Clatsop County Housing Inventories

Astoria Infrastructure Summary Memo

February 24, 2025

Introduction

This summary outlines key capital improvements in current infrastructure plans for the City of Astoria that will enable housing production on buildable lands. It includes descriptions, costs, and timelines of key issues and improvements identified in the City's infrastructure plans including the City of Astoria's Water System Master Plan (2021), The Wastewater Treatment Plant Improvement Project (2024), and the Transportation System Plan (2013). This summary also includes project information from the City's most recent Capital Improvement Plan (CIP) (2024).

The key capital improvements identified in this memorandum are currently unfunded with the exception of a few grant or loan funded projects. It is the current practice in Astoria that developers provide infrastructure improvements (including improvements to existing under-capacity or substandard infrastructure) to support their proposal. Astoria's Public Works Departments notes that it would be advantageous to the development community as a whole, including affordable developments, to have as many of the identified improvements as possible completed. Only by implementing the projects identified below can we reduce the financial burden on proposed development, including housing projects.

Astoria Water System Master Plan

Introduction

The City of Astoria, located in northwestern Clatsop County, Oregon, provides water services to local residents and businesses. This Water System Master Plan outlines the City's water production and distribution facilities, operations, and adherence to state and federal drinking water regulations. It also identifies necessary capital improvements to address system deficiencies, ensures ongoing maintenance, and support future growth in the service area.

Current Conditions

The City's water system serves about 10,000 residents, 3,000 people in seven nearby water districts, and various commercial and industrial users, including major consumers like breweries and the fishing industry. Water is sourced from Bear and Cedar Creeks and their reservoirs: Wickiup Lake, Middle Lake, and Bear Creek Reservoir. It is then treated at a slow sand filtration plant near Bear Creek Reservoir through filtration and chlorination, and travels through a 12-mile, 21-inch transmission main to the distribution system. Four reservoir locations provide storage for routine operations and fire suppression. Approximately 80 miles of piping distributes the water, with over 2 million gallons produced and distributed daily, reaching over 4 million gallons during peak summer months.

Future Needs

Astoria's water system is designed to handle current and future demands, focusing on reliability and regulatory standards. While residential growth is minimal, commercial and industrial expansion, particularly in brewing and fishing, is expected to increase water usage. The average daily water demand, 4.01 million gallons in 2020, is projected to rise to 4.39 million gallons by 2040. Astoria will continue providing water to nearby districts but will not accept new external users. Major users, like the Port of Astoria and local breweries, could add 75,000 gallons per day to the demand by 2040.

The City's water rights and infrastructure are sufficient for the next 50 years, but supply resiliency is a priority due to dependency on a single source and seismic vulnerability. Recommendations include seismic hardening and exploring new sources from Big Creek and Youngs River, along with finalizing supply resiliency goals to ensure a reliable water supply and mitigation of natural disaster disruptions.

Project Summary Table

Projects are prioritized into four categories: high, medium, low, and aspirational. These categories are based on the need and feasibility of each project as outlined in the 2024 CIP. These projects are shown from highest to lowest priority. Highest priority projects are in bold italics.

Description	Cost	Priority/Funded
Pipeline Road Waterline Resilience Project	***$2,930,000***	***High/Yes***
16th St Distribution Waterline Replacement Project	***$2,790,000***	***High/Yes***
Irving Ave. (20th - 28th St.) Waterline Resiliency Project	***$1,894,662***	***High/Yes***
Spur 14 Intake	***$600,000***	***High/No***
Install 600,000-gallon clearwell tank at WTP	***$5,000,000***	***High/No***
Install 1,100 LF 12" main from 16th St/Jerome Ave to 18th St/Irving Ave	***$460,000***	***High/No***
Install 10,350 LF 12" main to complete waterfront looped backbone	$4,310,000	High/No
Replace existing water meters with AMR system	$1,500,000	High/No
Install 430 LF 8" main to 2nd St/Franklin Ave, 2,500 LF 12" main from 1st St/Kensington Ave to 6th St/Grand Ave, 1,200 LF 12" main from 6th St/Grand Ave to 3rd St/Franklin Ave	$1,680,000	High/No
Install 900 LF 12" main from Portway St/Industry St to Hamburg St/Industry St	$370,000	High/No
Install 2,500 LF 12" main from the Port to W Marine View/Denver St	$1,040,000	High/No
Install 1,100 LF 14", 1400 LF 18" transmission main from Reservoir 2 to Low Pressure Zone	$1,280,000	High/No
Install 2,600 LF 8" main from 8th St/Irving Ave to 1st St/W Grand Ave	$850,000	High/No
Project to improve fire flow at Skyline	$580,000	High/No
Install fire pump at East Astoria Tanks	$350,000	High/No

a. Upgrade existing main from 35th St/Irving Ave to 36th St/Grand Ave (1,200 LF) b. Install new main from East Astoria pipeline (Emerald Heights) to 43rd St/Franklin Ave (2,500 LF)"	$1,430,000	High/No
Little Bear Creek Waterline Resilience Project	***$5,000,000***	***Medium/No***
Bear Creek Dam Emergency Spillway Project	***$3,878,000***	***Medium/No***
In downtown area: loop existing 4" dead-ends to existing 10" and 12" mains where possible or relocate services to existing 10" and 12" mains where possible.	$100,000	Medium/No
Install 2,100 LF 10" main from 2nd St/Franklin Ave to Lincoln St/W Grand Ave, 2,430 LF 10" main from Lincoln St/W Grand Ave to W Lexington St/W Grand Ave	$1,680,000	Medium/No
Install 900 LF 8" main from Wall St and SE 2nd St to Howard St	$290,000	Medium/No
Install 300 LF 8" main on Washington St from W Bond St to Alameda Ave	$100,000	Medium/No
Little Bear Creek Waterline Resilience Project	$5,000,000	Medium/No
Bear Creek Dam Emergency Spillway Project	$3,878,000	Medium/No
In downtown area: loop existing 4" dead-ends to existing 10" and 12" mains where possible or relocate services to existing 10" and 12" mains where possible.	$100,000	Medium/No
Install 2,100 LF 10" main from 2nd St/Franklin Ave to Lincoln St/W Grand Ave, 2,430 LF 10" main from Lincoln St/W Grand Ave to W Lexington St/W Grand Ave	$1,680,000	Medium/No
Install 900 LF 8" main from Wall St and SE 2nd St to Howard St	$290,000	Medium/No
Install 300 LF 8" main on Washington St from W Bond St to Alameda Ave	$100,000	Medium/No
Replace gas chlorination system with liquid hypochlorite system	$260,000	Medium/No
Install 800 LF 12" main from 11th St/James Ave to 11th St /Kensington Ave	$330,000	Low/No
Install 900 LF 8" main from 9th St/Klaskanine Ave to 9th St/McClure Ave	$290,000	Low/No
Install 370 LF 8" main from Franklin Ave to Grand Ave (along 26th St or 27th St)	$120,000	Low/No
Install 350 LF 6" main from 51st St/Cedar St to 51st St/Lief Erikson Dr, 50 LF 2" main to extend dead-end service on Lief Erikson Dr	$110,000	Low/No
Install 2,750 LF 12" main from 6th St/Kensington Ave to 15th St/Lexington Ave	$1,140,000	Low/No
Replace Navy Hospital Swamp Line	$500,000	Low/No
Replace 21" meters (2) for Reservoir No. 3	$100,000	Low/No
Replace 10" meter and 12" meter for Reservoir No. 2	$100,000	Low/No
Replace Cedar Creek culvert with bridge	$350,000	Low/No
Install new slide gates on Bear Creek and Cedar Creek diversion structures	$100,000	Low/No

