



# Chapter 6: Implementation Plan



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# Overview

*This chapter provides the transportation system plan’s strategies, projects and funding forecast to implement the TSP’s guiding tenets and system plans. It balances key arterial corridor improvements to facilitate through traffic with strategic investments in bicycle, pedestrian, and transit facilities to improve community accessibility.*

## LIST OF TRANSPORTATION PROJECTS AND STRATEGIES

The TSP’s projects and strategies include a list of both capital and non-capital improvement projects. Capital improvement projects are new construction, expansion of existing facilities, renovation or replacement projects. They are both street corridor projects and intersection projects. Non-capital improvement projects are technology solutions, planning and programmatic in nature. They offer cost effective ways to enhance the transportation system’s capacity and efficiency without a major road construction project.



Right: Summer 2013 improvements on SE Powell Valley Road included a reconditioned street surface, revised roadway striping layout to add an additional west-bound travel lane and a new sidewalk connection between Gordon Russell Middle School and Burnside Road that completes a continuous walking connection from Burnside to Kane.

<p><b>Capital Improvement</b></p> <p><b>Street Corridor Projects.</b> Examples include adding bike lanes to roadways, new multi-use trails, adding vehicle travel lanes for vehicles and freight and new sidewalks</p> <p><b>Intersection Projects.</b> Examples include adding new traffic signals, updating signal timing, or widening of the roadway at an intersection in order to allow more vehicles through each phase of a signal.</p>	<p><b>Non-Capital Improvements</b></p> <p><b>Technology Solutions - Intelligent Transportation Systems and Transportations Systems Management and Operations.</b> Examples include signal timing, corridor access management, parking management and bicycle safety.</p> <p><b>Planning.</b> Examples include corridor analysis of issues and opportunities and identification of solutions, or strategies to implement change.</p> <p><b>Programs.</b> Examples include Safe Routes to School and non-auto Commute Challenges.</p>
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This TSP includes a list of all identified transportation projects and solutions needed to support the City's Community Development Plan to its full potential. Those projects are identified as either fiscally constrained or unconstrained depending on how critical they are to providing immediate needs for additional safety or capacity.

Projects on the unconstrained list represent all of the transportation projects needed to accommodate and serve the amount of growth in new housing and employment that would complete the City, Pleasant Valley, Springwater and Kelley Creek Headwaters to full build-out according to the Comprehensive Development Plan.

Projects on the constrained list represent the highest priority projects.. All TSPs are required by law to identify which projects are assumed needed in order to support forecasted population growth and development within a 20-year timeframe. The 20-year projects are based on where congestion relief will be most critically needed, which facilities would best support a safe system, economic vitality and livability, and which facilities would best provide the most travel choices for bicycling, walking, driving and taking transit within expected revenues, making them fiscally constrained.

