

2022 PORT TRANSPORTATION IMPROVEMENT PLAN

FINAL 2/04/2022



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INTRODUCTION

The Port of Portland's mission is to provide competitive cargo and passenger access to regional, national and international markets while enhancing the region's quality of life.

For the most part, the Port does not own or control the surrounding transportation system that provides access to its facilities.¹ Good access to Port properties and marine and aviation facilities is a competitive advantage for the region's businesses and residents. The region's economy depends on efficient movement to and through the marine and aviation gateways. Therefore, improvements to the road, rail, water and transit systems that provide access to Port facilities are of vital interest to the Port and to the region's and state's businesses.

Freight movement has historically played a large role in the development of the Portland area economy. Due to its location at the confluence of the Willamette and Columbia Rivers with access to the Pacific Ocean, Portland has long served as a major shipment point in the Pacific Northwest. In addition to the navigable waterways, Portland is also served by two Class 1 rail lines, two interstate highways and a network of other major roads. All these factors contribute to Portland's development as a major distribution center for freight.

Several recent studies have substantiated the importance of investing in the transportation system and linked those investments to the region's and state's economic health. The Cost of Congestion to the Economy of the Portland Region (updated 2014), sponsored by a consortium of public agencies and private businesses, confirms the transportation dependency of the region's economy and affirms that the region's competitiveness is largely dependent upon its role as a gateway and distribution center. The study determined that improvements in the transportation system produce a 2:1 return for the economy.

The *Commodity Flow Forecast Update (2006)* produced by DRI/WEFA (updated in 2015 by Cambridge Systematics) predicts a doubling of freight volume moving throughout the region in 30 years. This kind of growth will dramatically impact Port facilities and will require significant investments to ensure access to them. The magnitude of regional transportation access investments and their financing are addressed through Metro's Regional Transportation Plan (RTP), Metro's Transportation Improvement Program (MTIP) and the State Transportation Improvement Plan (STIP). Access needs critical to Port facilities are reflected in the Port Transportation Improvement Plan (PTIP).

¹ Roads owned and maintained by the Port of Portland include: NE Airport Way (between I-205 and the Airport terminal), 82nd Ave. (north of NE Alderwood Rd.), NE Frontage Rd., NE Mt. Hood Ave. (north of Airport Way), NE AirTrans Way, part of N Time Oil Rd., T-5 access road, T-6 access roads, old Marine Dr. (west of N Portland Rd.) and other misc. access roads.

GOAL AND OBJECTIVES

The Port Transportation Improvement Plan is a multimodal compilation of marine terminal, airport, road, rail, waterway, transit, bicycle and pedestrian projects, normally identified through transportation and other studies managed by or in coordination with the Port. The plan also identifies a transportation demand management program to be implemented. The plan is designed to organize transportation and transportation-related improvement needs. The goal and objectives of the Port's Transportation Improvement Plan are as follows:

Goal:

Maintain the strategic advantage provided by the transportation system in this region by addressing the surface access needs of businesses and passengers trying to reach national and international markets via Port facilities.

Objectives:

- Identify 5, 10, and 20-year surface transportation system investments that provide and maintain access to Port facilities and property developments.
- Develop a long-range vision for the financial implications of transportation system investments and integrate this long-range planning with the Port's capital program.
- Increase public awareness of Port access needs on the city, state and private rail carrier systems.
- Facilitate coordination between the Port and appropriate public and private transportation system stakeholders to make improvements and investments that enhance access to national and international markets for the region's businesses and residents.

ASSUMPTIONS

Contained within this document are projects generally developed from transportation studies based on the region's assumptions about population and employment growth. These assumptions, developed by Metro in cooperation with all the jurisdictions in the region, are allocated to the land use designations of locally adopted comprehensive plans. As population and employment assumptions are updated, the needs of the transportation system are updated. The Port and other local governments participate in transportation systems studies to determine what parts of the surface transportation system (road/transit/rail/bicycle/pedestrian) are insufficient to meet the regional assumptions about passenger and freight movement.

This document represents the Port’s assessment of the transportation system and the infrastructure necessary to achieve its mission. The PTIP helps the Port focus its transportation priorities and lets the public and the Port’s partner jurisdictions know which projects will need cooperative efforts.

PROJECT FUNDING

In recent years, the overall demand for transportation improvements at the local, state and federal levels has vastly exceeded available resources. The PTIP defines Port transportation needs over a 20-year time frame. Some of the transportation improvements are on Port properties, and some are on systems that are the legal responsibility of others but serve Port facilities.

Funding for projects in the PTIP is expected from a number of sources, including the jurisdictions that have legal responsibility for the system and private interests that may benefit from the improvements. The project detail sheets identify the funding sources anticipated to implement these projects. Funds attributed to specific jurisdictions reflect specific funding commitments. Funds designated as “Committed Port Share” are in the Port’s approved budget. “Forecasted Port Share” indicates funds which the Port will obtain, whether from its own revenues or with funding from other sources. Where funds are listed as ‘Unfunded’, either a funding strategy has not yet been defined for the improvement, or changes in the project scope have impacted the existing funding strategy.

PROJECT REPORTS AND MAPS

The following pages contain a list of all projects, followed by maps of Port operation areas and individual project reports. The project reports include such details as a brief description, purpose, funding information, time frame, and strategic alignment.

Acronym Key:

PIC	Portland International Center
PDX	Portland International Airport
WHI	West Hayden Island
TRIP	Troutdale Reynolds Industrial Park
TTD	Troutdale Airport
HIO	Hillsboro Airport
GVBP	Gresham Vista Business Park

Time Frame:

Projects identified in the PTIP are shown as occurring in the 5, 10, or 20-year time frames. Projects within the 5-year time frame are expected to occur within the next five years. Projects within the 10-year time frame are expected to occur between five and ten years from the time of PTIP adoption. Similarly, projects within the 20-year time frame are expected to occur between 10 and 20 years from the time of PTIP adoption.

The time frames shown are estimates. The listing of a project in a given period does not ensure that it will be constructed in that time frame. Rather, projects will be constructed when transportation/business needs support them and when funding becomes available. For many projects, this need has already been identified. However, others depend on a variety of factors, including development at Port facilities and the changing challenges of the region's transportation system.

Port Strategic Plan Alignment

The mission of the Port is to enhance the region's economy and quality of life by providing efficient cargo and air passenger access to national and global markets.

Critical to the Port's effectiveness in implementing its mission are the following strategic areas of focus.

- Drive Regional Prosperity
- Deliver an Outstanding PDX Passenger Experience
- Connect People and Businesses to Markets
- Promote Excellence in Organizational Effectiveness

The project reports identify which of the strategic areas of focus the projects most closely align with.

PTIP MASTER PROJECT LIST

Map ID	Project Name	Project Description	Purpose	Time Frame (Years)	Total Cost	Area Map
1	PDX NEXT	Includes Terminal Core, Terminal Balancing, and PACR projects.	Expand airport capacity, functionality, and resilience.	5	\$2,131,500,000	PDX/PIC
2	82nd Ave./Airport Way Grade Separation	Construct grade-separated overcrossing.	Provide efficient movement of traffic to PDX properties.	5	\$87,000,000	PDX/PIC
3	Airport Way Rehabilitation - West	Rehabilitate Airport Way West of 82nd - east and west bound lanes. Improvements to traffic flow at the intersection of NE 82nd & Air Cargo Rd	The project will improve Airport Way west of 82nd and will improve traffic flow at 82nd Avenue, Air Cargo Road and Airport Way.	5	\$11,700,000	PDX/PIC
4	PDX Runway Seismic Retrofit	The runway at PDX and associated taxiways, aprons, nav aids and lighting will be retrofitted for a seismic event.	Provide a seismically resilient runway at PDX.	10	\$150,151,000	PDX/PIC
5	Tri Met Double Track	Construct a second track west of 82nd where only one exists today and extend Red Line service beyond Beaverton to Hillsboro.	Assure more on-time reliability and safety.	10	\$200,000,000	PDX/PIC
6	Tri Met Double Track Bike/Ped Path	Construct a multi-use path on the north side of Air Cargo Road between the MAX platform and the PDX Travel Center.	Provide a safe facility for pedestrians and bicyclists.	5	\$2,000,000	PDX/PIC
7	Alderwood and Columbia Blvd. Intersection	Widen and signalize intersection on Columbia Boulevard at Alderwood Rd.	Provide transportation link to the cargo area located within the south airport area and to support Columbia Corridor freight movement.	5	\$5,058,349	PDX/PIC
8	Cully Blvd. and Columbia Blvd. Intersection	Widen and signalize intersection on Columbia Boulevard at Cully Blvd.	Provide transportation link to the cargo area located within the south airport area and to support Columbia Corridor freight movement.	5	\$6,575,000	PDX/PIC
9	Alderwood Road Bikeway	Provide bike lanes or pathway on Alderwood Road between Columbia Blvd. and the Alderwood Trail.	Improve safety and provide better separation from motor vehicle traffic.	5	\$2,500,000	PDX/PIC
10	PDX Transportation Demand Management (TDM)	Implement local shuttle strategies at PDX and PIC properties that to reduce auto trips in the airport area. Programs to be undertaken with other area businesses/developers to maximize effectiveness; bus shuttle through Multnomah County.	Fulfill TDM requirements of PDX Master Plan. Implement TDM projects and programs recommended in the PDX Alternative Modes Study.	5	\$1,047,000	PDX/PIC
11	PDX Roadways Signing Update	Update roadway signs to current national guidelines.	Support customer experience and safety.	5	\$1,400,000	PDX/PIC
12	Cornfoot Road Multimodal Safety Improvements	Provide a separated multi-use path on the north side of NE Cornfoot Road. Install traffic signal at Air Trans Way.	Increase safety and provide improved bicycle and pedestrian access along NE Cornfoot Road.	5	\$3,708,539	PDX/PIC
13	SW Quad Access	Provide street access from 33rd Ave. into SW Quad.	Provide efficient movement of traffic to developing PDX properties.	10	\$5,917,500	PDX/PIC

