Port and Freight Infrastructure Program Selected Projects – Project Detail Summary July 6, 2023

Total Funding Awarded:

Port and Freight Infrastructure Program (PFIP): \$1,176,000,000

High-Priority Grade Crossing Improvement and Separation Projects: \$98,500,000





PFIP and High-Priority Grade Crossing Improvement and Separation Award Funding Split Acronyms Used throughout this Document:

GS – Grade Separation Funds

SP – Applications that primarily support the San Pedro Bay Ports (70% of PFIP funds)

SW – Applications that primarily support statewide freight movements (30% of PFIP funds)

1. Alameda County Transportation Commission

Project: 7th Street Grade Separation Project

PFIP Award:	\$ 13,500,000 (GS)
Total Project Cost:	\$ 378,000,000

Estimated Jobs Created:

This project will improve safety, capacity, efficiency, resiliency, and accessibility of goods movement to/from the Port of Oakland. The project will reduce greenhouse gas emissions and promote transportation equity and environmental justice by improving multimodal options while also generating high-paying local jobs.

9,000

The project consists of: realignment and reconstruction of the aging substandard four-lane underpass structure that carries Union Pacific Railroad (UPRR) tracks over 7th Street that has been subjected to damage from repeated truck strikes; reconstruction, widening and lighting of the existing, substandard, dark and narrow multi-use bicycle and pedestrian path; reconstruction of the affected railroad tracks, switches and appurtenant rail infrastructure; reconstruction of all appurtenant features to the roadway, including street lighting, storm drain infrastructure, pumping plant, clean water program elements, signage and striping; installation of intelligent transportation system technology elements such as changeable message signs, radio frequency identification readers and signal synchronization; installation of video detection pedestrian/bicycle signal activators; implementation of greening of project walls by planting vines along the multi-use pathway. The project will decrease the number of primary and secondary incidents and reduce or eliminate modal conflicts, resulting in an estimated \$44 million in safety-related benefits.

A letter of no prejudice is expected to be requested for this project. The project is expected to be completed by November 2026.

Zero-Emissions Features: While there are no zero-emissions vehicles or infrastructure proposed, the project improves an existing bicycle and pedestrian path and will add greening features to walls.

2. Caltrans

Project: Commerce Flyover Project

PFIP Award:	\$ 12,000,000 (GS)
Total Project Cost:	\$ 939,000,000
Estimated Jobs Created:	12,000

This project proposes to construct a two-track flyover (grade-separated rail bridge) on a rail corridor segment just east of downtown Los Angeles on the BNSF San Bernardino Subdivision (Commerce Corridor). The project will construct improvements to separate two tracks to serve passenger rail service from the other main tracks, lead tracks, and staging tracks that serve the freight rail within this segment of the corridor.

The benefits of this project include increased freight rail safety, throughput, and velocity; reduced delays to freight rail goods movement between the San Pedro Bay ports and both the state and national freight rail systems; increased resiliency and reliability the freight rail system; and reduced emissions of greenhouse gases, diesel particulates, and other pollutants. Project benefits also include increased passenger rail safety, reliability, and reduced delays. This project will deliver economic and employment benefits to the area through job growth and increased goods movement resulting from completion of construction of the project. The project is in a disadvantaged community that will benefit from approximately 12,000 jobs created from the project.

Grade Separation funding provided to the project development phase of this project will position the project to compete for future federal and state funding programs. A letter of no prejudice may be requested for this project. The project is expected to be completed by December 2028.

3. Caltrans

Project: High Desert Corridor Operational Efficiency Project

PFIP Award:	\$ 100,467,000 (SP)
Total Project Cost:	\$ 150,467,000
Estimated Emissions Reductions:	76 tons of CO_2 over 20 years
Estimated Jobs Created:	1,950

The High Desert Operational Efficiency Project will construct two freight rail staging tracks and add a third main track to extend the existing triple track by 11 miles on the BNSF Cajon Subdivision in San Bernardino County between railroad control points (CP) Martinez and CP Thorn in the City of Hesperia and unincorporated areas of San Bernadino County.