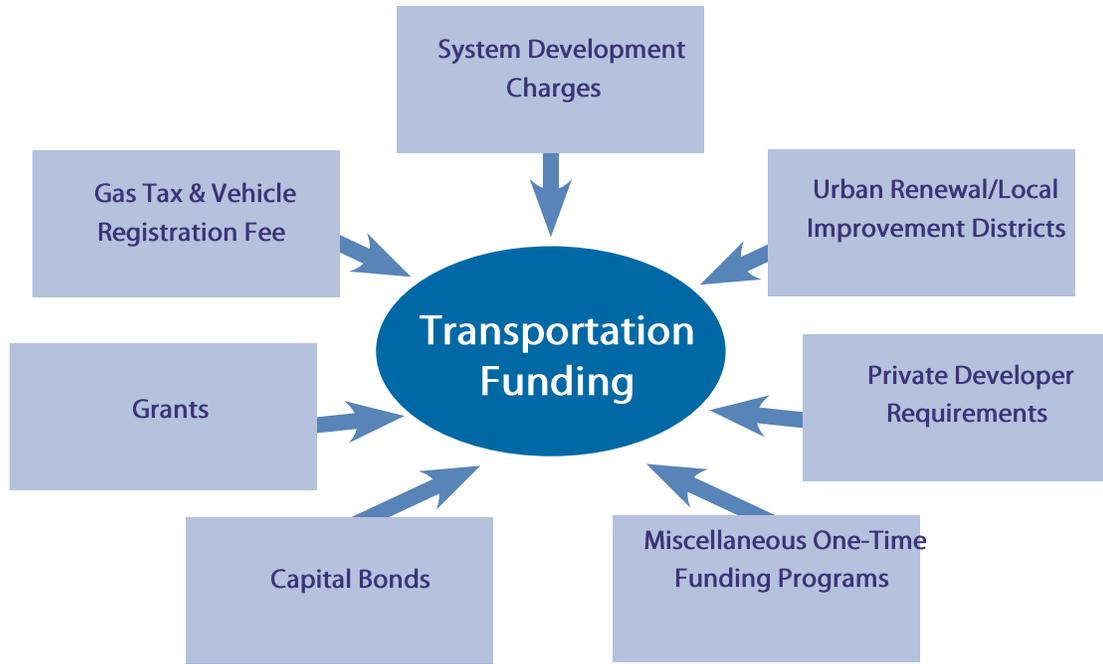


## PAYING FOR THE PLAN: FUNDING FORECAST

The TSP's System Plans call for significant investment in the transportation system over the next 20 years. This investment will improve transportation choices, enhance neighborhood livability, and strengthen Gresham's economic competitiveness. Per the State of Oregon's Transportation Planning Rule, all TSP's must forecast how transportation projects may be funded over the next 20 years.

## Funding Mechanisms

This section documents current revenue sources and projects expected available funding through the TSP horizon year of 2045. Gresham uses several funding mechanisms to pay for the transportation investments identified on the 20-year project list: system development charges (SDCs), grants, private developer requirements, capital bonds, urban renewal and local improvement districts (LIDs), gas tax and vehicle registration fees, and miscellaneous one-time funding programs.



## CURRENT AND PROJECTED REVENUE SOURCES

Current and projected revenues are described below, alongside the expected revenue amount.

- Revenue from SDCs is development-driven and required to be used for improvements which accommodate new development. SDCs were forecasted to generate approximately \$39 million dollars from 2025 through 2045.
- Private developer requirements ensure improvements of the surrounding public right-of-way during development and were forecast to generate approximately \$27 million dollars from 2025 through 2045.
- Urban renewal and LIDs provide funding for local projects through increased property tax revenue. These revenue sources were forecasted to generate approximately \$2 million dollars in revenue through 2045.
- Federal, state, regional, and local grants target specific programs and projects. Grants were forecasted to generate approximately \$10 million dollars annually from 2025 through 2045.
- Gas tax and vehicle registration fees are typically used to fund maintenance and operations. However, there are exceptions, including Oregon Revised Statutes requiring 1% of the City's gas tax revenue go towards funding pedestrian and bicycle facilities. These funding mechanisms were forecasted to generate approximately \$207 million dollars from 2025 through 2045.
- County Arterial Transfer includes funding from the County to maintain and improve arterials. This funding was expected to be approximately \$133 million dollars from 2025 through 2045.
- Approximately \$80 million dollars is anticipated to come from agency partners for joint projects.

In total, projected revenues are near \$498 million between 2025 and 2045.

## HISTORICAL EXPENDITURES

The City's maintenance and operations (M&O) efforts include road repair, traffic signal maintenance and optimization, sidewalk and bikeway enhancements, and roadway striping. The engineering, planning, and administration required for the work also falls under the scope of M&O. The forecasted M&O expenditure over

the next 20 years is \$302 million dollars. The primary funding source for M&O work is state gas tax and vehicle registration fees as well as County Arterial Transfer, which was forecasted to generate \$340 million dollars through 2045. There is approximately a \$38 million dollar excess. It should be noted that increased fuel efficiency has put additional strain on the future of gas tax revenue and raises an essential discussion about the stability in the City’s M&O funding.

Right: City Transportation Operations perform pavement maintenance. State gas tax and vehicle registration fees pay primarily for maintenance and operation of the transportation system.



## RESULTING EXPECTED REVENUES AND EXPENDITURES.

The 20-year revenue forecast, anticipated M&O costs, and capital project funding have been updated to reflect current and anticipated future revenue streams, and are shown in Table 1.

**Table 1. Funding Forecast Update Through 2045**

Funding Mechanism	20-Year Forecasted Revenue
SDCs	\$39,000,000
Private Developer Contributions	\$27,000,000
Urban Renewal / Local Improvement Districts	\$2,000,000
Misc. Grants	\$10,000,000
State Gas Tax & Vehicle Registration Fees	\$207,000,000
County Arterial Transfer	\$133,000,000
Agency Partner Funding	\$80,000,000
<b>Total Funding</b>	<b>\$498,000,000</b>
<b>M&amp;O Expenditure</b>	<b>\$302,000,000</b>

These revenues do not include funds allocated for construction in the immediate-term, and those projects are likewise not considered in the project prioritization and resulting project lists. Revenues also exclude 2023 and 2024 funds, which will be expended or allocated prior to TSP adoption.