Map ID	Project Name	Project Description	Purpose	Time Frame (Years)	Total Cost	Area Map
14	33rd Avenue/Marine Drive Intersection Improvements	Signalize and modify the intersection of NE 33rd Avenue and Marine Drive.	Improve safety and access for 33rd Avenue. May incorporate bike and ped facilities as well.	5	\$6,100,000	PDX/PIC
15	Columbia Blvd. Widening (82nd Ave. - 60th Ave.)	Widen Columbia Blvd. to five lanes.	Address system bottleneck along Columbia Blvd.	20	\$15,000,000	PDX/PIC
16	11th/13th (at Columbia Blvd.): Crossing Elimination	If feasible, eliminate the at-grade crossing and improve alternate roadway access.	Improve Kenton Mainline operation and eliminate a modal conflict.	5	\$1,000,000	PDX/PIC
17	HIO Taxiway A Reconstruction	Rehabilitate full length parallel Taxiway A and select connectors including drainage, lighting, and markings. Addresses locations identified by FAA's Runway Incursion Mitigation program.	Provide improvements identified in HIO 2006 and 2018 Master Plans.	5	\$14,500,000	Hillsboro
18	HIO 13R-31L RSA Modifications	Implement modifications to correct non-standard grading conditions and reduce waterfowl habitat in the runway safety area.	Modify and mitigate for non-standard grading conditions and water features in the runway safety area.	5	\$21,200,000	Hillsboro
19	HIO Relocate Taxiway AA	Relocate Taxiway AA 122 feet to the east and extend from Exit A5 to Taxiway G.	Replace existing Taxiway AA with a new taxiway with the appropriate design separation from Taxiway A. Construct a perimeter road extension between Taxiway AA and existing tenant ramps.	20	\$7,300,000	Hillsboro
20	HIO Crossfield Taxiways	Construct a new crossfield Taxiway.	Provide better taxiway circulation.	5	\$3,663,000	Hillsboro
21	HIO Construct Terminal Apron	Construct a new apron on the airside of the new terminal building, along with new stormwater infrastructure.	Provide new apron to serve new terminal building.	10	\$5,086,000	Hillsboro
22	HIO Taxiway A6 Improvements	Reconfigure Taxiway A6.	Provide pilots with enhanced situational awareness as they transition from the runway to the taxiway and to eliminate direct access from apron areas to the runway.	10	\$882,000	Hillsboro
23	HIO Taxiway B2 Relocation	Relocate Taxiway B2.	Eliminate direct access to Runway 2-20 from the east side T-hangers.	20	\$881,000	Hillsboro
24	HIO Northside Taxilane and Enabling Infrastructure (Phase I)	Construct taxilane parallel to Taxiway D in the North quadrant.	Provide access from the planned flight school development parcel to the airfield.	20	\$2,175,000	Hillsboro

Map ID	Project Name	Project Description	Purpose	Time	Total Cost	Area
				Frame (Years)		Map
25	HIO Runup Pad Construction on Taxiway D	Expand the existing runup pads adjacent to Taxiway D near each end of Runway 31L-31R.	Allow aircraft to perform pre-takeoff checks without blocking access to runway ends.	20	\$1,225,000	Hillsboro
26	HIO Vehicle Service Road Construction	Construct vehicle service roads to Airport locations.	Improve and realign vehicle service road in the West quadrant for compatibility with general aviation development.	20	\$1,950,000	Hillsboro
27	HIO Helipad Construction	Construct a helipad in the North quadrant near Taxiway D.	Will provide three helipad landing sites to for helicopter training activity.	20	\$535,000	Hillsboro
28	HIO Northside Taxilane and Enabling Infrastructure (Phase II)	Construct taxilane parallel to Taxiway D in the North quadrant, north of Phase I.	Will provide airfield access to planned general aviation hangers adjacent to the flight school.	20	\$2,383,000	Hillsboro
29	HIO Taxiway B Extension	Extend Taxiway B parallel to Runway 2-20.	Provide taxiway adjacent to new terminal building.	20	\$3,263,000	Hillsboro
30	HIO Apron Connectors	Create new taxiway and hold apron pavement in conjunction with new terminal development.	Provide for a safer and more efficient flow of aircraft taxiing.	20	\$840,000	Hillsboro
31	HIO Taxiway E-Middle Portion	Connect taxiways to Runway 13R-31L.	Second phase to the new parallel taxiway between the parallel runways.	20	\$7,488,000	Hillsboro
32	HIO Taxiway E-North Connector	Connect the north ends of Runway 13R-31L and Runway 13L-31-R.	Provide connectivity between the north end of the runways.	20	\$5,000,000	Hillsboro
33	HIO Taxiway B Extension	Extend Taxiway B beyond the end of Runway 2-20 to the flight museum.	Provide airside access to a proposed learning campus.	20	\$604,000	Hillsboro
34	NE 30th Avenue Extension to Flight School	Provide a roadway from NE 30th Avenue to the planned flight school and new general aviation development sites.	Will provide required landside access to the new flight school location.	20	\$2,109,000	Hillsboro
35	Springer Street Extension	Extend NE Springer Street to the west and provide temporary cul-de-sac.	To enable non-aviation development of airport land not needed for aeronautical puposes.	5	\$2,780,000	Hillsboro
36	Widen NE 30th Avenue	Widen NE 30th Avenue and NE Springer Street to comply with City of Hillsboro standards.	To enable non-aviation development of airport land not needed for aeronautical purposes.	5	\$2,508,000	Hillsboro

Map ID	Project Name	Project Description	Purpose	Time Frame (Years)	Total Cost	Area Map
37	Intersection improvements at NE 30th Avenue and NE Evergreen Road	Add turn lanes and signalization.	To enable non-aviation development of airport land not needed for aeronautical purposes.	5	\$1,026,000	Hillsboro
38	Relocate NE 25th Avenue	Relocate NE 25th Avenue to the west.	Comply with FAA Runway Object Free Area requirements.	10	\$3,203,000	Hillsboro
39	Relocate NE Cornell Road	Relocate a portion of NE Cornell Road to the south.	Comply with FAA Runway Object Free Area requirements.	10	\$2,859,000	Hillsboro
40	Extend NE Springer Street to NE Brookwood Parkway	Extend NE Springer Street to NE Brookwood Parkway.	Facilitate development of Port industrial properties.	20	\$4,997,000	Hillsboro
41	Intersection Improvements at NE Springer Street and NE Brookwood Parkway	Construct improvements needed to accommodate the extension of Springer Street.	Facilitate development of Port industrial properties.	20	\$497,000	Hillsboro
42	NE 34th Avenue and NE Cornell Road Improvements	Construct intersection improvements at NE 34th and Cornell, as well as a roundabout north of the intersection.	Facilitate development of Port properties.	20	\$4,528,000	Hillsboro
43	Connect Phase II Loop Road to Cornell Road	Provide intersection improvements to connect interior loop road to NE Cornell Road.	Facilitate development of Port properties.	20	\$2,533,000	Hillsboro
44	T6 Crane Drives for Cranes 6380 and 6381	Crane management system upgrades for Cranes 6380 and 6381.	Improve operational efficiencies for the container cranes.	5	\$2,800,000	Rivergate
45	T6 Auto Terminal	Pavement renewal, processing building, rail ramp and office.	Capture demand for mid level auto account.	5	\$35,000,000	Rivergate
46	T6 Berth 603 Low Dock	Modify existing berth for roll on-roll off (RORO) vessels.	Capture demand for high and heavy cargo.	5	\$8,000,000	Rivergate
47	T6 Electrical and Lighting Replacements	Replace electrical feeders and equipment and high mast lighting.	Modernize the electrical and lighting facilities at T6.	5	\$8,700,000	Rivergate

Map ID	Project Name	Project Description	Purpose	Time Frame (Years)	Total Cost	Area Map
48	T6 Breakbulk and Seismic Improvements	Modify portions of 603 and 604 to support breakbulk cargo handling. Upgrades to 603 and 604 crane rails, upgrades seismic performance of operating area, replace and repair pavement to support mobile harbor crane operations along berth in yard area landward of berth603.	Capture demand for breakbulk cargo	3	\$18,000,000	Rivergate
49	T6 Internal Roadway	Provide road connection between Suttle Road site and T6 main yard.	This will connect the main T6 yard to the Suttle Road development site.	10	\$6,100,000	Rivergate
50	Columbia River Mouth Jetty Refurbishment	With Jetty A and North Jetty now complete, complete refurbishment of the South Jetty at the mouth of the Columbia River.	This is a critical repair of the jetties at the Columbia River Bar.	5	\$239,000,000	Rivergate
51	Lower Columbia River Channel Maintenance Plan	Assist the Army Corps to establish a federally required 20 year strategic plan to manage deposition of Columbia River dredge material from the navigation channel.	Ensure there is sufficient dredged material disposal capacity for a minimum of 20 years.	5	\$1,500,000	Rivergate
52	Rivergate ITS	Intelligent Transportation System in Rivergate.	Improve traffic efficiency in Rivergate by connecting information about the roadway system to ODOT's Highway information systems.	5	\$480,000	Rivergate
53	Marine Dr. Improvement Phase 2	Construct rail overcrossing on Marine Dr.	Avoid road/rail conflict.	20	\$13,644,200	Rivergate
54	Marine Drive ITS Improvement	Install a CCTV at Portland Road and changeable message signs at N. Portland Road, North Vancouver Way and NE 185th Drive.	Improve traffic efficiency in the Columbia Corridor.	10	\$200,000	Rivergate
55	North Portland Junction	Upgrade railroad with revised crossovers, centralized traffic control tie-in and increased turning radius.	Accommodate higher rail speeds at the junction, which provides greater capacity.	10	\$9,160,000	Rivergate
56	Kenton Rail Line Upgrade	Upgrade existing track to second main track with new double track from Peninsula Junction to I-205 and increase track speeds between North Portland, Peninsula Junction, to Reynolds on UP's Kenton Line.	Expand rail capacity and reduce delays for greater efficiency.	10	\$25,382,000	Rivergate
57	I-5 Columbia River Bridge	Increase the number of lanes and add transit capacity across the river.	Increase multi-modal capacity across the Columbia River and relieve congestion.	10	\$2,982,000,000	Rivergate
58	BNSF Fallbridge Double Tracking	Double-track the Fallbridge line to Washougal.	Increases capacity of the BNSF east-west mainline serving Port of Portland.	10	\$72,000,000	Rivergate
59	Time Oil Road Reconstruction	Reconstruct Time Oil Road.	Provide improved access to South Rivergate industrial area.	10	\$9,000,000	Rivergate