Replace or retrofit in-town reservoirs	$15,000,000	Low-Aspirational/ No
Install 12 miles 24" transmission main	$43,330,000	Low–Aspirational/ No

Project #	Category	Description	Estimated Capital Cost (2020$)	Notes
Priority: High				
1	Distribution System	Install 10350 LF 12" main to complete waterfront looped backbone	$ 4,310,000	Improve available fire flow to a large portion of the Low Pressure Zone along the west waterfront.
2	Distribution System	Install 900 LF 12" main from Portway St/Industry St to Hamburg St/Industry St	$ 370,000	Improve fire flows and provide for future growth at Port and on west end of City.
3	Distribution System	Install 2500 LF 12" main from the Port to W Marine View/Denver St	$ 1,040,000	
4	Distribution System	Install 1100 LF 14", 1400 LF 18" transmission main from Reservoir 2 to Low Pressure Zone	$ 1,280,000	Address excessive headloss during high flow conditions. Existing water main is beyond reasonable useful life expectancy.
5	Distribution System	Install 2600 LF 8" main from 8th St/Irving Ave to 1st St/W Grand Ave	$ 850,000	Improve fire flow and static pressures to an area that is hydraulically isolated due to undersized/old water main.
6	Distribution System	Project to improve fire flow at Skyline	$ 580,000	
7	Distribution System	Install fire pump at East Astoria Tanks	$ 350,000	
8	Distribution System	a. Upgrade existing main from 35th St/Irving Ave to 36th St/Grand Ave (1200 LF) b. Install new main from East Astoria pipeline (Emerald Heights) to 43rd St/Franklin Ave (2500 LF)	$ 1,430,000	
9	Distribution System	Install 1100 LF 12" main from 16th St/Jerome Ave to 18th St/Irving Ave	$ 440,000	Increase volume to central part of town. Backup for 21" from Res 3 to Res 2.
10	Distribution System	Replace existing water meters with AMR system.	$ 1,500,000	4277 meters, budgetary cost $350 per service connection
11	Distribution System	Install 430 LF 8" main to 2nd St/Franklin Ave, 2500 LF 12" main from 1st St/Kensington Ave to 6th St/Grand Ave, 1200 LF 12" main from 6th St/Grand Ave to 3rd St/Franklin Ave	$ 1,680,000	Improve fire flows at W Exchange and Duane St near 1st St. Located in an active slide area.
12	Distribution System	Install 2800 LF 12" main from 20th St/Irving Ave to 28th St/Irving Ave	$ 1,170,000	Increase volume to central part of town. Backup for 21" from Res 3 to Res 2. Located in an active slide area.
13	Headworks	Install 600,000 gallon clearwell tank at WTP	$ 700,000	
Priority: Medium				
14	Distribution System	In downtown area: loop existing 4" dead-ends to existing 10" and 12" mains where possible or relocate services to existing 10" and 12" mains where possible.	$ 100,000	Improve circulation and increase pressure and fire flows in downtown area.
15	Distribution System	Install 2100 LF 10" main from 2nd St/Franklin Ave to Lincoln St/W Grand Ave, 2430 LF 10" main from Lincoln St/W Grand Ave to W Lexington St/W Grand Ave	$ 1,680,000	Replace line that has excessive repairs on W Grand Ave.
16	Distribution System	Install 900 LF 8" main from Wall St and SE 2nd St to Howard St	$ 290,000	Replace lines that require excessive repairs in south Astoria.
17	Distribution System	Install 300 LF 8" main on Washington St from W Bond St to Alameda Ave	$ 100,000	Existing line crosses private property. No easement found.
18	Headworks	Replace gas chlorination system with liquid hypochlorite system	$ 260,000	Wait until required at the WWTP. Assume liquid hypochlorite system using existing chlorine room.

Project #	Category	Description	Estimated Capital Cost (2020$)	Notes
Priority: Low				
19	Distribution System	Install 800 LF 12" main from 11th St/James Ave to 11th St/Kensington Ave	$ 330,000	Replace line that has excessive repairs and improve fire flows on 11th St.
20	Distribution System	Install 900 LF 8" main from 9th St/Klaskanine Ave to 9th St/McClure Ave	$ 290,000	Very old pipe in poor condition
21	Distribution System	Install 370 LF 8" main from Franklin Ave to Grand Ave (along 26th St or 27th St)	$ 120,000	Improve flows on Grand Ave
22	Distribution System	Install 350 LF 6" main from 51st St/Cedar St to 51st St/Lief Erikson Dr, 50 LF 2" main to extend dead-end service on Lief Erikson Dr	$ 110,000	Improve circulation on small dead end line on Lief Erikson Dr
23	Distribution System	Install 2750 LF 12" main from 6th St/Kensington Ave to 15th St/Lexington Ave	$ 1,140,000	
24	Distribution System	Replace Navy Hospital Swamp Line	$ 500,000	
25	Reservoirs	Replace 21" meters (2) for Reservoir No. 3	$ 100,000	Improve flow monitoring accuracy.
26	Reservoirs	Replace 10" meter and 12" meter for Reservoir No. 2	$ 100,000	Improve flow monitoring accuracy.
27	Watershed	Replace Cedar Creek culvert with bridge	$ 350,000	
28	Watershed	Install new slide gates on Bear Creek and Cedar Creek diversion structures	$ 100,000	
Priority: Aspirational				
29	Reservoirs	Replace or retrofit in-town reservoirs	$ 15,000,000	
30	Transmission	Install 12 miles 24" transmission main	$ 43,330,000	