## NEW POTENTIAL REVENUES

Table 2 shows potential new funding mechanisms for Gresham projects that the City could pursue to fund additional projects, a description of the purpose, and all entities that can pursue that type of funding. The funding sources are divided into two categories: roadway-focused funding sources are shown in light blue, and sources generally used for active transportation (e.g., transit, pedestrian, and bicycle) improvements are in light green. Many of these programs were existing programs expanded by the Bipartisan Infrastructure Law, as well

as new programs. The new programs, with their total funding allocation for fiscal year (FY) 2022-2026 in parentheses, are as follows:

- **Safe Streets for All (\$6B)** – This program will provide funding directly to local and tribal governments to support their efforts to advance “vision zero” plans and other improvements to reduce crashes and fatalities, especially for cyclists and pedestrians.
- **MEGA Projects (\$15B)** – This new National Infrastructure Project Assistance grant program will support multi-modal, multi-jurisdictional projects of national or regional significance.
- **Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program (\$8.7B)** – PROTECT will provide \$7.3 billion in formula funding to states and \$1.4 billion in competitive grants to eligible entities to increase the resilience of our transportation system. This includes funding for evacuation routes, coastal resilience, making existing infrastructure more resilient, or efforts to move infrastructure to nearby locations not continuously impacted by extreme weather and natural disasters.
- **Charging and fueling infrastructure discretionary grants (Up to \$2.5B)** – This discretionary grant program will provide up to \$2.5 billion in funding to provide convenient charging where people live, work, and shop.
- **Reconnecting Communities Pilot Program (\$1B)** – This new competitive program will provide dedicated funding to state, local, MPO, and tribal governments for planning, design, demolition, and reconstruction of street grids, parks, or other infrastructure.
- **Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program (\$1B)** – The SMART Grant program will be a programmed competition that will deliver competitive grants to states, local governments, and tribes for projects that improve transportation safety and efficiency.

As the BIL funding ends in FY26 and the Oregon state legislature forms a transportation bill in 2025, the City of Gresham will need to monitor ongoing impacts to its federal and state funding sources. Recently the City passed a bond measure to fund safety through revenue for Police and Fire. However, the local appetite for additional taxes is low and would need clear demonstration of project benefits to gain support.



*Left: By state law, 1 percent of the City's gas tax revenue must be used to fund improvements to bicycle and pedestrian facilities.*

Table 2. Funding Sources

Funding Source	Description	Eligibility			
		MPO	County	City	District
Surface Transportation Block Grant (STBG)	Federal flexible funding that may be used for projects to preserve and improve conditions on and performance of any federal-aid highway, bridge, or tunnel project on any public road; pedestrian and bicycle infrastructure; and transit capital projects, including intercity bus terminals. These funds are distributed through Metro's Regional Flexible Fund Allocation (RFFA), and projects are focused on four primary RTP investment priorities – Equity, Safety, Climate Smart Strategy, and Congestion.	X	X	X	
State Highway Fund	Revenue sources are: motor vehicle registration and title fees; driver license fees; motor vehicle fuel taxes; and weight-mile taxes. Fund expenditures are restricted to construction; improvement; maintenance; operation; and use of public highways, roads, streets, and roadside rest areas.		X	X	
Road Fund Serial Levy	Voter-approved property tax levied in addition to the permanent tax rate.		X	X	
Road Utility Fee	Monthly user fee with revenue dedicated to road operations. Enacted legislatively or by popular vote. This source is generally better suited to funding operations than capital improvements.		X	X	
Vehicle Registration Fee	An extra fee on all registered motor vehicles, enacted legislatively or by popular vote. This source could fund operations or capital programs.	X	X	X	
Local-Option Fuel Tax	Enacted legislatively or by popular vote. This source could fund operations or capital programs.		X	X	
Immediate Opportunity Funds	Enacted legislatively or by popular vote. This source could fund operations or capital programs.	X	X	X	
All Roads Transportation Safety (ARTS)	MAP-21 increased safety funding and emphasizes a focus on all roads. Because of this, ODOT offered a portion of its safety funds to improve safety on local roads, leading to the creation of the All Roads Transportation Safety (ARTS) program.	X	X	X	
General Fund	Property taxes from local agencies' permanent tax rate.		X	X	
Transportation Development Tax	Based on the estimated traffic generated by each type of development; revenue is dedicated to transportation capital improvements designed to accommodate growth. Eligible projects are on major roads, including sidewalks and bike lanes, as well as transit capital projects.		X	X	
System Development Charges (SDC)	A reimbursement fee, an improvement fee or a combination thereof assessed or collected at the time of increased usage of a capital improvement or issuance of a development permit, building permit, or connection to the capital improvement.		X	X	
Local Improvement District (LID)	Used as a method of financing capital improvements constructed by the local agency or utility district that provide a special benefit to the properties within the boundary of the LID.		X	X	X
Tax Increment Financing	Used to capture additional property taxes generated in the vicinity of transit-specific improvements or areas. This type of funding can also be used to capture a portion of property value increase caused by a particular investment.		X	X	
Urban Renewal Districts	Uses the future increase in property taxes from the rehabilitation of urban areas by renovating or replacing dilapidated buildings with new housing, public buildings, parks, roadways, industrial areas to finance infrastructure improvements within the district. This is a type of tax increment financing.		X	X	
Private/Public Sponsorships	Private/public sponsorships involve a private entity, such as a local business owner, working with the public agency to fund a project (e.g., bus stop shelter and sidewalk connection maintenance). In return for their investment in the community, these business owners often have recognition for their role, providing a marketing venue for the business.	X	X	X	X
Congestion Mitigation & Air Quality (CMAQ)	Federal flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. These funds are distributed through Metro's Regional Flexible Fund Allocation (RFFA), and projects are focused on four primary RTP investment priorities – Equity, Safety, Climate Smart Strategy, and Congestion.	X	X	X	X
STIP Enhance	Funds allocated to projects through a competitive grant application process. Eligible projects include public transit capital improvements.		X	X	X
Property Taxes	Tax assessed on the value of an owned property, a portion of which can be used to fund transit.	X	X	X	
Payroll Taxes	Taxes imposed on employers or employees, usually calculated as a percentage of the salaries that employers pay their staff and generated through deductions from an employee's wages or taxes paid by the employer based on the employee's wages.		X	X	
Business Taxes	Tax assessed on the net income of businesses near transit facilities/routes.		X	X	