Map ID	Project Name	Project Description	Purpose	Time Frame (Years)	Total Cost	Area Map
60	Rivergate Boulevard Overcrossing	Grade separate the South Rivergate Lead at Rivergate Blvd.	Improve rail and vehicle traffic flow in Rivergate Industrial District.	5	\$26,158,076	Rivergate
61	Bonneville Rail Yard Build Out	Construct two interior yard tracks and complete the double track lead from the wye at the east end of the yard to Barnes Yard.	Add rail staging capacity for South Rivergate.	10	\$3,600,000	Rivergate
62	Ramsey Yard Utilization	Connect existing set out track with industrial lead.	Improve unit train staging capabilities at Ramsey Rail Yard.	10	\$1,700,000	Rivergate
64	T4 Berth 410, 411 Rail Yard Improvements	Construct additional rail track in the Berth 410 and 411 rail yard.	Improve the efficiency of the rail yard by creating additional rail capacity.	10	\$7,800,000	Rivergate
65	T4 Second Entrance	Design and construct a second entrance to Terminal 4.	Support additional rail expansion at the terminal.	5	\$14,200,000	Rivergate
66	T4 Pier 1 Tracks 704-709	Perform upgrades and rehabilitation on tracks 704-709.	Support rail car storage needs of Terminal 4 tenants	5	\$1,000,000	Rivergate
67	Terminal 4 Pier 1 Site Preparation	Remove Berths 405 and 408, the grain leg platform and tower, and the grain elevator in the Pier 1 area of Terminal 4. Estimated \$18 M for phase 1 (2015 year estimate) and \$24M for phase 2 (2020 year estimate)	This project will facilitate the redevelopment of approximately 30 acres of vital marine industrial property in the Portland Harbor.	5	\$38,000,000	Rivergate
68	Barnes to Terminal 4 Rail	Provide a new track from Barnes Yard to Terminal 4. Includes replacement of Lombard Bridge.	Improve rail access to Terminal 4.	5	\$10,543,000	Rivergate
70	T4 Electrical Replacements	Replace obsolete electrical components.	Replace obsolete electrical components at Terminal 4, including relocating and replacing the feeder between the grain elevator and Berth 401.	5	\$2,000,000	Rivergate
71	Cathedral Park Quiet Zone	Address rail switching noise by improving multiple public rail crossings in the St. Johns Cathedral Park area.	To allow auto import operations to continue to grow in N. Portland and improve neighborhood livability.	5	\$8,200,000	Rivergate
72	St. Johns Pedestrian District	Improvements could include restriping, curb extensions and other pedestrian and bicycle amenities on Lombard St. that do not impede truck movement, as well as intersection improvements and signalization.	Maintain truck movement and minimize conflicts with bicycles and pedestrians between Philadelphia Ave. and Lombard St. at Pier Park.	5	\$3,346,000	Rivergate
73	Willamette River Channel Deepening	Deepen the portions of the Willamette River with deep draft infrastructure to -43' where appropriate.	To allow Willamette River terminals to benefit from the Columbia River's controlling depth. To follow maintenance to -40 feet.	10	\$200,000,000	Rivergate

Map ID	Project Name	Project Description	Purpose	Time Frame (Years)	Total Cost	Area Map
74	Berth Deepening at T4	Deepen berths at Terminal 4 to allow deeper draft vessels to transit the planned 43 foot channel. Tied to Willamette River Channel Deepening. Cost TBD.	Allow better utilization of Panamax-class bulk vessels.	10		Rivergate
75	PSU ITS Expansion	Expand PSU's existing web based ITS "count sensor" program beyond the freeway to some key arterials throughout the region and create a repository of regional freight data.	To secure truck flow and congestion data.	5		T2/Swan Island
76	Dredge Oregon Pipe, Scows and Pontoons	Acquire 2,000 feet of dredge pipe, pontoons, anchor scows and anchors.	Allow Dredge Oregon to make full use of recent repower and pump material 14,000 feet.	5	\$3,000,000	T2/Swan Island
77	New Dredge Tender	Replace the existing vintage tugboat W.L. Williams with a newly constructed modern work-boat vessel. Repower tugboat Clackamas.	Improve operational support for Dredge Oregon dredging operations and improve environmental performance.	5	\$6,000,000	T2/Swan Island
78	Dredge Oregon Support Equipment	Repower or replace navigation equipment including support vessels and landside equipment such as bulldozers.	Improve productivity and environmental performance.	5	\$12,000,000	T2/Swan Island
79	North Willamette Greenway Trail	Pedestrian and bicycle trail from Kelly Point Park to the Steel Bridge along the Willamette River. The money associated for this project is for a study only.	Improve pedestrian and bicycle connectivity in North Portland. Coordinate implementation with the City of Portland.	20	\$500,000	T2/Swan Island
80	Portland Terminal Railroad Power Switches	Install Dispatcher Controlled Power Switches between Lake Yard and Terminal 2.	Will reduce blockage of mainline for BNSF, UPRR and Amtrak.	5	\$10,805,000	T2/Swan Island
81	TTD Reconstruct runway 7-25	Reconstruct existing 150' x 5400' runway; narrow to 75' wide, reduce length to 4500', relocate/reconstruct edge lighting, construct required drainage improvements.	Project identified in 2016 TTD Master Plan.	5	\$22,100,000	East County
82	40 Mile Loop Trail: Blue Lake Park to Sundial Rd.	Construct a mixed use off road trail connecting Blue Lake Park and Sundial Road.	Combined with the Port's Reynolds levee trail it will complete gaps in the 40 Mile Loop Trail.	5	\$3,424,073	East County
83	Sundial Road at Graham Road	Install traffic signal.	Address traffic growth at Troutdale Reynolds Industrial Park.		\$1,000,000	East County
84	TRIP Road Access Phase 3	Road improvements to serve Phase 3 industrial development. Actual project will be developed in coordination with stakeholders.	Address off-site transportation impacts.	10		East County
85	Sandy Blvd. Widening to 4 lanes	Sandy Blvd. widen to 4 lanes and center turn lane (181st-202nd) with sidewalks and bike lanes.	Improve east west capacity and serve developing industrial property.	10	\$10,000,000	East County
86	Sandy Blvd. Widening to 3 lanes	Sandy Blvd. widen to 3 lanes (207th to 238th), add sidewalks and bike lanes.	Improve east-west capacity and serve adjacent developing industrial property.	10	\$7,438,000	East County

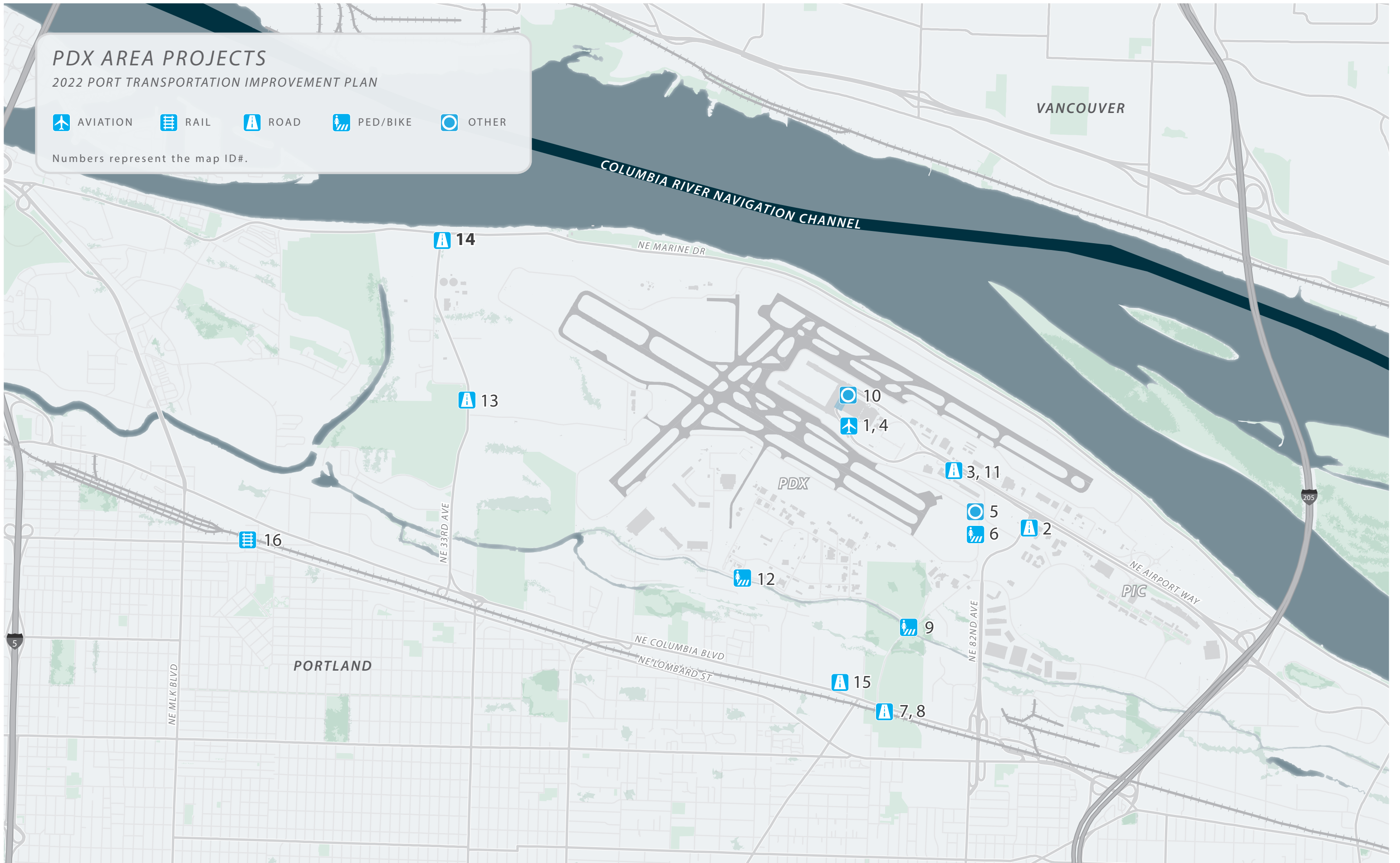
Map ID	Project Name	Project Description	Purpose	Time	Total Cost	Area Map
				Frame (Years)		
87	NE Hogan at NE Stark Street	Add right turn lanes on all approaches and second northbound and southbound left turn lanes.	Address intersection capacity affecting access to Gresham Vista Business Park.	5	\$1,908,431	East County
88	NE 223rd at Stark	Add eastbound and northbound right turn lanes and southbound left turn lanes.	Address intersection capacity affecting access to Gresham Vista Business Park.	5	\$1,196,756	East County
90	NE 223rd Avenue Widening	Widen to three lanes between Halsey Street and Marine Drive.	Upgrade the facility to major collector urban street standards.	5	\$4,437,809	East County
91	NE Marine Drive -- NE 223rd Ave to Gresham Limits	Reconstruct NE Marine Drive from NE 223rd Avenue to the Gresham City limits to a two-way, five-lane cross section. Project includes constructing sidewalks and bicycle lanes where there are currently gaps.	Project identified in Multnomah County Capital Improvement Plan		\$19,350,000	East County

PDX AREA PROJECTS

2022 PORT TRANSPORTATION IMPROVEMENT PLAN

-  AVIATION
-  RAIL
-  ROAD
-  PED/BIKE
-  OTHER

Numbers represent the map ID#.