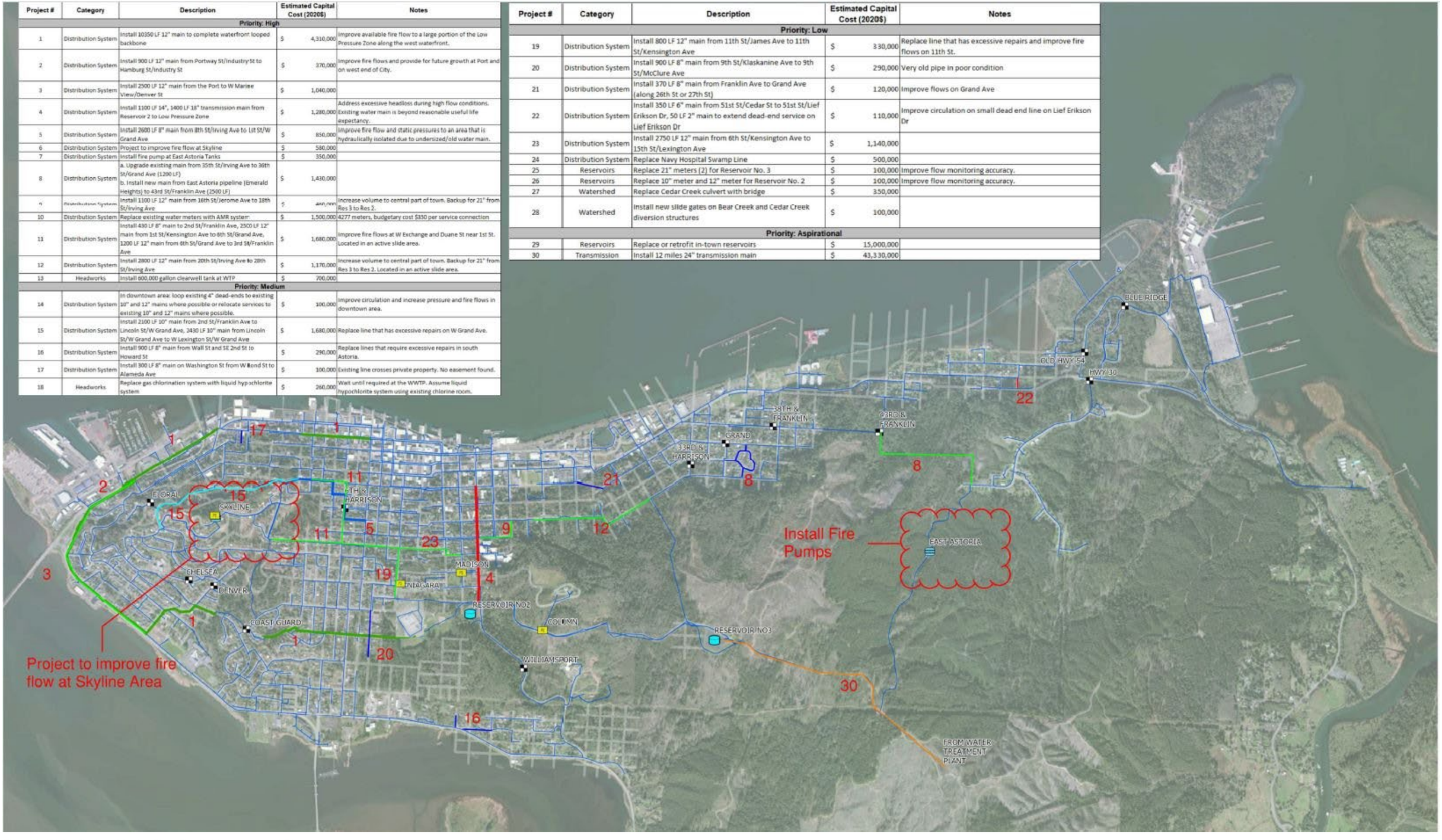

Figure 1: Water System Master Plan, Capital Improvement Plan

Astoria Wastewater Treatment Plant

The Wastewater Treatment Plant (WWTP) Improvement Project aims to ensure compliance with the City's National Pollutant Discharge Elimination System Permit while accommodating the wastewater needs of future populations and brewery industry growth. The project includes installing a magnetic flow meter in an influent box, a 2-channel screening system with washer-compactors, and a vortex grit basin with associated washing and dewatering equipment. Additionally, a flow distribution structure will direct flow to treatment cells, and lagoon upgrades will involve installing baffle curtains, additional aeration, solids removal, and a recirculation system. An odor control system using biofilter technology will also be installed at the new headworks to enhance the facility's capacity and functionality.

The most recent CIP notes that the WWTP, interceptor system, and sewer lift stations were built in 1974. The plan notes that the age of the wastewater collection system is highly variable due to the varying ages of piping, with much of the piping built in the early 1900s. Approximately 1-20 million gallons of sewage is treated daily. The City maintains 72 miles of sewage collection piping.

Project Summary Table

Individual upgrades for the WWTP and wastewater collection system are displayed below along with their costs according to the most recent 2024 CIP. Projects are categorized into high, medium, low, and aspirational categories.

Description	Cost	Priority/Funded
WWTP Headworks Improvements Project	***$9,869,232***	***High/Yes***
Sewage Lift Stations Rehabilitation Project	***$3,670,000***	***High/Yes***
7th St and Olney Sanitary Sewer Repair (Fultano's)	$400,000	High/No
32nd St & Franklin Collapsed Sanitary Sewer	$150,000	High/No
Combined Sewer Overflow (CSO) Phase 5	$18,000,000	High/No
Wastewater Collection System Assessment & Master Plan	***$1,500,000***	***Medium/No***
Sanitary Sewer Pipe Interceptor Comprehensive Evaluation (including cleaning) and Replacement/Rehabilitation Project	***$10,000,000***	***Medium/No***
PS#6 Rehabilitation Project	$100,000	Medium/No
Replace existing concrete sewer pipe on Cedar Street from 47th to 50th	$600,000	Medium/No
Remove power line in sewer pipe at 33rd St & Lief Erikson Drive	$25,000	Medium/No
Remove plugged diversion manholes and replace with straight pipe	$200,000	Medium/No
Senior Center 8-inch Sewer Line Repair	$500,000	Medium/No
36th & Lief Erikson Drive Sewer	$250,000	Medium/No
Replace 8" concrete sewer pipe north of Marine between Hamburg & Hull (behind Dutch Bros)	$400,000	Medium/No
Replace sewer pipe on Alameda between Melbourne & Columbia	$400,000	Low/No

On-site Chlorine Generation Project	$2,000,000	Low/No
Sanitary Sewer Pipe Replacement/Rehabilitation Project (Downtown)	$15,000,000	Low - Aspirational/No
Sanitary Sewer Pipe Replacement Project (City-wide Critical Areas)	$10,000,000	Low - Aspirational/No

Astoria Stormwater and Sewer

Storm Infrastructure

According to the most current CIP, the city of Astoria currently maintains 35 miles of storm collection piping, 651 storm manholes, and 1,838 catch basins.