This project will increase operational efficiency of freight rail movement to and from the San Pedro Bay ports, through the Los Angeles Basin, and within the High Desert Freight Corridor. The project will reduce traffic delay, improve safety and security, reduce congestion, improve travel time reliability, enhance multimodal mobility, increase efficiency and productivity of the transportation system, enhance accessibility, and improve the resiliency of freight transportation. The third main track will allow freight and passenger trains to more easily pass each other without causing delays, thereby improving operations. The staging tracks will act like a highway ramp meter, permitting trains to enter the Los Angeles Basin at more optimal times, avoiding train bunching and other operational difficulties.

PFIP funding provided to this project will position the project to receive matching funds from federal grant programs. The project is expected to be completed by July 2027.

4. Caltrans

Project: Hobart/Commerce IMF Leads Project

PFIP Award:	\$ 15,000,000 (SP)
Total Project Cost:	\$ 1,200,000,000

The Hobart/Commerce Intermodal Facility (IMF) Leads Project provides increased efficiency of the freight corridor through traffic on the main tracks, improves capacity and efficiency of the yards, improves movement and staging of train movements between the yards, improves throughput of freight and passenger trains, and provides for future improvements to fully separate freight and passenger rail movements through the yards.

The project will improve capacity and efficiency of the nation's busiest intermodal facility and will improve rail corridor operations through the most congested segment of the entire San Bernardino subdivision.

PFIP will provide requested funding for Project Approval and Environmental Document (PA&ED) and Plans, Specifications, and Estimates (PS&E) phases of the project. These project phases support construction of improvements to the shareduse (both passenger and freight rail operations) rail corridor and to the lead tracks (connecting the mainline to the rail yard) and staging tracks in the adjacent Hobart IMF, Commerce IMF, as well as staging tracks at C-Yard.

PFIP funding provided to this project will position the project to receive matching funds from federal grant programs. The project is expected to be completed by December 2028.

5. City of Long Beach Harbor Department (Port of Long Beach)

Project: System-Wide Investment in Freight Transport (SWIFT)

PFIP Award:	\$ 383,346,997 (SP)
Total Project Cost:	\$ 2,167,673,910
Estimated Emissions Reductions:	Tons annually by 2028: 255,000 CO ₂ , 18 PM _{2.5} , 132 VOC, 1,048 CO, 844 NOx*
Estimated Deaths Prevented:	7 over 20 years*
Estimated Serious Injuries Prevented:	415 injuries and 70 lost workdays over 20 years*
Estimated Jobs Created:	22,481*

*These estimates are based on full project funding, not the partial funding awarded by CalSTA.

The System-Wide Investment in Freight Transport (SWIFT) project will provide important resources to accelerate port modernization, improve goods movement efficiency and reduce harmful environmental effects experienced by port-adjacent communities, including the cities of Carson, Wilmington, West Long Beach and communities along the I-710/Alameda Corridor.

The PFIP awards will partially fund a Rail Efficiency and Advancement Project constructing a full-service staging facility to support on-dock rail, allowing trains up to 10,000 feet long within the project footprint (and up to 20,000 feet long jointly using both the Pier B Rail Yard and marine terminal tracks) to be assembled or broken down safely and efficiently.

The zero-emission features receiving PFIP awards include:

- Zero-Emission Locomotive Program. This component provides funds for linehaul (long-distance) and switching (local only) locomotive operators to demonstrate and deploy zero-emission locomotives. The program is estimated to fund up to 12 locomotives.
- Long Beach Container Terminal (LBCT) Equipment Replacement and Charging Infrastructure Installation. This component involves replacing diesel equipment with 44 pieces of zero-emission (electric) human-operated yard tractors, top handlers, reach stackers, forklifts, and intermediate bulk container (IBC) carts at LBCT, as well as 62 charging units.
- SSA Fuel-Cell Top Handlers Demonstration. SSA Terminals will develop and demonstrate nine human-operated hydrogen fuel-cell top handlers and fueling infrastructure capable of serving up to 11 human-operated fuel-cell top handlers at its Pier C terminal.
- SSA Heavy Forklifts Demonstration. SSA Pacific will deploy and demonstrate 10 diesel heavy-forklifts (55,000-pound) with human-operated zero-emission electric forklifts at SSA's Pier F breakbulk terminal and install the associated charging infrastructure.
- Crowley Battery Plug-In Hybrid Tugboat. Crowley Marine will develop a battery plug-in hybrid propulsion tugboat capable of ship assist and harbor work.
- Tesoro T121 Shore Power Enhancement System. Tesoro Logistics, a tanker terminal, will enhance the capabilities of an existing shore-power system to serve more tanker vessels by adding a cable management crane and 480-volt cable management system to Berth T121.
- Tesoro LBT and T2 Shore Power Demonstrations. Tesoro will design, build, and demonstrate shore power at the Tesoro LBT and T2 terminals to nearly eliminate emissions from tanker vessels while at berth and to assess the feasibility of shore power for tankers at a larger scale than ever before.
- Zero-Emission Terminal Transformation Program (partial award). This component provides funds to support development of infrastructure master

plans for all container terminals and the major bulk terminal to support 100% deployment of zero-emission equipment as well as a program by which terminals with completed master plans can apply for funding to implement those plans.

• Harbor Craft Business Continuity and Emission Reduction Program (partial award). This component provides funds to support the design of a competitive grant program to repower or replace harbor craft throughout Long Beach and Los Angeles—particularly tugboats to prevent a potential tugboat shortage that would cripple vessel operations.

PFIP funding provided to this project will position the project to receive matching funds from federal grant programs, as well as financing through federal credit programs. The PFIP-funded components of the project are expected to be completed by December 2028.

6. City of Riverside

Project: Third Street Grade Separation Project

PFIP Award:	\$ 22,000,000 (GS)
Total Project Cost:	\$ 74,000,000
Estimated Emissions Reductions:	Tons over 20 years: 4,170 CO ₂ , .08 PM _{2.5} , .086 PM ₁₀ , .977 VOC, 4.2 CO, .743 NOx, .042 SOx
Estimated Deaths Prevented:	4 over 20 years
Estimated Serious Injuries Prevented:	30 over 20 years
Estimated Jobs Created:	963

The Third Street Grade Separation Project supports goods movement along the BNSF San Bernardino Subdivision, a significant component of the Alameda Corridor East corridor connecting to the San Pedro Bay ports. The project improves freight reliability by grade separating the railway and highway, thereby reducing delays. The project also accommodates a fourth main line track, which will increase capacity of the rail corridor.

The project proposes to construct a new four-lane underpass to replace the existing at-grade crossing along the BNSF San Bernardino Subdivision near the Third Street intersection with Commerce Street in Riverside. Commerce Street will be realigned

as well. Improvements on Third Street will include a raised median, bike lanes, and sidewalks.

The Grade Separation funding on this project provides funding match to a recently awarded Federal Railroad Administration Railroad Crossing Elimination grant of \$15 million. A letter of no prejudice is expected to be requested for this project. The project is expected to be completed by December 2026.

7. Merced County

Project: Merced County Inland Port

PFIP Award:

\$ 49,600,000 (\$ 34,664,000 SW Funds and \$ 14,936,000 SP Funds)

Total Project Cost:

\$ 115,674,000

Estimated Emissions Reductions:

Tons annually: 225,686.51CO₂, 6.94 PM₁₀, 18.42 VOC, 4.16 CO, 960.88 NOx, 2.22 SOx, 0.55 CH₄, 35.04 N₂O+

+These estimates are based on the 2020 California Inland Port Feasibility Analysis conversion of 250 truck trips to one train trip per week and are not site-specific.

This project contains three distinctive elements:

- Project I(a): development of 70 acres within Castle Commerce Center to support pre-shipment processing and intermodal crossdocking for Central Valley Growers.
- Project I(b): Rail expansion to a new staging and container laydown area, replacing the former "Alert Area" on the Castle Commerce Center airport tarmac to support cross-docking and processing. Examples of proposed uses for this area include the decommissioning of wind blades, transloading of intermodal containers, and container laydown space.
- Project II: Evaluation, engineering, and planning for further expansion on existing land inside Castle Commerce Center. This will include identifying targeted inbound industries, additional unit train staging and cross-docking areas, a larger storage area for containers, and exploration of emerging opportunities to merge rail-air using Castle's existing active runway.