Project Name: PDX NEXT

Map ID: 1
Project Type: Aviation
Operation Area: PDX/PIC
Project Description: Includes Terminal Core, Terminal Balancing, and PACR projects.

Time Frame (Years): 5 years

Total Cost: \$2,131,500,000
Year of Cost Estimate: 2019

Federal:
State:

City:

SDC:

Purpose: Expand airport capacity, functionality, and resilience.

MW NUM: 101888, 102191

RTP Related:

Recent Study: Airport Futures

Port Strategic Area: Deliver an Outstanding PDX Passenger Experience

- RTP 2045 Illustrative
 RTP 2045 Constrained
- Conditioned Project
 Identified in STIP

Port Share Committed:
Port Share Forecasted: \$2,131,500,000

Private:

Other:

Unfunded:

Project Name: 82nd Ave./Airport Way Grade Separation

Map ID: 2
Project Type: Road
Operation Area: PDX/PIC
Project Description: Construct grade-separated overcrossing.

Time Frame (Years): 5 years

Total Cost: \$87,000,000
Year of Cost Estimate: 2018

Federal:
State:

City: \$5,000,000

SDC:

Purpose: Provide efficient movement of traffic to PDX properties.

MW NUM: 700261

RTP Related: 10362

Recent Study: Airport Futures Transportation Impact Study (2010)

Port Strategic Area: Deliver an Outstanding PDX Passenger Experience

- RTP 2045 Illustrative
 RTP 2045 Constrained
- Conditioned Project
 Identified in STIP

Port Share Committed:
Port Share Forecasted:
Private:
Other:
Unfunded: \$82,000,000

Project Name: Tri Met Double Track

Map ID: 5 **Time Frame (Years):** 10 years **Total Cost:** \$200,000,000
Project Type: Rail **Year of Cost Estimate:** 2019
Operation Area: PDX/PIC **Federal:** \$100,000,000
Project Description: Construct a second track west of 82nd where only one exists today and extend Red Line service beyond Beaverton to Hillsboro. **State:**
 City:
 SDC:
Purpose: Assure more on-time reliability and safety. **Port Share**
 Committed:
 Port Share
 Forecasted:
MW NUM: **Private:**
RTP Related: 10922 **Other:** 100000000
Recent Study: **Unfunded:**
Port Strategic Area: Deliver an Outstanding PDX Passenger Experience
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Tri Met Double Track Bike/Ped Path

Map ID: 6 **Time Frame (Years):** 5 years **Total Cost:** \$2,000,000
Project Type: Bike/Ped **Year of Cost Estimate:** 2019
Operation Area: PDX/PIC **Federal:**
Project Description: Construct a multi-use path on the north side of Air Cargo Road between the MAX platform and the PDX Travel Center. **State:**
 City:
 SDC:
Purpose: Provide a safe facility for pedestrians and bicyclists. **Port Share**
 Committed:
 Port Share
 Forecasted: \$2,000,000
MW NUM: 701164 **Private:**
RTP Related: **Other:**
Recent Study: **Unfunded:**
Port Strategic Area: Deliver an Outstanding PDX Passenger Experience
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: PDX Roadways Signing Update

Map ID: 11 Time Frame (Years): 5 years
Project Type: Road
Operation Area: PDX/PIC
Project Description: Update roadway signs to current national guidelines.

Purpose: Support customer experience and safety.

MW NUM: 701155

RTP Related:

Recent Study:

Port Strategic Area: Deliver an Outstanding PDX Passenger Experience

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$1,400,000

Year of Cost Estimate:

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$1,400,000

Project Name: Cornfoot Road Multimodal Safety Improvements

Map ID: 12 Time Frame (Years): 5 years
Project Type: Bike/Ped
Operation Area: PDX/PIC
Project Description: Provide a separated multi-use path on the north side of NE Cornfoot Road.
Install traffic signal at Air Trans Way.

Purpose: Increase safety and provide improved bicycle and pedestrian access along NE Cornfoot Road.

MW NUM:

RTP Related: 10340

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$3,708,539

Year of Cost Estimate: 2013

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$3,708,539

Project Name: SW Quad Access

Map ID: 13 **Time Frame (Years):** 10 years
Project Type: Road
Operation Area: PDX/PIC
Project Description: Provide street access from 33rd Ave. into SW Quad.

Total Cost: \$5,917,500
Year of Cost Estimate: 2007

Federal:
State:

City:

SDC:

Purpose: Provide efficient movement of traffic to developing PDX properties.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$5,917,500

MW NUM:

RTP Related: 10363

Recent Study: PDX Conditional Use Master Plan (2003)

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: 33rd Avenue/Marine Drive Intersection Improvements

Map ID: 14 **Time Frame (Years):** 5 years
Project Type: Road
Operation Area: PDX/PIC
Project Description: Signalize and modify the intersection of NE 33rd Avenue and Marine Drive.

Total Cost: \$6,100,000
Year of Cost Estimate: 2019

Federal:
State:

City: \$610,000

SDC:

Purpose: Improve safety and access for 33rd Avenue. May incorporate bike and ped facilities as well.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$6,100,000

MW NUM: 700461

RTP Related: 10337

Recent Study: PDX Airport Futures 2010 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

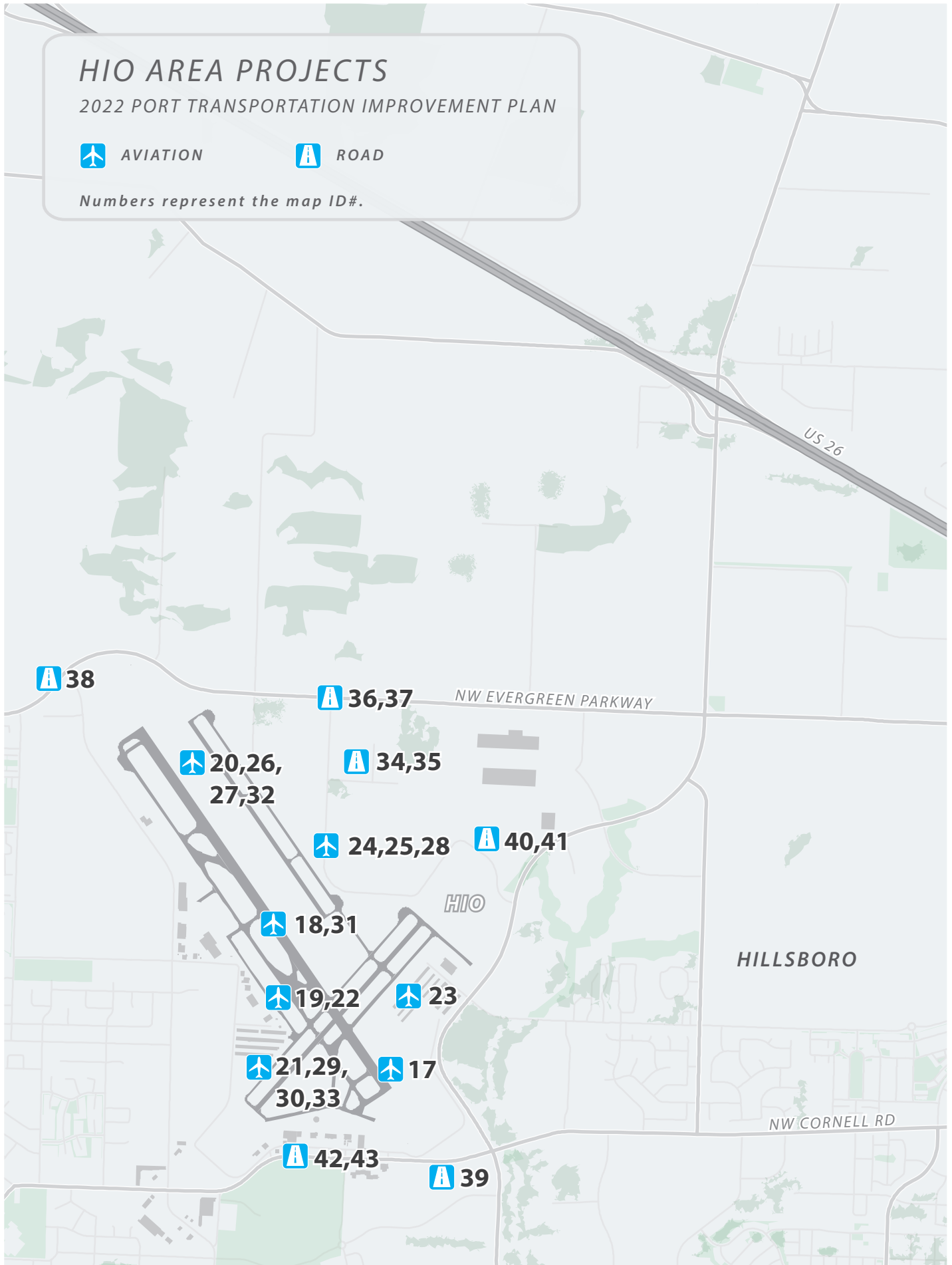
HIO AREA PROJECTS

2022 PORT TRANSPORTATION IMPROVEMENT PLAN

 AVIATION

 ROAD

Numbers represent the map ID#.