Project Summary Table

The CIP categorizes projects into high and medium priority projects for stormwater upgrades below.

Description	Cost	Priority
Pre-disaster Landslide Storm Drainage Project (FEMA project)	***$901,875***	***High/Yes***
11th Street Tunnel Repair Project	***$500,000***	***High/No***
West Craig Creek - rehab, replace or reroute	***$2,000,000***	***High/No***
Replace Street End Corrugated Steel Outfall Pipes	***$1,500,000***	***High/No***
7th & Clatsop Stormline Extension	***$300,000***	***High/No***
Irving & 38th Storm Inlet & Stormline Relocation Project	***$1,000,000***	***Medium/No***
Pre-Disaster Landslide Storm Drainage Project (Remaining areas)	$5,000,000	Medium/No
Large Diameter Stormwater Outfall Pipe Flushing & Repair Project	$250,000	Medium/No

Combined Sewer Overflow Program

The Combined Sewer Overflow (CSO) facilities plan was completed in 1998, with the first construction project beginning in 2004. According to the most recent CIP, four of the five phases of this project are complete. The construction is estimated to be completed in 2038. The CSO program is currently mandated and is an unfunded program, causing the cost burden to fall on ratepayers through a utility bill surcharge. The current debt service equates to approximately $18 million in addition to interest. The CSO surcharge rate is currently 97 percent of the sewer bill.

This current surcharge in utility bills can exasperate the cost of living in Astoria. The surcharge has also impacted the ability to adjust water and sewer rates, thus limiting the funding potential for other infrastructure projects. This issue has caused a lack of funding to adequately replace aging infrastructure and a lack of funding to hire additional public works staff to operate and maintain current infrastructure. Issues of limited funding have also occurred when recruiting, maintaining, and compensating skilled public works staff to operate the City's utilities. Staff capacity issues have caused limitations in public work's ability to invest more time in proactive maintenance and emergency preparedness projects.

Astoria Transportation System Plan

Introduction

Published in 2013 with a planning horizon to 2035, the Astoria Transportation System Plan (TSP) addresses key transportation issues and prepares for future growth within the Urban Growth Boundary. Astoria strives to keep the TSP updated to ensure efficient transportation network performance and accommodate growth effectively.

Current Conditions

In 2013 Astoria was home to over 5,000 households and 5,600 jobs. The TSP estimates that by 2035 Astoria is expected to have around 5,400 households and over 6,300 jobs. This growth, coupled with increased port and tourism activity, will significantly strain the transportation network. Much of the employment growth is projected north of US 101 (West Marine Drive) and along Exchange Street between 14th and 23rd Streets, with the highest increases at the Port of Astoria in Uniontown. Population growth will concentrate north of US 30 along the Columbia River, particularly east of downtown near Mill Pond and on the east side near Tongue Point.

As a result, the street network, which currently handles approximately 8,200 average weekday and 9,900 summer evening peak hour trips, will need to manage an additional 1,200 motor vehicle trips during the evening peak hour on an average weekday and 1,500 during the summer by 2035. The majority of this increased travel is expected to originate or terminate in key residential and employment growth areas, including downtown Astoria and along US 30 to the east and west of downtown.

According to the most recent Astoria CIP, eight of the nine city-owned bridges have been replaced using Local Bridge Program STIP funding. The last bridge that needs to be replaced is the Irving Bridge, with the estimated cost of replacement being $14.2 million. The City is currently working on paving projects, equating to approximately $500,000 every two years. The rate of paving is currently eight percent of the rate recommended by the local Pavement Management System. The City currently does not have a source of funding for pedestrians, sidewalks, or trails.

Future Needs

Astoria's future transportation needs are guided by several key goals. The City aims to offer diverse travel options, reduce travel distances, improve reliability, and manage congestion for all modes of transportation. Solutions will be tailored to the local context, supporting active transportation, promoting public health, and enhancing neighborhood and business community livability. The plan prioritizes individual health and safety by maximizing active transportation options and ensuring safe, smooth connections. Economic development and revitalization are also supported in the TSP, encouraging business growth. The City seeks to protect and improve existing transportation assets, enhance the overall system cost-effectively, and pursue additional funding. Sustainability is also a priority, ensuring the system meets present and future needs in an environmentally, fiscally, and socially responsible manner.

Project Summary Table

The table below describes improvement projects, their cost, and priority level. The projects are organized by priority level (high and medium) and by the projected time of completion (Long-term, medium-term, and short term). These projects, and their priority levels, come from the City's most recent 2024 CIP.

Description	Cost	Priority/Funded
Paving Project (every 2 years)	***$500,000***	***High/Yes***
Irving at 33rd Street Bridge Replacement	***$14,200,000***	***High/No***
OR202 Sidewalk Project - Phase 2	$4,000,000	High/No
Denver & Alameda Sidewalk Project	$960,000	Medium/No
Shared Roadway Enhancements - Various Locations (TSP Projects # B1, B2, B3, B5, B6, B7, B8, B9, B10, B11, B12, B14, B15, B16, B17, B18, B20, B21, B22, B23, B33, B34, B35, B36, B37, B38, B39, B40, B43, B44, B47, B49, B52, B53, B55)	$334,000	Short-Term Likely Funded Plan
Marine Drive/W Marine Drive Bike Lanes – Bay St. to 6th St. (This project was partially completed with the Marine Drive road reconfiguration project from Hume Ave. to 8th St.)	$32,000	Short-term Likely Funded Plan
OR202 and 4th St Crossing Enhancements - OR202 and 4th Street	$34,000	Short-term Likely Funded Plan
US 30 and 6th St. Crossing Enhancements (included with Marine Drive- Columbia to 9th Circulation Option)	$75,000	Short-term Likely Funded Plan
US 30 and 8th Street Crossing Enhancements (included with Marine Drive- Columbia to 9th Circulation Option)	$75,000	Short-term Likely Funded Plan
Commercial and 8th Street Crossing Enhancements (included with Marine Drive- Columbia to 9th Circulation Option)	$75,000	Short-term Likely Funded Plan
US 30 and 16th Street Crossing Enhancements	$21,000	Short-term Likely Funded Plan
7th Street Road Diet - Niagara Avenue to OR 202	$103,000	Short-Term Likely Funded Plan
Niagara Avenue Road Diet - 7th Street to 15th Street; 3rd Street to 7th Street Optional.	$275,000	Short-term Likely Funded Plan
Marine Drive – Columbia to 9th Circulation Option (This project has been partially completed with a road reconfiguration from Columbia Ave. to 8th Street. ODOT completed this in 2023. It did not include relocation of the traffic signal from 9th to 10th Street)	$446,000	Short-Term Likely Funded Plan
8th Street (South) Sidewalk Infill - Kensington Avenue to Madison Avenue	$99,000	Short-Term Likely Funded Plan
OR 202/W Marine Drive Bike Lanes - High School to Williamsport Road	$44,000	Medium-term Likely Funded Plan
US 30 Bike Lanes - From the eastern extent of the existing bike lane between 39th and 43rd to the eastern City Limits (near Old Hwy 30)	$89,000	Medium-term Likely Funded Plan