This project will benefit its surrounding communities by leveraging principal rail and highway corridors in the region to establish connections with the ports of Los

Angeles, Long Beach, and Oakland and the broader distribution and multimodal transportation network. The project will expand these ports' rail capacity, reducing traffic and commuter delays at local bottlenecks, while also reducing greenhouse gas emissions, air pollution, public health impacts and negative economic impacts to communities adjacent to the corridors and facilities used for goods movement.

The project is expected to be completed by June 2028.

8. Oxnard Harbor District (Port of Hueneme)

Project: Port Action, Climate, and Environment Development (PACED)

PFIP Award:	\$ 79,820,475 (SW)
Total Project Cost:	\$ 216,592,920
Estimated Emissions Reductions:	Electric Charging Stations + eCHE tons/year: 125.5 CO ₂ , .03 PM _{2.5} , .005 PM ₁₀ , 1.07 CO, .64 NOx, .003 SOx, .025 DPM. Bonnet Barge tons per year: 3,800 CO ₂ , 1.2 PM _{2.5} , 56 NOx, 2.8 SOx.

The PACED project components contribute significant benefits to the Port of Hueneme and its surrounding communities while sustaining supply chain fluidity, flexibility, and resilience, ensuring continued operational excellence, sustaining and creating new employment opportunities, improving air and water quality, mitigating the impacts of climate change, and promoting transportation equity and environmental justice.

The PACED program serves as the overarching long-term capital development plan for the port. This program consists of multiple components, each of which will be executed over the coming five years and beyond.

Eight of the components will enhance the port's container line of business, while four of the components will enhance the port's automobile import/export line of business. The components will be comprised of the demolition and rehabilitation of dilapidated buildings, the installation of zero-emission Electric Reefer plugs, and a Fuel Cell Technology System. Efficiency and safety improvements will be made by deepening of berths, wharf repairs, shoreside power system upgrades, stormwater system upgrades, bonnet barge system installation, port-wide crane electrification, squid offloading relocation, new zero-emission cargo handling equipment, new electric charging stations, and north terminal dredging.

The final three components will position the port for an even more sustainable future by improving the port's ability to manage stormwater, developing a port-wide programmatic Environmental Impact Report (EIR), and enhancing port-led workforce development and training efforts.

PFIP funding provided to this project will position the project to receive matching funds from federal grant programs. The project is expected to be completed by December 2028.

Zero-Emissions Features: Electric Reefer Plugs and Fuel Cell System, South Terminal Shore Power Upgrade, Street Sweeper, Bonnet Barge, North and South Terminal Crane Electrification, Electric Charging Stations, and Electric Utility Tractor Rig.

9. Port of Los Angeles

Project: Maritime Support Facility (MSF) Improvement and Expansion Project

PFIP Award:	\$ 149,330,000 (SP)
Total Project Cost:	\$ 198,250,000
Estimated Emissions Reductions:	Annual Tonnage by 2046: 658.20 CO ₂ , .29 PM, .01 VOC, .30 CO, 1.29 NOx, .01 SOx (11,540 tons of emissions over 20 years).
Estimated Jobs Created:	720

The Maritime Support Facility (MSF) Improvement and Expansion Project will greatly reduce truck-miles-traveled inside container terminals (4.68 million miles traveled over 20 years), incident potential inside terminals, and emissions adjacent to the Wilmington and San Pedro communities of the City of Los Angeles, which are two of the most "Disadvantaged/Low Income Communities" as designated by the State. The MSF will also reduce cargo delays, which in turn aids in maintaining and accommodating expected container volume growth.