Project Name: HIO Construct Terminal Apron

Map ID: 21 **Time Frame (Years):** 10 years **Total Cost:** \$5,086,000
Project Type: Aviation **Year of Cost Estimate:** 2018
Operation Area: Hillsboro **Federal:**
Project Description: Construct a new apron on the airside of the new terminal building, along with **State:**
new stormwater infrastructure. **City:**
 SDC:

Purpose: Provide new apron to serve new terminal building. **Port Share**
 Committed:
 Port Share
 Forecasted:
 Private:
 Other:
 Unfunded: \$5,086,000

MW NUM:
RTP Related:
Recent Study: HIO 2018 Master Plan
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: HIO Taxiway A6 Improvements

Map ID: 22 **Time Frame (Years):** 10 years **Total Cost:** \$882,000
Project Type: Aviation **Year of Cost Estimate:** 2018
Operation Area: Hillsboro **Federal:**
Project Description: Reconfigure Taxiway A6. **State:**
 City:
 SDC:

Purpose: Provide pilots with enhanced situational awareness as they transition from **Port Share**
the runway to the taxiway and to eliminate direct access from apron areas **Committed:**
to the runway.

MW NUM:
RTP Related:
Recent Study: HIO 2018 Master Plan
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share
Forecasted:
Private:
Other:
Unfunded: \$882,000

Project Name: HIO Helipad Construction

Map ID: 27 **Time Frame (Years):** 20 years
Project Type: Aviation
Operation Area: Hillsboro
Project Description: Construct a helipad in the North quadrant near Taxiway D.

Total Cost: \$535,000
Year of Cost Estimate: 2018

Federal:
State:

City:

SDC:

Purpose: Will provide three helipad landing sites to for helicopter training activity.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$535,000

MW NUM:

RTP Related:

Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: HIO Northside Taxilane and Enabling Infrastructure (Phase II)

Map ID: 28 **Time Frame (Years):** 20 years
Project Type: Aviation
Operation Area: Hillsboro
Project Description: Construct taxilane parallel to Taxiway D in the North quadrant, north of Phase I.

Total Cost: \$2,383,000
Year of Cost Estimate: 2018

Federal:

State:

City:

SDC:

Purpose: Will provide airfield access to planned general aviation hangers adjacent to the flight school.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$2,383,000

MW NUM:

RTP Related:

Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: HIO Taxiway B Extension

Map ID: 29 **Time Frame (Years):** 20 years
Project Type: Aviation
Operation Area: Hillsboro
Project Description: Extend Taxiway B parallel to Runway 2-20.

Total Cost: \$3,263,000
Year of Cost Estimate: 2018

Federal:
State:

City:

SDC:

Purpose: Provide taxiway adjacent to new terminal building.

MW NUM:

RTP Related:

Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$3,263,000

Project Name: HIO Apron Connectors

Map ID: 30 **Time Frame (Years):** 20 years
Project Type: Aviation
Operation Area: Hillsboro
Project Description: Create new taxiway and hold apron pavement in conjunction with new terminal development.

Total Cost: \$840,000
Year of Cost Estimate: 2018

Federal:

State:

City:

SDC:

Purpose: Provide for a safer and more efficient flow of aircraft taxiing.

MW NUM:

RTP Related:

Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$840,000

Project Name: HIO Taxiway E- Middle Portion

Map ID: 31 **Time Frame (Years):** 20 years
Project Type: Aviation
Operation Area: Hillsboro
Project Description: Connect taxiways to Runway 13R-31L.

Total Cost: \$7,488,000
Year of Cost Estimate: 2018

Federal:
State:

City:

SDC:

Purpose: Second phase to the new parallel taxiway between the parallel runways.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$7,488,000

MW NUM:

RTP Related:

Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: HIO Taxiway E- North Connector

Map ID: 32 **Time Frame (Years):** 20 years
Project Type: Aviation
Operation Area: Hillsboro
Project Description: Connect the north ends of Runway 13R-31L and Runway 13L-31-R.

Total Cost: \$5,000,000
Year of Cost Estimate: 2018

Federal:

State:

City:

SDC:

Purpose: Provide connectivity between the north end of the runways.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$5,000,000

MW NUM:

RTP Related:

Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Springer Street Extension

Map ID: 35 **Time Frame (Years):** 5 years **Total Cost:** \$2,780,000
Project Type: Road **Year of Cost Estimate:** 2018
Operation Area: Hillsboro **Federal:**
Project Description: Extend NE Springer Street to the west and provide temporary cul-de-sac. **State:**
City:
SDC:
Purpose: To enable non-aviation development of airport land not needed for aeronautical puposes. **Port Share**
Committed:
Port Share
Forecasted:
Private:
Other:
Unfunded: \$2,780,000
MW NUM:
RTP Related:
Recent Study: HIO 2018 Master Plan
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Widen NE 30th Avenue

Map ID: 36 **Time Frame (Years):** 5 years **Total Cost:** \$2,508,000
Project Type: Road **Year of Cost Estimate:** 2018
Operation Area: Hillsboro **Federal:**
Project Description: Widen NE 30th Avenue and NE Springer Street to comply with City of Hillsboro standards. **State:**
City:
SDC:
Purpose: To enable non-aviation development of airport land not needed for aeronautical purposes. **Port Share**
Committed:
Port Share
Forecasted:
Private:
Other:
Unfunded: \$2,508,000
MW NUM:
RTP Related:
Recent Study: HIO 2018 Master Plan
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Relocate NE Cornell Road

Map ID: 39 **Time Frame (Years):** 10 years
Project Type: Road
Operation Area: Hillsboro
Project Description: Relocate a portion of NE Cornell Road to the south.

Total Cost: \$2,859,000
Year of Cost Estimate: 2018

Federal:
State:
City:
SDC:

Purpose: Comply with FAA Runway Object Free Area requirements.

Port Share Committed:
Port Share Forecasted:
Private:
Other:
Unfunded: \$2,859,000

MW NUM:

RTP Related:
Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
- RTP 2045 Constrained Identified in STIP

Project Name: Extend NE Springer Street to NE Brookwood Parkway

Map ID: 40 **Time Frame (Years):** 20 years
Project Type: Road
Operation Area: Hillsboro
Project Description: Extend NE Springer Street to NE Brookwood Parkway.

Total Cost: \$4,997,000
Year of Cost Estimate: 2018

Federal:
State:
City:
SDC:

Purpose: Facilitate development of Port industrial properties.

Port Share Committed:
Port Share Forecasted:
Private:
Other:
Unfunded: \$4,997,000

MW NUM:

RTP Related:
Recent Study: HIO 2018 Master Plan

Port Strategic Area: Connect People and Businesses to Markets


- RTP 2045 Illustrative Conditioned Project
- RTP 2045 Constrained Identified in STIP

Project Name: Connect Phase II Loop Road to Cornell Road

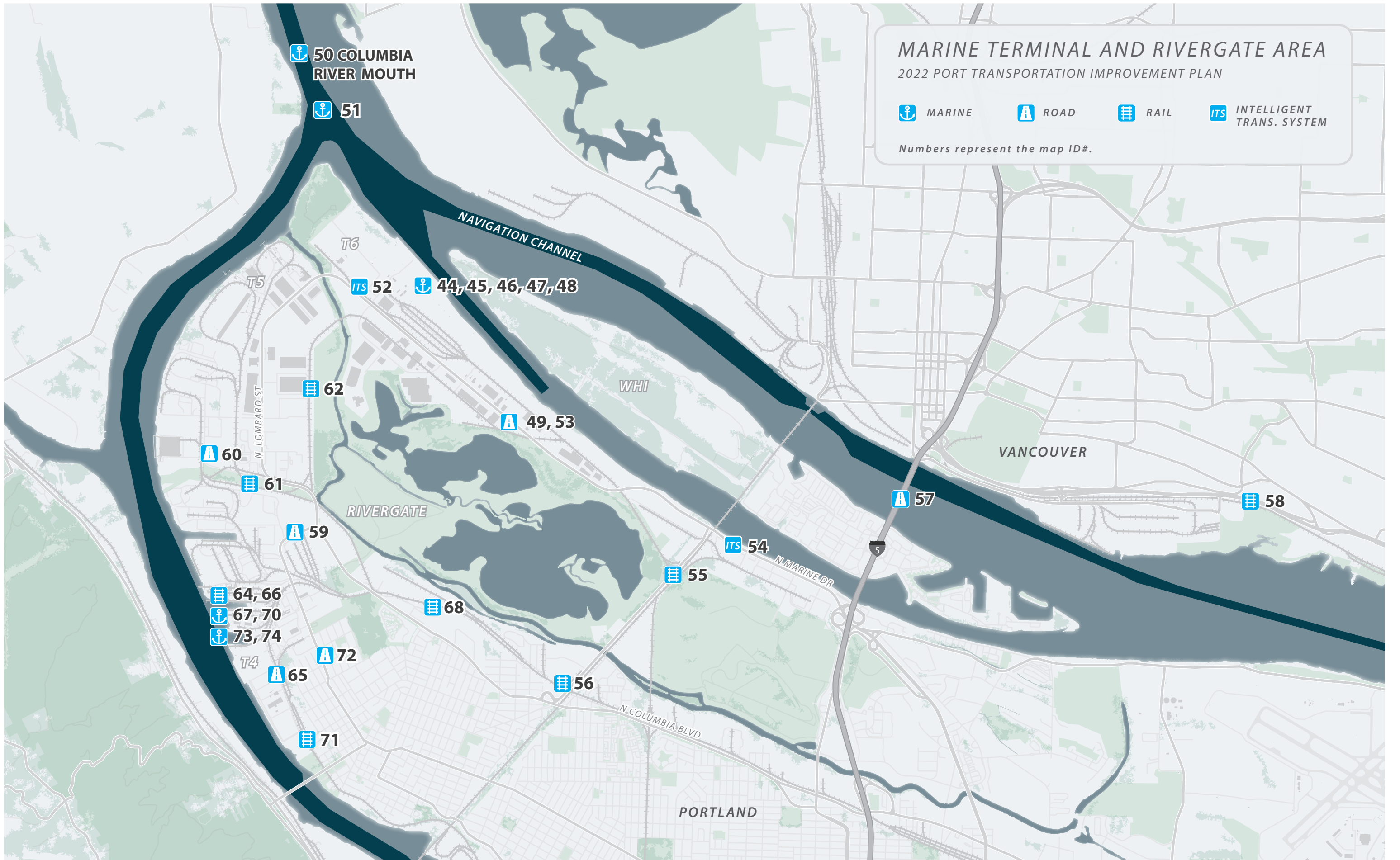
Map ID: 43	Time Frame (Years): 20 years	Total Cost: \$2,533,000
Project Type: Road		Year of Cost Estimate: 2018
Operation Area: Hillsboro		Federal:
Project Description: Provide intersection improvements to connect interior loop road to NE Cornell Road.		State:
		City:
		SDC:
Purpose: Facilitate development of Port properties.		Port Share Committed:
		Port Share Forecasted:
MW NUM:		Private:
RTP Related:		Other:
Recent Study: HIO 2018 Master Plan		Unfunded: \$2,533,000
Port Strategic Area: Connect People and Businesses to Markets		
<input type="checkbox"/> RTP 2045 Illustrative	<input type="checkbox"/> Conditioned Project	
<input type="checkbox"/> RTP 2045 Constrained	<input type="checkbox"/> Identified in STIP	

MARINE TERMINAL AND RIVERGATE AREA

2022 PORT TRANSPORTATION IMPROVEMENT PLAN

 MARINE
  ROAD
  RAIL
  INTELLIGENT TRANS. SYSTEM

Numbers represent the map ID#.