Leif Erikson Drive Bike Lanes - 33rd Street to 39th Street	$22,000	Medium-term Likely Funded Plan
Exchange and 13th Street Crossing Enhancements	$34,000	Medium-term Likely Funded Plan
US 101-US 30 Coordinated Signal Timing Plans - US 101-US 30 from Portway Street to Columbia Avenue-Bond Street	$75,000	Medium-term Likely Funded Plan
Marine Drive Coordinated Signal Timing Plans - Marine Drive from 30th Street to 33rd Street	$50,000	Medium-term Likely Funded Plan
Downtown Circulation Feasibility Study	$100,000	Medium-term Likely Funded Plan
15th Street Sidewalk Infill - Jerome Avenue to Niagara Avenue	$204,000	Medium-term Likely Funded Plan
Oregon Street Sidewalk Infill - Florence Avenue to Alameda Avenue	$75,000	Medium-term Likely Funded Plan
Vista Drive Sidewalk Infill - Alameda Avenue to W Marine Drive	$133,000	Medium-term Likely Funded Plan
W Niagara Avenue Sidewalk Infill - Glasgow Avenue to East of Alameda Avenue	$126,000	Medium-term Likely Funded Plan
Alameda Avenue Sidewalk Infill - Existing shared use path to Bridgeview Court	$392,000	Medium-term Likely Funded Plan
Florence Avenue Sidewalk Infill - Rivington Street to Oregon Street	$168,000	Medium-term Likely Funded Plan
Franklin Avenue Sidewalk Infill - 7th Street to 8th Street	$46,000	Medium-term Likely Funded Plan
Bus Stop Amenity Enhancement	$100,000	Medium-term Likely Funded Plan
Niagara Avenue Bike Lanes - 17th Street to 15th Street	$23,000	Long term Likely Funded Plan
Middle School Connector Bicycle and Pedestrian Trail - James Street to Middle School	$139,000	Long term Likely Funded Plan
Commercial Connection Bicycle and Pedestrian Trail - Commercial Street western terminus to Alameda Avenue	$79,000	Long term Likely Funded Plan
8th Street Bike Lane / Shared Roadway Enhancements - Niagara Avenue to Irving Avenue	$13,000	Long-Term Phase 1 Likely Funded Plan
7th Street Bike Lane / Shared Roadway Enhancements - Niagara Avenue to OR 202	$29,000	Long-Term Phase 1 Likely Funded Plan
US 30 and 45th Street Crossing Enhancements - US 30 and 45th Street	$26,000	Long-Term Phase 1 Likely Funded Plan
US 30 and 37th Street Crossing Enhancements - US 30 and 37th Street	$26,000	Long-Term Phase 1 Likely Funded Plan
OR202 and 7th Street Intersection Enhancements - OR202 and 7th Street	$1,200	Long-Term Phase 1 Likely Funded Plan
Niagara between 8th and 9th Crossing Enhancements - Niagara between 8th and 9th	$34,000	Long-Term Phase 1 Likely Funded Plan
OR202 just east of Hannover Street Crossing Enhancements	$34,000	Long-Term Phase 1 Likely Funded Plan

US 30 and 18th Street Crossing Enhancements	$17,000	Long-Term Phase 1 Likely Funded Plan
Commercial at 10th, 11th and 12th Crossing Enhancements	$100,000	Long-Term Phase 1 Likely Funded Plan
Roundabout Enhancements - Provide additional signage at roundabout to clarify expected behavior for bicyclists or consider alternate route using Taylor Avenue	$1,200	Long-Term Phase 1 Likely Funded Plan
Niagara and 15th Street Enhance existing crosswalk with high visibility zebra striping and adequate lighting.	$17,000	Long-Term Phase 1 Likely Funded Plan
OR 202/7th Street Safety Enhancement	$160,000	Long-Term Phase 1 Likely Funded Plan
OR 202/Denver Street Capacity Enhancement	$1,000	Long-Term Phase 1 Likely Funded Plan
Bay Street Extension - North of US 30 to Industry Street Extension	$293,000	Long-Term Phase 1 Likely Funded Plan
Bond Street Sidewalk Infill – Hume Ave. to West of 2nd St. (This project has been completed for the north side of Bond St., however it cannot be completed on the south side due impacts from the 1st and Commercial slide.)	$195,000	Long-Term Phase 1 Likely Funded Plan
Industry Street Extension - Basin Street to Bay Street Extension	$1,057,000	Long-Term Phase 1 Likely Funded Plan
US 30/Liberty Lane Safety Enhancement	$362,000	Long-Term Phase 2 Aspirational Plan
Williamsport Road/ James Street Realignment	$270,000	Long-Term Phase 2 Aspirational Plan
Maritime Road Extension - Old US Highway 30 to Railroad	$876,000	Long-Term Phase 2 Aspirational Plan
OR 202 Safety Enhancement - OR 202 from 8th Street to SE 2nd Street	$592,000	Long-Term Phase 2 Aspirational Plan
Tongue Point Road Upgrade - Old US Highway 30 to Pier Street	$1,119,000	Long-Term Phase 2 Aspirational Plan
54th Street-Old US Highway 30 Upgrade - US 30 to Tongue Point Road	$2,328,000	Long-Term Phase 2 Aspirational Plan
Maritime Road-Old US Highway 30 Upgrade - Tongue Point Road to US 30	$893,000	Long-Term Phase 2 Aspirational Plan
Downtown Traffic Signal Upgrade (This project was partially completed with the addition of new signal backplates, enforcement lights, and countdown pedestrian signals. I don't believe it included communication upgrades.)	$1,492,000	Long-Term Phase 2 Aspirational Plan
US 30/54th Street Safety Enhancement	$297,000	Long-Term Phase 2 Aspirational Plan
US 30/Nimitz-Maritime Road Safety Enhancement	$242,000	Long-Term Phase 2 Aspirational Plan
S Denver Street Community Based Solution - Clatsop Avenue to Glasgow Avenue	$49,000	Long-Term Phase 2 Aspirational Plan