The MSF is an existing important container terminal support facility located on Terminal Island, at the centroid of the Ports of Los Angeles-Long Beach (POLA-POLB). The existing MSF currently provides up to 30 acres of chassis and empty container storage, on a temporary surface that is inadequate for long-term use. The MSF will be improved and expanded to provide 71 net acres of chassis/empty container storage for all 12 container terminals located in the POLA-POLB. These terminals, combined, handle 35% of all waterborne containers entering and exiting the entire United States. The MSF has been critical in mitigating potential supply chain disruptions throughout the U.S. since mid-2020 and is also important for accommodating future cargo growth.

The project is expected to be completed by April 2026.

10. Port of Los Angeles

Project: Port of Los Angeles Rail Mainline/Wilmington Community & Waterfront Pedestrian Grade Separation Bridge

PFIP Award:	\$ 42,080,000 (SP)
Total Project Cost:	\$ 57,910,000
Estimated Emissions Reductions:	Annual Tonnage by 2046: .0178 CO ₂ , .0015 PM _{2.5} , 29.63 VOC, .0028 CO, .0151 NOx, .01 SOx (583 tons of emissions over 20 years).
Estimated Jobs Created:	400

This project will construct a pedestrian bridge to connect the Wilmington community, which has eight schools within one mile, to the Port of Los Angeles Wilmington Waterfront area and Banning's Landing Community Center. Currently, two freight mainline tracks in the port bifurcate the Wilmington Waterfront from the Wilmington community itself. The rail tracks being grade separated move 6 percent of all U.S. waterborne containers. The project will provide a dedicated pedestrian/cycling bridge over these freight rail tracks and connect to the Statedesignated California Coast Trail.

The benefits of this project include the improvement of public safety by eliminating the potential for serious pedestrian-train incidents, as well as influence travel behavior and encourage more walking/biking for access to/from the waterfront. This mode shift will thus reduce vehicular trips and associated emissions.

The project is expected to be completed by April 2027.

Zero-Emissions Features: While there are no zero-emissions vehicles or infrastructure proposed, the project constructs a new bicycle and pedestrian crossing and includes landscaping.

11. Port of Los Angeles

Project: State Route 47-Seaside Avenue & Navy Way Interchange Improvement Project

PFIP Award:	\$ 41,790,000 (SP)
Total Project Cost:	\$ 62,980,000
Estimated Emissions Reductions:	Annual Tonnage by 2048: 2,214 CO ₂ , .069 PM _{2.5} , .276 PM ₁₀ , .585 VOC, 11.23 CO, 7.99 NOx, .019 SOx (37,745 tons of emissions over 20 years)
Estimated Deaths Prevented:	2 (on roadways over 20 years)
Estimated Serious Injuries Prevented:	36 (on roadways over 20 years)
Estimated Jobs Created:	414

This project directly serves 10% of all waterborne containers entering and exiting the entire United States. The benefits of this project include reduction of vehicular delays, collision potential, and emissions directly adjacent to the Wilmington and San Pedro communities of the City of Los Angeles, which are two of the most "Disadvantaged/Low Income Communities" as designated by the State.

The project augments an existing partial interchange at SR 47/Seaside Avenue/Navy Way and includes the following: removal of last traffic signal and at-grade intersection on Terminal Island/SR 47 between I-110 and I-710, which is at the apex of largest port complex in the Western Hemisphere; new westbound auxiliary lane on SR 47, between Pier S Avenue and Navy Way; new eastbound, two-lane collectordistributor road, all within the existing facility and ROW, between Ferry Street interchange eastbound on-ramp and Pier S Avenue interchange eastbound offramp; channelization improvements at Navy Way/Terminal Way intersection; and new 5th leg/westbound off-ramp termini.

The project is expected to be completed by June 2028.

12. Port of Oakland

Project: Arterial Roadway Improvements Project

PFIP Award:	\$ 17,343,178 (SW)
Total Project Cost:	\$ 38,965,889

Estimated Jobs Created:

282 (Segments 1 and 2 only)

PFIP Award will fully fund the requested funds for Project Segments 1 and 2.