Project Name: T6 Berth 603 Low Dock

Map ID: 46 **Time Frame (Years):** 5 years
Project Type: Marine
Operation Area: Rivergate
Project Description: Modify existing berth for roll on-roll off (RORO) vessels.

Total Cost: \$8,000,000
Year of Cost Estimate: 2017

Federal:
State:

City:

SDC:

Purpose: Capture demand for high and heavy cargo.

MW NUM:

RTP Related:

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$8,000,000

Project Name: T6 Electrical and Lighting Replacements

Map ID: 47 **Time Frame (Years):** 5 years
Project Type: Marine
Operation Area: Rivergate
Project Description: Replace electrical feeders and equipment and high mast lighting.

Total Cost: \$8,700,000
Year of Cost Estimate: 2019

Federal:

State:

City:

SDC:

Purpose: Modernize the electrical and lighting facilities at T6.

MW NUM: 701387

RTP Related:

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$8,700,000

Project Name: T6 Breakbulk and Seismic Improvements

Map ID: 48 **Time Frame (Years):** 3 years **Total Cost:** \$18,000,000
Project Type: **Year of Cost Estimate:**
Operation Area: Rivergate **Federal:**
Project Description: Modify portions of 603 and 604 to support breakbulk cargo handling. **State:**
Upgrades to 603 and 604 crane rails, upgrades seismic performance of **City:**
operating area, replace and repair pavement to support mobile harbor crane **SDC:**
operations along berth in yard area landward of berth603. **Port Share**
Purpose: Capture demand for breakbulk cargo **Committed:**
MW NUM: 701601 **Port Share**
RTP Related: **Forecasted:**
Recent Study: Concept of Operations and Concept of Design for MHC **Private:**
operations at T6 B603/604 **Other:**
Port Strategic Area: **Unfunded:**
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: T6 Internal Roadway

Map ID: 49 **Time Frame (Years):** 10 years **Total Cost:** \$6,100,000
Project Type: Marine **Year of Cost Estimate:** 2018
Operation Area: Rivergate **Federal:**
Project Description: Provide road connection between Suttle Road site and T6 main yard. **State:**
Purpose: This will connect the main T6 yard to the Suttle Road development site. **City:**
MW NUM: **SDC:**
RTP Related: **Port Share**
Recent Study: **Committed:**
Port Strategic Area: Connect People and Businesses to Markets **Port Share**
 RTP 2045 Illustrative Conditioned Project **Forecasted:**
 RTP 2045 Constrained Identified in STIP **Private:**
Unfunded: \$6,100,000 **Other:**

Project Name: Columbia River Mouth Jetty Refurbishment

Map ID: 50 **Time Frame (Years):** 5 years **Total Cost:** \$239,000,000
Project Type: Marine **Year of Cost Estimate:** 2016
Operation Area: Rivergate **Federal:** \$50,000,000
Project Description: With Jetty A and North Jetty now complete, complete refurbishment of the South Jetty at the mouth of the Columbia River. **State:**
 City:
 SDC:

Purpose: This is a critical repair of the jetties at the Columbia River Bar. **Port Share**
 Committed:
 Port Share
 Forecasted:
 Private:
 Other:
 Unfunded: \$189,000,000

MW NUM:
RTP Related:
Recent Study:
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Lower Columbia River Channel Maintenance Plan

Map ID: 51 **Time Frame (Years):** 5 years **Total Cost:** \$1,500,000
Project Type: Marine **Year of Cost Estimate:**
Operation Area: Rivergate **Federal:**
Project Description: Assist the Army Corps to establish a federally required 20 year strategic plan to manage deposition of Columbia River dredge material from the navigation channel. **State:**
 City:
 SDC:

Purpose: Ensure there is sufficient dredged material disposal capacity for a minimum of 20 years. **Port Share**
 Committed:
 Port Share
 Forecasted:
 Private:
 Other:
 Unfunded: \$1,500,000

MW NUM:
RTP Related:
Recent Study: 2003 Feasibility Report
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Rivergate ITS

Map ID: 52 **Time Frame (Years):** 5 years
Project Type: ITS
Operation Area: Rivergate
Project Description: Intelligent Transportation System in Rivergate.

Total Cost: \$480,000
Year of Cost Estimate: 2007

Federal:
State:

City:

SDC:

Purpose: Improve traffic efficiency in Rivergate by connecting information about the roadway system to ODOT's Highway information systems.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$480,000

MW NUM:

RTP Related: 10373

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- | | |
|---|--|
| <input checked="" type="checkbox"/> RTP 2045 Illustrative | <input type="checkbox"/> Conditioned Project |
| <input checked="" type="checkbox"/> RTP 2045 Constrained | <input type="checkbox"/> Identified in STIP |

Project Name: Marine Dr. Improvement Phase 2

Map ID: 53 **Time Frame (Years):** 20 years
Project Type: Road
Operation Area: Rivergate
Project Description: Construct rail overcrossing on Marine Dr.

Total Cost: \$13,644,200
Year of Cost Estimate: 2003

Federal:

State:

City:

SDC:

Purpose: Avoid road/rail conflict.

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$13,644,200

MW NUM:

RTP Related: 10379

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- | | |
|---|--|
| <input checked="" type="checkbox"/> RTP 2045 Illustrative | <input type="checkbox"/> Conditioned Project |
| <input checked="" type="checkbox"/> RTP 2045 Constrained | <input type="checkbox"/> Identified in STIP |

Project Name: Kenton Rail Line Upgrade

Map ID: 56 **Time Frame (Years):** 10 years **Total Cost:** \$25,382,000
Project Type: Rail **Year of Cost Estimate:** 2003
Operation Area: Rivergate **Federal:**
Project Description: Upgrade existing track to second main track with new double track from Peninsula Junction to I-205 and increase track speeds between North Portland, Peninsula Junction, to Reynolds on UP's Kenton Line. **State:**
Purpose: Expand rail capacity and reduce delays for greater efficiency. **City:**
MW NUM: **SDC:**
RTP Related: **Port Share**
Recent Study: I-5 Rail Capacity Study (HDR, 2003) **Committed:**
Port Strategic Area: Connect People and Businesses to Markets **Port Share**
Forecasted:
 RTP 2045 Illustrative Conditioned Project **Private:**
 RTP 2045 Constrained Identified in STIP **Other:**
Unfunded: \$25,382,000

Project Name: I-5 Columbia River Bridge

Map ID: 57 **Time Frame (Years):** 10 years **Total Cost:** \$2,982,000,000
Project Type: Road **Year of Cost Estimate:** 2002
Operation Area: Rivergate **Federal:**
Project Description: Increase the number of lanes and add transit capacity across the river. **State:**
Purpose: Increase multi-modal capacity across the Columbia River and relieve congestion. **City:**
MW NUM: **SDC:**
RTP Related: 10893 **Port Share**
Recent Study: I-5 Transportation and Trade Partnership Final Strategic Plan (2002) **Committed:**
Port Strategic Area: Connect People and Businesses to Markets **Port Share**
Forecasted:
 RTP 2045 Illustrative Conditioned Project **Private:**
 RTP 2045 Constrained Identified in STIP **Other:**
Unfunded: \$2,982,000,000

Project Name: BNSF Fallbridge Double Tracking

Map ID: 58 **Time Frame (Years):** 10 years
Project Type: Rail
Operation Area: Rivergate
Project Description: Double-track the Fallbridge line to Washougal.

Purpose: Increases capacity of the BNSF east-west mainline serving Port of Portland.

MW NUM:

RTP Related:

Recent Study: Port Rail Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$72,000,000
Year of Cost Estimate:

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$72,000,000

Project Name: Time Oil Road Reconstruction

Map ID: 59 **Time Frame (Years):** 10 years
Project Type: Road
Operation Area: Rivergate
Project Description: Reconstruct Time Oil Road.

Purpose: Provide improved access to South Rivergate industrial area.

MW NUM:

RTP Related: 11654

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$9,000,000
Year of Cost Estimate: 2013

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$9,000,000

Project Name: Rivergate Boulevard Overcrossing

Map ID: 60
Project Type: Road
Operation Area: Rivergate
Project Description: Grade separate the South Rivergate Lead at Rivergate Blvd.

Time Frame (Years): 5 years

Total Cost: \$26,158,076
Year of Cost Estimate: 2018
Federal: \$16,723,093
State: \$1,112,970
City: \$4,322,013

Purpose: Improve rail and vehicle traffic flow in Rivergate Industrial District.

MW NUM: 700687

RTP Related: 11659

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share
Committed: \$4,000,000
Port Share
Forecasted:
Private:
Other:
Unfunded:

Project Name: Bonneville Rail Yard Build Out

Map ID: 61
Project Type: Rail
Operation Area: Rivergate
Project Description: Construct two interior yard tracks and complete the double track lead from the wye at the east end of the yard to Barnes Yard.

Time Frame (Years): 10 years

Total Cost: \$3,600,000
Year of Cost Estimate: 2013
Federal:
State:
City:
SDC:

Purpose: Add rail staging capacity for South Rivergate.

MW NUM:

RTP Related: 11652

Recent Study: Port Rail Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share
Committed:
Port Share
Forecasted:
Private:
Other:
Unfunded: \$3,600,000

Project Name: Ramsey Yard Utilization

Map ID: 62 **Time Frame (Years):** 10 years
Project Type: Rail
Operation Area: Rivergate
Project Description: Connect existing set out track with industrial lead.

Total Cost: \$1,700,000
Year of Cost Estimate: 2013

Federal:
State:

City:

SDC:

Purpose: Improve unit train staging capabilities at Ramsey Rail Yard.

MW NUM:

RTP Related: 11653

Recent Study: Port Rail Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$1,700,000

Project Name: T4 Berth 410, 411 Rail Yard Improvements

Map ID: 64 **Time Frame (Years):** 10 years
Project Type: Rail
Operation Area: Rivergate
Project Description: Construct additional rail track in the Berth 410 and 411 rail yard.