W Marine Drive Sidewalk Infill – Florence Ave. to 4th St. – Complete Sidewalk gaps on N. side of street. (This project is currently funded by ODOT and in the final design stage prior to bidding. Construction is anticipated to be completed by Fall 2024.)	$3,700,000	Long-Term Phase 2 Aspirational Plan
W Niagara Avenue Community Based Solution - W Clatsop Avenue to Sonora Avenue	$191,000	Long-Term Phase 2 Aspirational Plan
OR 202/US 101 Business Safety Enhancement	$5,291,000	Long-Term Phase 3 Aspirational Plan
US 101/Hamburg Avenue Capacity Enhancement	$26,000	Long-Term Phase 3 Aspirational Plan
US 30/16th Street Capacity Enhancement	$319,000	Long-Term Phase 3 Aspirational Plan
Log Bronc Way Extension - 30th Street to 32nd Street	$977,000	Long-Term Phase 3 Aspirational Plan
Abbey Lane Extension - 36th Street to 39th Street	$974,000	Long-Term Phase 3 Aspirational Plan
US 101 Business Capacity Enhancement – OR 202 south to Miles Crossing	$5,470,000	Long-Term Phase 3 Aspirational Plan
Portway Street Capacity Enhancement - Portway Street from US 101 to Industry Street	$424,000	Long-Term Phase 3 Aspirational Plan
Bay Street Upgrade - US 30 to northern terminus	$68,000	Long-Term Phase 3 Aspirational Plan
US 30/45th Street Safety Enhancement	$323,000	Long-Term Phase 3 Aspirational Plan
Olney Avenue Sidewalk Infill - 4th Street to 7th Street	$2,315,000	Long-Term Phase 3 Aspirational Plan
16th Street Sidewalk Infill - Niagara Avenue to Williamsport Road	$130,000	Long-Term Phase 3 Aspirational Plan
Sonora Avenue Community Based Solution - W Lexington Avenue to W Niagara Avenue	$25,000	Long-Term Phase 3 Aspirational Plan
OR 202/US 101 Business Transit Pullout	$75,000	Long-Term Phase 3 Aspirational Plan
OR 202/Williamsport Road Safety Enhancement	$117,000	Long-Term Phase 4 Aspirational Plan
Niagara Avenue/7th Street Safety Enhancement	$238,000	Long-Term Phase 4 Aspirational Plan
Niagara Avenue/8th Street Safety Enhancement	$238,000	Long-Term Phase 4 Aspirational Plan
Irving Avenue Extension - 38th Street to Nimitz Drive-Spruance Road	$6,941,000	Long-Term Phase 4 Aspirational Plan
US 30 Safety Enhancement - US 30 from 27th Street to Franklin Avenue	$267,000	Long-Term Phase 4 Aspirational Plan
US 30 Speed Warning System - US 30 east of 50th Street	$25,000	Long-Term Phase 4 Aspirational Plan
US 30/Exchange Street/23rd Street Safety Enhancement	$1,547,000	Long-Term Phase 4 Aspirational Plan

Grand Avenue Sidewalk Infill - W Lexington Avenue to 2nd Street	$44,000	Long-Term Phase 4 Aspirational Plan
Irving Avenue Community Based Solution - 13th Street to 35th Street	$829,000	Long-Term Phase 4 Aspirational Plan
Leif Erickson Drive (West) Sidewalk Infill - 38th Street to 500' west of 43rd Street	$265,000	Long-Term Phase 4 Aspirational Plan
Leif Erickson Drive (East) Sidewalk Infill - 46th Street to 54th Street	$488,000	Long-Term Phase 4 Aspirational Plan
W Grand Avenue Community Based Solution - W Lexington Avenue to 2nd Street	$136,000	Long-Term Phase 4 Aspirational Plan
W Lexington Avenue Community Based Solution - Alameda Avenue to 2nd Street	$195,000	Long-Term Phase 4 Aspirational Plan
W Marine Drive Sidewalk Infill - Florence Avenue to 4th Street – Complete sidewalks on S side of street	$1,000,000	Long-Term Phase 4 Aspirational Plan
1st Street Sidewalk Infill - W Lexington Avenue to 2nd Street	$54,000	Long-Term Phase 4 Aspirational Plan
Williamsport Road Sidewalk Infill - 16th Street to SE Front Street	$1,724,000	Long-Term Phase 4 Aspirational Plan
2nd Street Sidewalk Infill - Grand Avenue to Franklin Avenue	$49,000	Long-Term Phase 4 Aspirational Plan
Alameda Avenue Community Based Solution - West of Melbourne Avenue to Grand Avenue	$23,000	Long-Term Phase 4 Aspirational Plan
OR 202/W Marine Drive Bike Lanes - High School to Williamsport Road	$44,000	Medium-term Likely Funded Plan
US 30 Bike Lanes - From the eastern extent of the existing bike lane between 39th and 43rd to the eastern City Limits (near Old Hwy 30)	$89,000	Medium-term Likely Funded Plan
Leif Erikson Drive Bike Lanes - 33rd Street to 39th Street	$22,000	Medium-term Likely Funded Plan
Exchange and 13th Street Crossing Enhancements	$34,000	Medium-term Likely Funded Plan
US 101-US 30 Coordinated Signal Timing Plans - US 101-US 30 from Portway Street to Columbia Avenue-Bond Street	$75,000	Medium-term Likely Funded Plan
Marine Drive Coordinated Signal Timing Plans - Marine Drive from 30th Street to 33rd Street	$50,000	Medium-term Likely Funded Plan
Downtown Circulation Feasibility Study	$100,000	Medium-term Likely Funded Plan
15th Street Sidewalk Infill - Jerome Avenue to Niagara Avenue	$204,000	Medium-term Likely Funded Plan
Oregon Street Sidewalk Infill - Florence Avenue to Alameda Avenue	$75,000	Medium-term Likely Funded Plan
Vista Drive Sidewalk Infill - Alameda Avenue to W Marine Drive	$133,000	Medium-term Likely Funded Plan
W Niagara Avenue Sidewalk Infill - Glasgow Avenue to East of Alameda Avenue	$126,000	Medium-term Likely Funded Plan

Alameda Avenue Sidewalk Infill - Existing shared use path to Bridgeview Court	$392,000	Medium-term Likely Funded Plan
Florence Avenue Sidewalk Infill - Rivington Street to Oregon Street	$168,000	Medium-term Likely Funded Plan
Franklin Avenue Sidewalk Infill - 7th Street to 8th Street	$46,000	Medium-term Likely Funded Plan
Bus Stop Amenity Enhancement	$100,000	Medium-term Likely Funded Plan