The project will improve aging roadway infrastructure serving the Port of Oakland and improve the capacity and resiliency to meet the growing demand for freight movement in the region. PFIP will fund two components of the project to improve arterial streets serving the port: improvements to and near Adeline Street and the 3rd Street Truck Corridor. These project components will rehabilitate Adeline Street between 3rd Street and 7th Street; rehabilitate 5th Street between Union Street and Adeline Street; and rehabilitate 3rd Street between Market Street and Broadway.

This project will optimize the operational efficiency and connectivity of the roadway network to reduce delays, vehicles braking, vehicle miles traveled, fossil fuel consumption, and emissions. The rerouting of trucks and heavy container loads away from neighborhoods will reduce the freight impacts of noise and air pollution in the nearby disadvantaged communities. These multimodal improvements will increase safety and mobility for non-motorized users and has the potential to incentivize more trips by transit, biking, and walking.

The project is expected to be completed by June 2028.

13. Port of Oakland

Project: The Port of Oakland Terminal Modernization Project

PFIP Award:	\$ 102,335,929 (SW)
Total Project Cost:	\$ 357,298,847
Estimated Emissions Reductions:	2,843 Tons CO2 per Year for Segment 3
Estimated Deaths Prevented:	96 over 20 years
Estimated Jobs Created:	4,645 (includes 2,902 for Segment 1 which is only partially funded by PFIP)

PFIP Award will fully fund the requested funds for Project Segments 2, 3, and 4, and fund the PA&ED and PS&E phases of Segment 1.

The Port of Oakland Terminal Modernization Project will improve underutilized and dilapidated marine terminal infrastructure, promote innovative technologies (including zero-emissions equipment and infrastructure), and generally modernize marine terminal assets while furthering the port's commitment to reduce emissions and potential adverse effects on the environment and surrounding communities. The project includes wharf-related improvements such as bollard and fender replacements, electrical infrastructure and shore power capacity improvements, mobile shore power outlet systems, leveling and repaving underutilized space, replacement of diesel-powered cargo handling equipment with zero-emissions equipment, and modernizing of backlands areas for off-dock container support.

The project will provide public health benefits statewide from improvements in safety due to reductions in truck vehicle miles traveled (truck VMT) by enabling import and export of goods to a closer Pacific Coast gateway. More specifically, the modernization of the port will support carrier decisions to use the port, resulting in some trucks that currently deliver goods to the ports of Long Beach, Los Angeles, Seattle, and Tacoma to travel a shorter distance to the Port of Oakland.

The PFIP funding for project development activities on this project is expected to prepare the project to compete for future federal and state funding programs. The project is expected to be completed by June 2028.

Zero-Emissions Features: Shore power, cable, and substation upgrades; mobile shore power systems, 22 diesel utility tractor rig replacements with battery electric and charging stations, eight diesel top handler replacements with hydrogen fuel cell powered; hydrogen storage and fueling stations; reefer plugs; charging stations; and a battery storage system.

14. Port of San Francisco

Project: Maritime Eco-Industrial Complex Improvement Program

21,582,000 (3₩)
58,762,500

Estimated Jobs Created:

10-15 FTE jobs for additional export vessel calls at Pier 80, 70 for Construction of Amador Street PFIP Award will fully fund the following project components: Pier 80 Drainage and Marine Fendering, Amador Street Improvements, and Truck Fleets Zero Emissions Pilot Demonstration Project.

This project will significantly improve port and intermodal connections, bringing operational improvements that will include port resilience and environmental or emissions mitigations measures.

The project includes marine fendering and mooring improvements at Pier 80 that will accommodate larger ocean-going vessels for greater goods movement. The essential project for drainage and subsidence improvements at Pier 80 will maximize roll-on/roll-off (RO/RO) throughput and improve mobility. Roadway improvements along Amador Street will advance the flow of goods in the port's jurisdiction and improve the efficiency of the national supply chain. Also, the project proposes a Truck Fleets Zero Emissions Pilot Demonstration, which will examine the most effective zero-emission technology to mitigate air emissions from the marine terminal truck fleet at the port with a project implementation plan that is scalable for other ports.

The project is expected to be completed by April 2026.