Total Cost: \$7,800,000
Year of Cost Estimate: 2015

Federal:

State:

City:

SDC:

Purpose: Improve the efficiency of the rail yard by creating additional rail capacity.

MW NUM: 102052

RTP Related:

Recent Study: Port Rail Plan

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$7,800,000

Project Name: T4 Second Entrance

Map ID: 65 **Time Frame (Years):** 5 years
Project Type: Road
Operation Area: Rivergate
Project Description: Design and construct a second entrance to Terminal 4.

Purpose: Support additional rail expansion at the terminal.

MW NUM:

RTP Related:

Recent Study: Terminal 4 Pier 1 Facility Plan

Port Strategic Area: Connect People and Businesses to Markets

- | | |
|--|--|
| <input type="checkbox"/> RTP 2045 Illustrative | <input type="checkbox"/> Conditioned Project |
| <input type="checkbox"/> RTP 2045 Constrained | <input type="checkbox"/> Identified in STIP |

Total Cost: \$14,200,000
Year of Cost Estimate: 2018

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$14,200,000

Project Name: T4 Pier 1 Tracks 704-709

Map ID: 66 **Time Frame (Years):** 5 years
Project Type: Marine
Operation Area: Rivergate
Project Description: Perform upgrades and rehabilitation on tracks 704-709.

Purpose: Support rail car storage needs of Terminal 4 tenants

MW NUM:

RTP Related: 11208

Recent Study: Port Rail Plan

Port Strategic Area: Connect People and Businesses to Markets

- | | |
|---|--|
| <input checked="" type="checkbox"/> RTP 2045 Illustrative | <input type="checkbox"/> Conditioned Project |
| <input checked="" type="checkbox"/> RTP 2045 Constrained | <input type="checkbox"/> Identified in STIP |

Total Cost: \$1,000,000
Year of Cost Estimate: 2018

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$1,000,000

Project Name: Terminal 4 Pier 1 Site Preparation

Map ID: 67 **Time Frame (Years):** 5 years **Total Cost:** \$38,000,000
Project Type: Marine **Year of Cost Estimate:** 2015
Operation Area: Rivergate **Federal:**
Project Description: Remove Berths 405 and 408, the grain leg platform and tower, and the grain elevator in the Pier 1 area of Terminal 4. Estimated \$18 M for phase 1 (2015 year estimate) and \$24M for phase 2 (2020 year estimate) **State:**
Purpose: This project will facilitate the redevelopment of approximately 30 acres of vital marine industrial property in the Portland Harbor. **City:**
MW NUM: 701210, 701211, 701209 **SDC:**
RTP Related: 11208 **Port Share**
Recent Study: Terminal 4 Pier 1 Facility Plan (TEC Inc.) **Committed:**
Port Strategic Area: Drive Regional Prosperity **Port Share**
Forecasted:
 RTP 2045 Illustrative Conditioned Project **Private:**
 RTP 2045 Constrained Identified in STIP **Other:**
Unfunded: \$38,000,000

Project Name: Barnes to Terminal 4 Rail

Map ID: 68 **Time Frame (Years):** 5 years **Total Cost:** \$10,543,000
Project Type: Rail **Year of Cost Estimate:** 2016
Operation Area: Rivergate **Federal:**
Project Description: Provide a new track from Barnes Yard to Terminal 4. Includes replacement of Lombard Bridge. **State:**
Purpose: Improve rail access to Terminal 4. **City:**
MW NUM: **SDC:**
RTP Related: 11355 **Port Share**
Recent Study: Marine Terminal Master Plan 2020 (2003) **Committed:**
Port Strategic Area: Drive Regional Prosperity **Port Share**
Forecasted:
 RTP 2045 Illustrative Conditioned Project **Private:**
 RTP 2045 Constrained Identified in STIP **Other:**
Unfunded: \$10,543,000

Project Name: St. Johns Pedestrian District

Map ID: 72 **Time Frame (Years):** 5 years **Total Cost:** \$3,346,000
Project Type: Road **Year of Cost Estimate:** 2005
Operation Area: Rivergate **Federal:** \$3,002,365
Project Description: Improvements could include restriping, curb extensions and other pedestrian and bicycle amenities on Lombard St. that do not impede truck movement, as well as intersection improvements and signalization. **State:**
 City: \$343,635
 SDC:
Purpose: Maintain truck movement and minimize conflicts with bicycles and pedestrians between Philadelphia Ave. and Lombard St. at Pier Park. **Port Share**
 Committed:
 Port Share
 Forecasted:
 Private:
 Other:
 Unfunded:

MW NUM:
RTP Related: 10182
Recent Study: St. Johns Truck Strategy Report & Recommendation (2001)
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Willamette River Channel Deepening

Map ID: 73 **Time Frame (Years):** 10 years **Total Cost:** \$200,000,000
Project Type: Marine **Year of Cost Estimate:**
Operation Area: Rivergate **Federal:**
Project Description: Deepen the portions of the Willamette River with deep draft infrastructure to - 43' where appropriate. **State:**
 City:
 SDC:
Purpose: To allow Willamette River terminals to benefit from the Columbia River's controlling depth. To follow maintenance to -40 feet. **Port Share**
 Committed:
 Port Share
 Forecasted:
 Private:
 Other:
 Unfunded: \$200,000,000

MW NUM:
RTP Related:
Recent Study:
Port Strategic Area: Connect People and Businesses to Markets
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Berth Deepening at T4

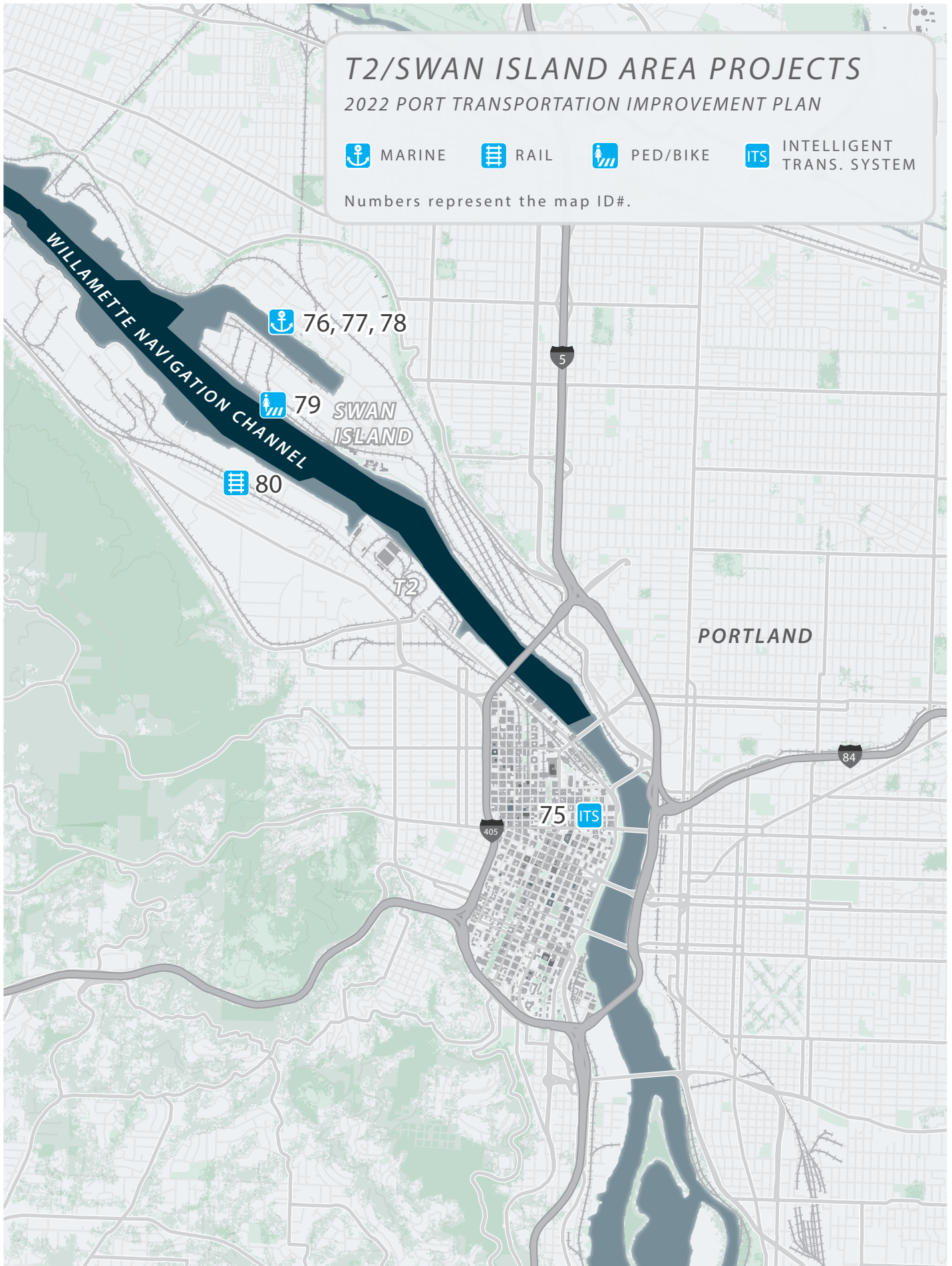
Map ID: 74	Time Frame (Years): 10 years	Total Cost:
Project Type: Marine		Year of Cost Estimate:
Operation Area: Rivergate		Federal:
Project Description: Deepen berths at Terminal 4 to allow deeper draft vessels to transit the planned 43 foot channel. Tied to Willamette River Channel Deepening. Cost TBD.		State:
		City:
		SDC:
Purpose: Allow better utilization of Panamax-class bulk vessels.		Port Share Committed:
		Port Share Forecasted:
MW NUM: 101999		Private:
RTP Related:		Other:
Recent Study:		Unfunded:
Port Strategic Area: Connect People and Businesses to Markets		
<input type="checkbox"/> RTP 2045 Illustrative	<input type="checkbox"/> Conditioned Project	
<input type="checkbox"/> RTP 2045 Constrained	<input type="checkbox"/> Identified in STIP	

T2/SWAN ISLAND AREA PROJECTS

2022 PORT TRANSPORTATION IMPROVEMENT PLAN

-  MARINE
-  RAIL
-  PED/BIKE
-  INTELLIGENT TRANS. SYSTEM

Numbers represent the map ID#.