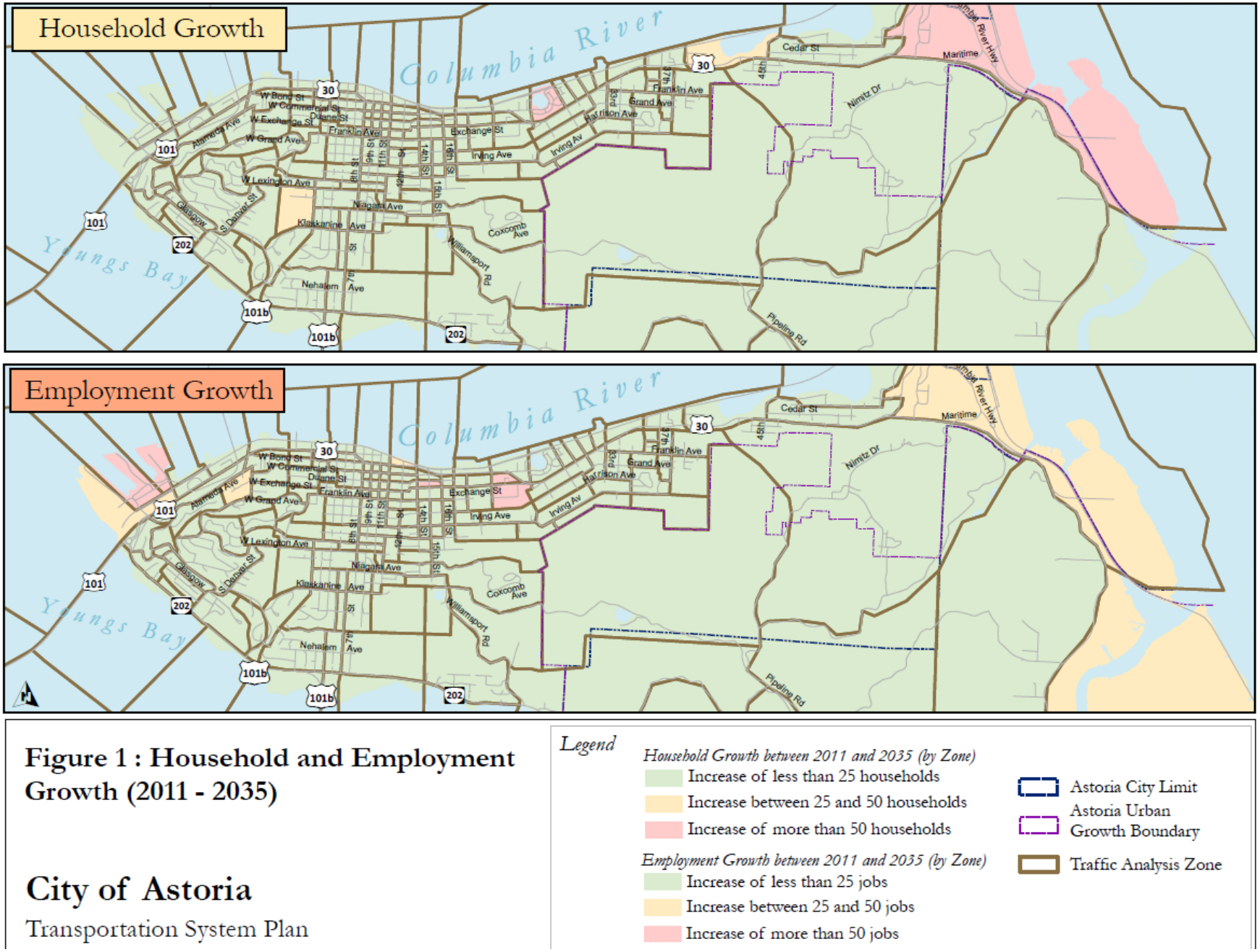

Figure 2: Transportation System Plan, Household and Employment Growth

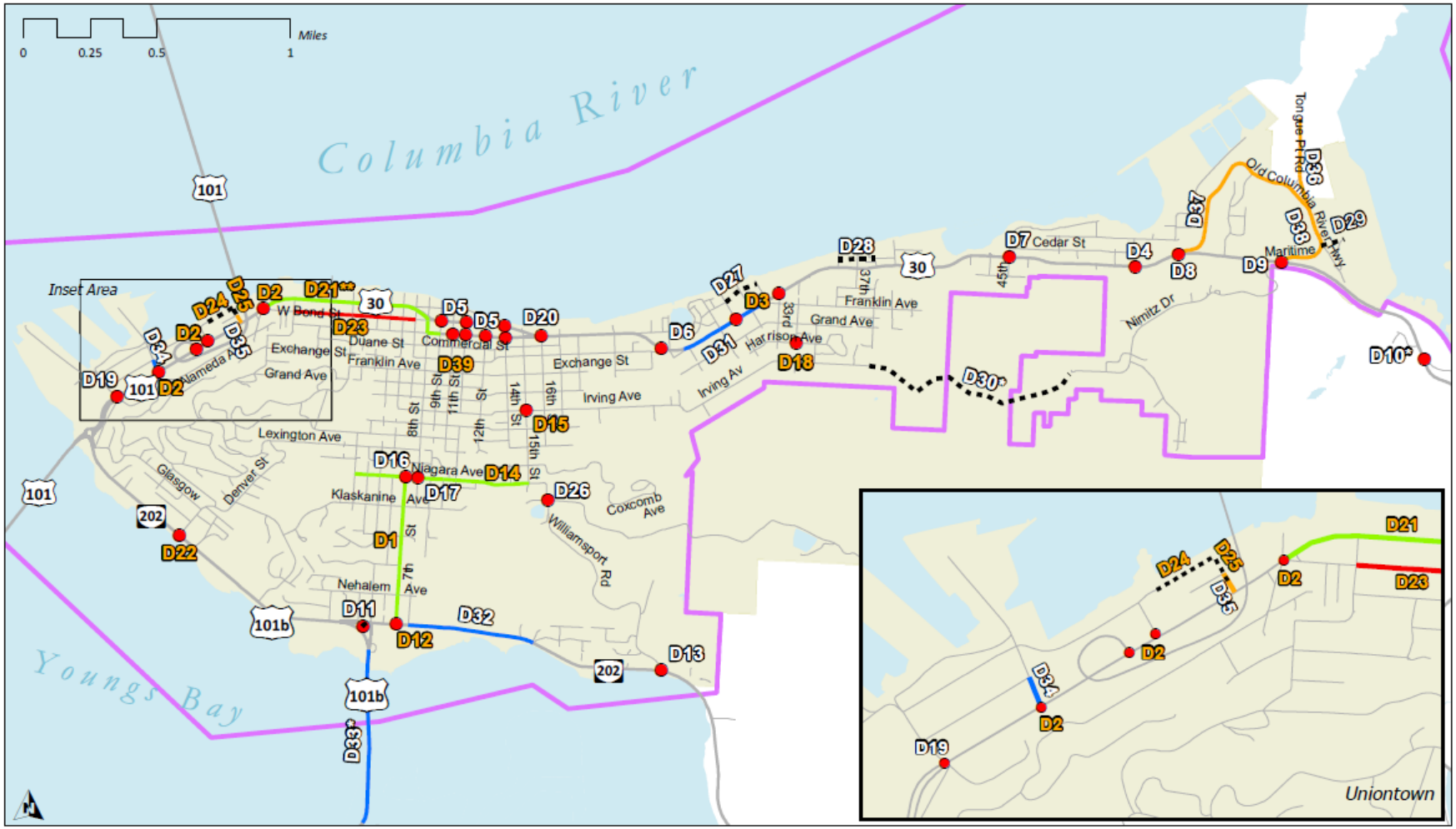

Figure 10 : Planned Driving Solutions

Note: This Figure includes all potential driving projects in the City, whether they are reasonably likely to be funded and constructed, or aspirational and conceptual (see the legend for more details).

City of Astoria

Transportation System Plan

Legend

Planned Driving Solutions

- Planned Intersection Improvement
- Planned Street Reconfiguration
- Planned Street Upgrade
- Planned Street Widening
- Planned Two-Way Street
- Planned Street

- # Likely Funded Transportation System Project # (See TSP Volume 2, Section A for more information)
- # Aspirational Transportation System Project # (See TSP Volume 2, Section A for more information)
- City Limit
- Urban Growth Boundary

* See TSP Volume 2, Section A for more information

