elements relating to vulnerable

road user safety” and “combine highway crash data and injury health data to produce a national database of pedestrian injuries and fatalities, disaggregated by demographic characteristics.”

Environmental Protection Agency

Clean School Bus Program

EPA will offer a total of \$5 billion between fiscal years 2022 and 2026 to fund the replacement of existing school buses with low- or zero-emission school buses. Each year, \$500 million will be available exclusively for electric school buses and \$500 million will be available for electric buses and multiple types of cleaner alternative fuel school buses.

Post-Consumer Materials Management Infrastructure Grant Program

\$275 million in grants for states to improve local waste management systems, including municipal recycling programs, and to improve post-consumer materials management and infrastructure to reduce plastic waste in waterways and the ocean.

Consumer Recycling Education and Outreach Grant Program

\$75 million in grants for states, local governments, and tribes to improve effectiveness of recycling programs. Can be used for educational and decreasing contamination initiatives.

Federal Communications Commission

Affordable Connectivity Fund

Provides \$14.2 billion to modify and extend the Emergency Broadband Benefit Program to a longer-term broadband affordability program called the Affordable Connectivity Program (ACP). The ACP provides eligible households with a discount on broadband service and connected devices.

Existing Programs

Army Corps of Engineers

Water Infrastructure Finance and Innovation Act (WIFIA)

Department of Agriculture

Rural eConnectivity (ReConnect) Program

Rural Broadband Program

Department of Commerce

Tribal Broadband Connectivity Program

National Coastal Resilience Fund

NOAA Community-based restoration program

· **Fish Passage Barrier Removal Grants**

Pacific Coastal Salmon Recovery Fund

NOAA Marine Debris Program

NOAA National Estuarine Research Reserves Program

NOAA Regional Ocean Partnerships

NOAA Coastal Ocean and Great Lakes Observing Systems

Coastal Zone Enhancement Program

Department of Energy

Weatherization Assistance Program

Energy Efficiency and Conservation Block Grant Program

State Energy Program

Smart Grid Investment Grant (SGIG) program

Carbon Capture Large-scale Pilot Projects and Demonstration Projects Program

Lithium-Ion Battery Recycling Prize Phase III

Hydroelectric Production Incentive Program

Hydroelectric Efficiency Improvement Incentives

Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) Grant Program

Solar Energy Demonstration Projects

Department of the Interior

Abandoned Mine Reclamation Fund

Funding for Department of Interior's Wildland Fire Management activities

Funding for Department of Interior’s Ecosystem Restoration activities

Department of Transportation

National Highway Performance Program

Surface Transportation Block Grant Program (STBGP)

SBTGP Transportation Alternative Program (TAP)

Highway Safety Improvement Program (HSIP)

Railway Highway Grade Crossing Program

Congestion Mitigation and Air Quality improvement Program

Metropolitan Planning Program

National Highway Freight Program

Federal-State Partnership for Intercity Passenger Rail

Consolidated Rail Infrastructure and Safety Improvements Program

Motor Carrier Safety Assistance Program (MCSAP) Grants

Highway Safety Program Grants

National Priority Safety Program Grants

Appalachian Development Highway System

Puerto Rico and Territorial Highway Program

Federal Lands Transportation Program

Tribal Transportation Program

Urbanized Area Program

Enhanced Mobility of Seniors and Individuals with Disabilities Program

Rural Program (Formula Grants for Rural Areas)

State of Good Repair Program

Buses and Bus Facilities Program

Air Traffic Facilities and Equipment

Rural Surface Transportation Grant Program

Nationally Significant Federal Lands and Tribal Projects

Advanced Transportation Technologies and Innovative Mobility Deployment

Low or No Emission Vehicle Program

FTA Buses + Bus Facilities Competitive Program

Capital Investments Grants Program

Passenger Ferry Grant Program

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants

Infrastructure for Rebuilding America (INFRA) Grants

Port Infrastructure Development Program

Marine Highway Program

Commercial Motor Vehicle (CMV) Operator Safety Training Grant

Environmental Protection Agency

Clean Water State Revolving Fund

Clean Water State Revolving Fund for Emerging Contaminants

Drinking Water State Revolving Fund

Drinking Water State Revolving Fund for Lead Service Line Replacement

Drinking Water State Revolving Fund for Emerging Contaminants

Water Infrastructure Improvements for the Nation (WINN) Grants to address emerging contaminants

Underground Injection Control Grants

Brownfield Competitive Grant Program

Pollution Prevention Grant Program