Project Name: PSU ITS Expansion

Map ID: 75 **Time Frame (Years):** 5 years **Total Cost:**
Project Type: ITS **Year of Cost Estimate:**
Operation Area: T2/Swan Island **Federal:**
Project Description: Expand PSU's existing web based ITS "count sensor" program beyond the freeway to some key arterials throughout the region and create a repository of regional freight data. **State:**
City:
SDC:

Purpose: To secure truck flow and congestion data. **Port Share**
Committed:
Port Share
Forecasted:
Private:
Other:
Unfunded:

MW NUM:
RTP Related: 11104
Recent Study:
Port Strategic Area: Connect People and Businesses to Markets

RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Dredge Oregon Pipe, Scows and Pontoons

Map ID: 76 **Time Frame (Years):** 5 years **Total Cost:** \$3,000,000
Project Type: Marine **Year of Cost Estimate:** 2014
Operation Area: T2/Swan Island **Federal:**
Project Description: Acquire 2,000 feet of dredge pipe, pontoons, anchor scows and anchors. **State:**
City:
SDC:

Purpose: Allow Dredge Oregon to make full use of recent repower and pump material 14,000 feet. **Port Share**
Committed:
Port Share
Forecasted:
Private:
Other:
Unfunded: \$3,000,000

MW NUM: 700445
RTP Related:
Recent Study:
Port Strategic Area: Promote Excellence in Organizational Effectiveness

RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: North Willamette Greenway Trail

Map ID: 79 **Time Frame (Years):** 20 years **Total Cost:** \$500,000
Project Type: Bike/Ped **Year of Cost Estimate:** 2007
Operation Area: T2/Swan Island **Federal:**
Project Description: Pedestrian and bicycle trail from Kelly Point Park to the Steel Bridge along the **State:**
Willamette River. The money associated for this project is for a study only. **City:**
SDC:
Purpose: Improve pedestrian and bicycle connectivity in North Portland. Coordinate **Port Share**
implementation with the City of Portland. **Committed:**
MW NUM: **Port Share**
RTP Related: 11643 **Forecasted:**
Recent Study: **Private:**
Port Strategic Area: Connect People and Businesses to Markets **Other:**
Unfunded: \$500,000
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Project Name: Portland Terminal Railroad Power Switches

Map ID: 80 **Time Frame (Years):** 5 years **Total Cost:** \$10,805,000
Project Type: Rail **Year of Cost Estimate:** 2012
Operation Area: T2/Swan Island **Federal:**
Project Description: Install Dispatcher Controlled Power Switches between Lake Yard and **State:**
Terminal 2. **City:**
SDC:
Purpose: Will reduce blockage of mainline for BNSF, UPRR and Amtrak. **Port Share**
MW NUM: **Committed:**
RTP Related: **Port Share**
Recent Study: Port Rail Plan **Forecasted:**
Port Strategic Area: Connect People and Businesses to Markets **Private:**
Unfunded: \$10,805,000
 RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

EAST COUNTY PROJECT AREAS

2022 PORT TRANSPORTATION IMPROVEMENT PLAN



AVIATION

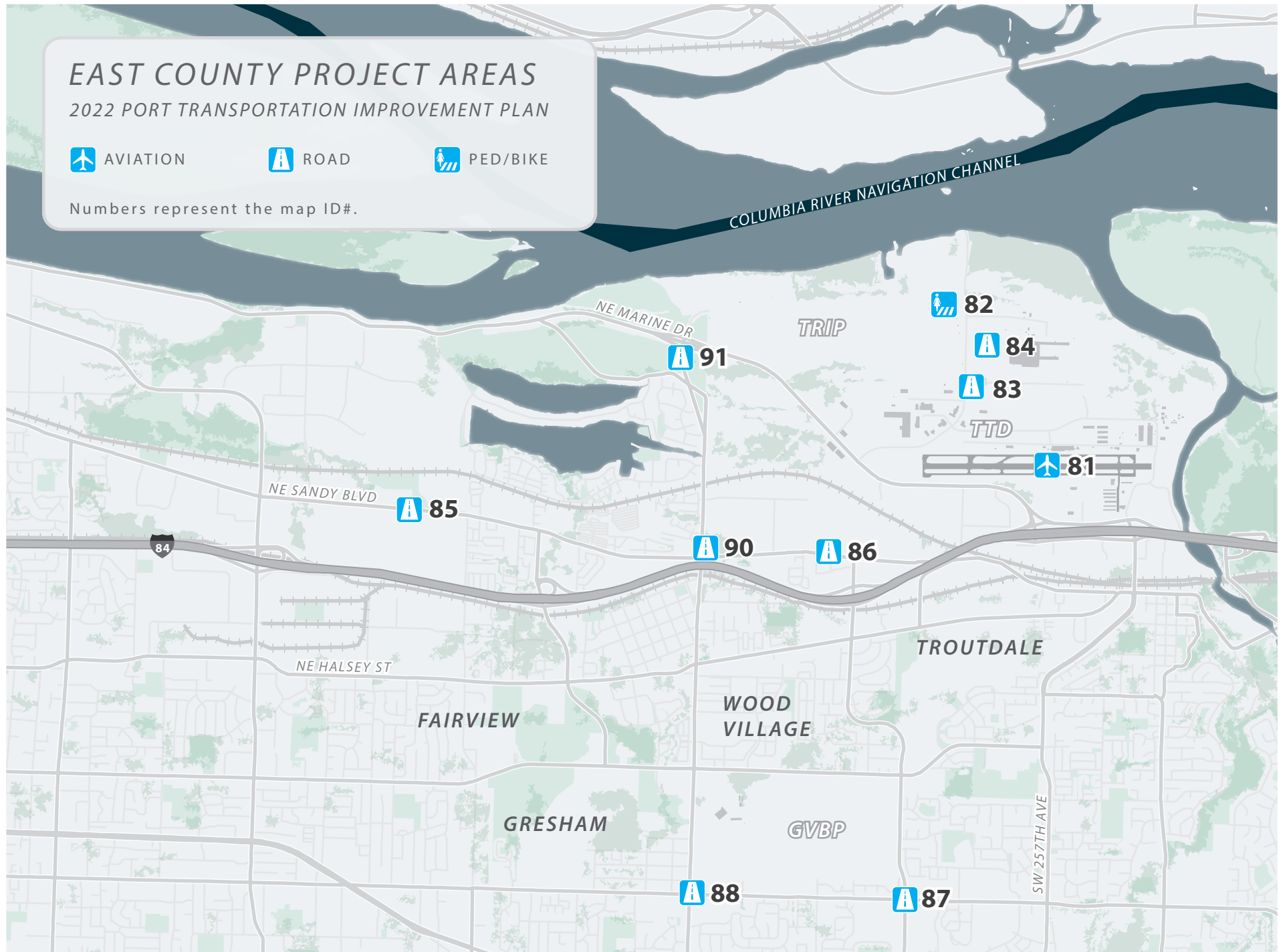


ROAD



PED/BIKE

Numbers represent the map ID#.



Project Name: Sundial Road at Graham Road

Map ID: 83 Time Frame (Years): years
Project Type: Road
Operation Area: East County
Project Description: Install traffic signal.

Total Cost: \$1,000,000
Year of Cost Estimate: 2017

Federal:
State:

City:

SDC:

Purpose: Address traffic growth at Troutdale Reynolds Industrial Park.

MW NUM:

RTP Related: 11190

Recent Study: Troutdale Reynolds Traffic Study

Port Strategic Area: Drive Regional Prosperity

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$1,000,000

Project Name: TRIP Road Access Phase 3

Map ID: 84 Time Frame (Years): 10 years
Project Type: Road
Operation Area: East County
Project Description: Road improvements to serve Phase 3 industrial development. Actual project will be developed in coordination with stakeholders.

Total Cost:
Year of Cost Estimate:

Federal:

State:

City:

SDC:

Purpose: Address off-site transportation impacts.

MW NUM: 700215

RTP Related:

Recent Study:

Port Strategic Area: Drive Regional Prosperity

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded:

Project Name: NE Hogan at NE Stark Street

Map ID: 87
Project Type: Road
Operation Area: East County
Project Description: Add right turn lanes on all approaches and second northbound and southbound left turn lanes.

Purpose: Address intersection capacity affecting access to Gresham Vista Business Park.

MW NUM:

RTP Related: 10511
Recent Study: East Metro Connections Plan
Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$1,908,431
Year of Cost Estimate: 2017

Federal:
State:
City:
SDC:
Port Share Committed:
Port Share Forecasted:
Private:
Other:
Unfunded: \$1,908,431

Project Name: NE 223rd at Stark

Map ID: 88
Project Type: Road
Operation Area: East County
Project Description: Add eastbound and northbound right turn lanes and southbound left turn lanes.

Purpose: Address intersection capacity affecting access to Gresham Vista Business Park.

MW NUM:

RTP Related: 10473
Recent Study: East Metro Connections Plan
Port Strategic Area: Drive Regional Prosperity

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$1,196,756
Year of Cost Estimate: 2017

Federal:
State:
City:
SDC:
Port Share Committed:
Port Share Forecasted:
Private:
Other:
Unfunded: \$1,196,756

Project Name: NE 223rd Avenue Widening

Map ID: 90
Project Type: Road
Operation Area: East County
Project Description: Widen to three lanes between Halsey Street and Marine Drive.

Purpose: Upgrade the facility to major collector urban street standards.

MW NUM:

RTP Related: 10388, 10389

Recent Study:

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$4,437,809
Year of Cost Estimate: 2017

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$4,437,809

Project Name: NE Marine Drive -- NE 223rd Ave to Gresham Limits

Map ID: 91
Project Type: Road
Operation Area: East County
Project Description: Reconstruct NE Marine Drive from NE 223rd Avenue to the Gresham City limits to a two-way, five-lane cross section. Project includes constructing sidewalks and bicycle lanes where there are currently gaps.

Purpose: Project identified in Multnomah County Capital Improvement Plan

MW NUM:

RTP Related:

Recent Study: Multnomah County CIP

Port Strategic Area: Connect People and Businesses to Markets

- RTP 2045 Illustrative Conditioned Project
 RTP 2045 Constrained Identified in STIP

Total Cost: \$19,350,000
Year of Cost Estimate: 2020

Federal:

State:

City:

SDC:

Port Share

Committed:

Port Share

Forecasted:

Private:

Other:

Unfunded: \$19,350,000