** Planning concept potentially reduces vehicle-carrying capacity of the highway, further evaluation of the project design will be required at the time of implementation to ensure compliance with ORS 366.215

Figure 3: Transportation System Plan, Planned Driving Solutions

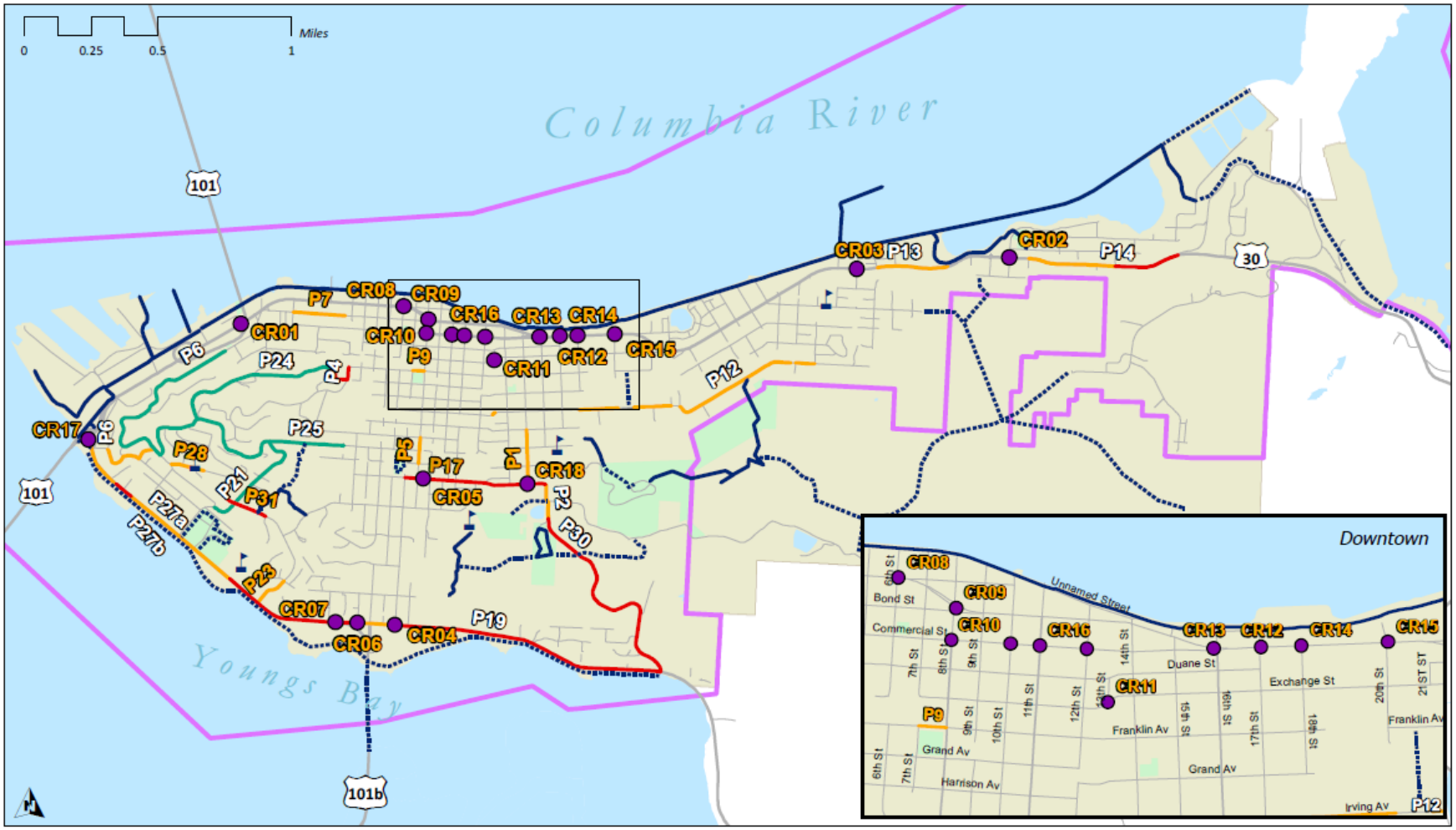

Figure 11 : Planned Walking and Crossing Solutions

City of Astoria

Transportation System Plan

Legend

Walking Projects

- Planned Sidewalk Infill (Both Sides)
- Planned Sidewalk Infill (One Side)
- Planned Community Based Solution
- Planned Crossing Improvement

Trail Projects (From Recreation Trails Master Plan)

- ExistingRecreation Trails
- Planned Recreation Trails

- Likely Funded Transportation System Project # (See TSP Volume 2, Section A for more information)
- Aspirational Transportation System Project # (See TSP Volume 2, Section A for more information)
- School
- Park
- City Limit
- Urban Growth Boundary

Figure 4: Transportation System Plan, Planned Walking and Crossing Solutions