Zero-Emissions Features: Truck Fleets Zero Emissions Pilot Demonstration Project.

15. Port of Stockton

Project: Port of Stockton Rail Infrastructure Improvements for Sustainable Exports Project (RIISE)

PFIP Award:	\$ 45,908,418 (SW)
Total Project Cost:	\$ 371,223,580
Estimated Emissions Reductions:	Rail efficiencies tons per year: 61 GHG, 5.1 NOx; Mode shift truck to rail tons over 20 years: 155,081 criteria pollutants, 7.95 CO ₂ ; New railcar mover tons per year: 22.3 CO ₂ .*
Estimated Jobs Created:	1,124 construction jobs and 323 permanent jobs*

*These estimates are based on full project funding, not the partial funding awarded by CalSTA.

PFIP Award partially funds the amount requested for this project.

The RIISE project supports building new infrastructure to enhance rail capacity, accommodate increased freight tonnage and train frequencies, mitigate potential service disruptions, and reduce long-term repair and maintenance costs. PFIP will fund elements of this project including a replacement of the San Joaquin River rail bridge; expansion of the port's long lead track to two tracks; and procurement of a zero-emission electric railcar mover. The project will help reduce trucks traversing neighborhood streets, consistent with the priorities of near-port communities and the Stockton AB 617 Community Steering Committee, reducing public health harms and negative environmental and economic impacts.

The project is expected to be completed by June 2027.

Zero-Emissions Features: Electric Railcar Mover.

16. Sacramento Metropolitan Air Quality Management District

Project: SNR Proposal to Advance Domestic Hydrogen Rail Switcher Locomotive Conversion

PFIP Award:	\$ 15,646,000 (SW)
Total Project Cost:	\$ 19,561,000
Estimated Emissions Reductions:	Kilograms per year: 10

Kilograms per year: 102,060 CO₂, 66.9 PM₁₀, 153.5 Hydrocarbons, 278.2 CO, 1915.2 NOx.

The project is a public-private partnership to expand on Sierra Northern Railway's (SNR) current efforts and develop, demonstrate, and test hydrogen-fueled, zeroemissions switcher locomotives on the to-be-constructed test track in SNR's West Sacramento rail yard. The project includes the construction of approximately 2,000 feet of 10906 ancillary test trackage, conversion of three locomotives, and development of refueling infrastructure and protocols. The project will refine SNR's hydrogen (H2) locomotive technology in furtherance of its desire to convert 50% of its own locomotives to H2 technology in the next decade, while simultaneously commercializing the technology and encouraging other short lines to do the same. The benefits of this project will provide significant air quality and environmental justice benefits to disadvantaged communities surrounding the Port of West Sacramento and eventually throughout Northern California.

The project is expected to be completed by 2028.

Zero-Emissions Features: Three hydrogen-fueled switcher locomotives and refueling infrastructure.

17. San Diego Unified Port District (Port of San Diego)

Project: National City Balanced Freight Project

PFIP Award:	\$ 35,500,00 (SW)
Total Project Cost:	\$ 55,000,000
Estimated Emissions Reductions:	Tons over 20 years: 8,082 CO ₂ , 1 VOC, 16 CO, 4 NOx.

This project will reconfigure maritime and commercial uses within the National City bayfront to balance the anticipated future market demands for those uses, while also increasing public access to bayfront amenities.

The proposed project requests funds for five critical elements within the National City Marina District Balanced Plan:

- Berth 24-3 and 24-4 Rehabilitation
- Realignment of Marina Way
- Rail Connector Track Construction
- Reconfiguration of the First Point of Rest adjacent to Pepper Park
- Lighting Upgrade in Warehouse 24-A.

The project is expected to be completed by December 2027.

18. San Gabriel Valley Council of Governments

Project: Turnbull Canyon Road Grade Separation Project

PFIP Award:

\$ 30,000,000 (GS)

Total Project Cost:

Estimated Jobs Created: 1,120

The project is the last grade separation of the comprehensive Alameda Corridor-East (ACE) Program that improves safety and mitigates the effects of growing freight rail traffic to and from the San Pedro port complex. The proposed grade separation consists of eliminating the existing at-grade crossing at Turnbull Canyon Road between Salt Lake Avenue and Clark Avenue in the City of Industry and unincorporated Los Angeles County community of Hacienda Heights by constructing a two-lane roadway overpass to carry vehicles over the railroad tracks and a separate pedestrian bridge for bicyclists and pedestrians.

The project will eliminate crossing collisions and reduce delays for motorists and emergency responders, reduce greenhouse gas emissions from idling vehicles, and provide significant safety, mobility, and air quality benefits to the local community adjacent to the freight corridor, which includes SB 535 designated disadvantaged communities and AB 1550 designated low-income communities.

A letter of no prejudice may be requested for this project. The project is expected to be completed by March 2027.

19. San Joaquin Regional Rail Commission

Project: Stockton South End Crossover Project

PFIP Award:	\$ 6,000,000 (GS)
Total Project Cost:	\$ 11,000,000

The project will construct crossovers and switches in the UPRR South Stockton Yard to maintain access to the BNSF Railroad and Port of Stockton as a component of construction of the Stockton Diamond Grade Separation Project.

The Stockton South End Crossover Project will allow continuous movement of trains through the yard that are destined for the connections to the BNSF tracks, reducing significant noise and pollutants from the braking and starting of trains in the see-saw movements. This project will help in providing a comprehensive approach to enhancements for trains, vehicles, pedestrians, bicycles, and the surrounding neighborhoods. A letter of no prejudice is expected to be requested for this project. The project is expected to be completed by May 2025.

20. South Coast Air Quality Management District

Project: Freight Air Quality Solutions (FAQS)

PFIP Award:	\$ 76,250,003 (SP)
Total Project Cost:	\$ 240,394,401
Estimated Emissions Reductions:	Annual Tonnage: 147,104 CO ₂ , 1.7 PM _{2.5} ,

This project includes the deployment of Direct Current Fast Chargers (DCFC) and hydrogen refueling dispensers at seven locations near the San Pedro Bay ports, the Inland Empire, San Fernando Valley, and major railyards to support zero-emission drayage fleets. A total of 376 DCFC ports will be installed, as well as 19 hydrogen refueling dispensers, all with Battery Electric Storage Systems (BESS) and on-site linear power generation. The project also includes a short line hydrogen fuel cell locomotive demonstration operating in and around Southern California that will support the largest container ports in the U.S. and use the development of this locomotive to later demonstrate this technology in long haul operations.

632 NOx.

This project provides substantial benefits not only to Southern California but also to the broader freight network. Some benefits include, but are not limited to, reducing noise pollution, eliminating harmful diesel emissions, doubling the haulage capacity of the locomotive to increase port throughput, reducing reliance on the electric networks, providing workforce benefits, and, lastly, supporting the commercialization of innovative zero-emissions technology in the freight ecosystem.

The project is expected to be completed by May 2028.

Zero-Emissions Features: 376 DCFC ports and 19 hydrogen refueling dispensers across seven locations, BESS, fuel cell locomotive.

21. Ventura County Transportation Commission / City of Oxnard

Project: Rice Avenue Grade Separation

PFIP Award:	\$ 15,000,000 (GS)
Total Project Cost:	\$ 132,500,000

Estimated Emissions Reductions:

196 CO₂ metric tons per year

The Rice Avenue Grade Separation Project will construct a grade separation structure at the existing Rice Avenue (SR 1) and Fifth Street (SR 34) intersection in Ventura County to eliminate an existing at-grade railroad crossing to improve safety, reduce congestion for trucks and vehicles traveling to and from the Port of Hueneme, and increase rail service reliability. Rice Avenue would be constructed over Fifth Street and the UPRR tracks.

This project will produce several benefits to enhance roadway safety and efficiency, improve the flow of goods movement, and further reinforce Rice Avenue as the primary access roadway to the industrial areas of Oxnard and the Port of Hueneme by eliminating conflicts that currently exist at this crossing.

This project is expected to request a letter of no prejudice. The project is expected to be completed by the fall of 2027.