Funding Source	Description	Eligibility			
		MPO	County	City	District
Tax Increment Financing	Used to capture additional property taxes generated in the vicinity of transit-specific improvements or areas. This type of funding can also be used to capture a portion of property value increase caused by a particular investment.		X	X	
Tax Incentive Zones	Designated areas that provide an indirect avenue for transit funding by potentially increasing fare revenue, sponsorship revenue, etc. by providing tax incentives for businesses and residents near transit-oriented or transit-friendly developments.		X	X	
Multimodal Impact Fees	Similar to transportation system development charges (SDC), but focused on improvements to multimodal transportation options. In the event a TIF is established, the fixed-route service could work to allocate a portion of funds towards transit-enhancing improvements.		X	X	
ODOT Safe Routes to School Grant Program	Eligible projects include safety improvements that positively affect the ability of children to walk and bicycle to school. Projects must be within a public road right-of-way, consistent with jurisdictional plans, supported by the school or school district, within a one-mile radius of a school, and able to be constructed within five years of the application. Project examples include sidewalks, median refuge islands, rapid flashing beacons, etc. The minimum funding request is \$60,000, and the maximum is \$2 million.		X	X	X
Metro Grant Programs	Metro provides grant opportunities for various transportation-based projects. One such opportunity is the Regional Travel Options (RTO) grant, which includes Infrastructure and Innovation grants to support light infrastructure that make it easier, more convenient, or safer for people to get around using travel options and Safe Routes to School grants.	X	X	X	X
Innovative Mobility Program	<p>The Innovative Mobility Program is a new initiative that aims to improve historically underserved communities' access to public and active transportation. Program goals also include reducing the number of trips Oregonians make by car and reducing greenhouse gas emissions. The Innovative Mobility Program is designed to increase social equity and mobility while reducing the effects of climate change. The core objectives of the program are to:</p> <ol style="list-style-type: none"> <li>1. Improve <b>historically underserved</b> communities' access to public and active transportation.</li> <li>2. Reduce the number of drive-alone trips.</li> <li>3. Reduce greenhouse gas emissions.</li> </ol> <p><b>The term "historically underserved communities" refers to populations sharing a particular characteristic, as well as geographic communities, whose access to resources and opportunities have been historically limited due to systemic barriers.</b> This includes, but is not limited to, communities who have been historically underserved or under-resourced due to age, disability status, language, income, race/ethnicity, immigration status, or gender.</p>	X	X	X	X

## Cost Estimates

Project cost estimates from the prior TSP were updated to reflect the impacts of inflation and the rising costs of construction since 2013. Oregon Metro's 2023 Regional Transportation Plan (RTP) update provided recent cost estimates for select projects that were included in The City of Gresham's 2013 TSP. In comparing the 2023 RTP and 2013 TSP costs, project costs increased between 75-100% for projects whose scope remained relatively unchanged during that timeframe. This is also in line with national and local construction cost trends during this period. Consequently, corridor and intersection-based projects cost estimates from the prior TSP were updated to reflect a 90% increase from the 2013 estimates. The transportation systems management operations/intelligent transportation systems, outreach and education transportation projects were increased at the same rate.

Similarly, the pedestrian and bicycle projects in the City's 2018 Active Transportation Plan (ATP) were increased roughly 45%, consistent with industry trends. Not all active transportation projects had cost estimates in the 2018 ATP. Therefore, new cost estimates were developed by calculating an average cost-per-mile where estimates existed, then applying this factor to the other projects. Lastly, pedestrian crossing projects were assumed to cost between \$150,000 - \$200,000.

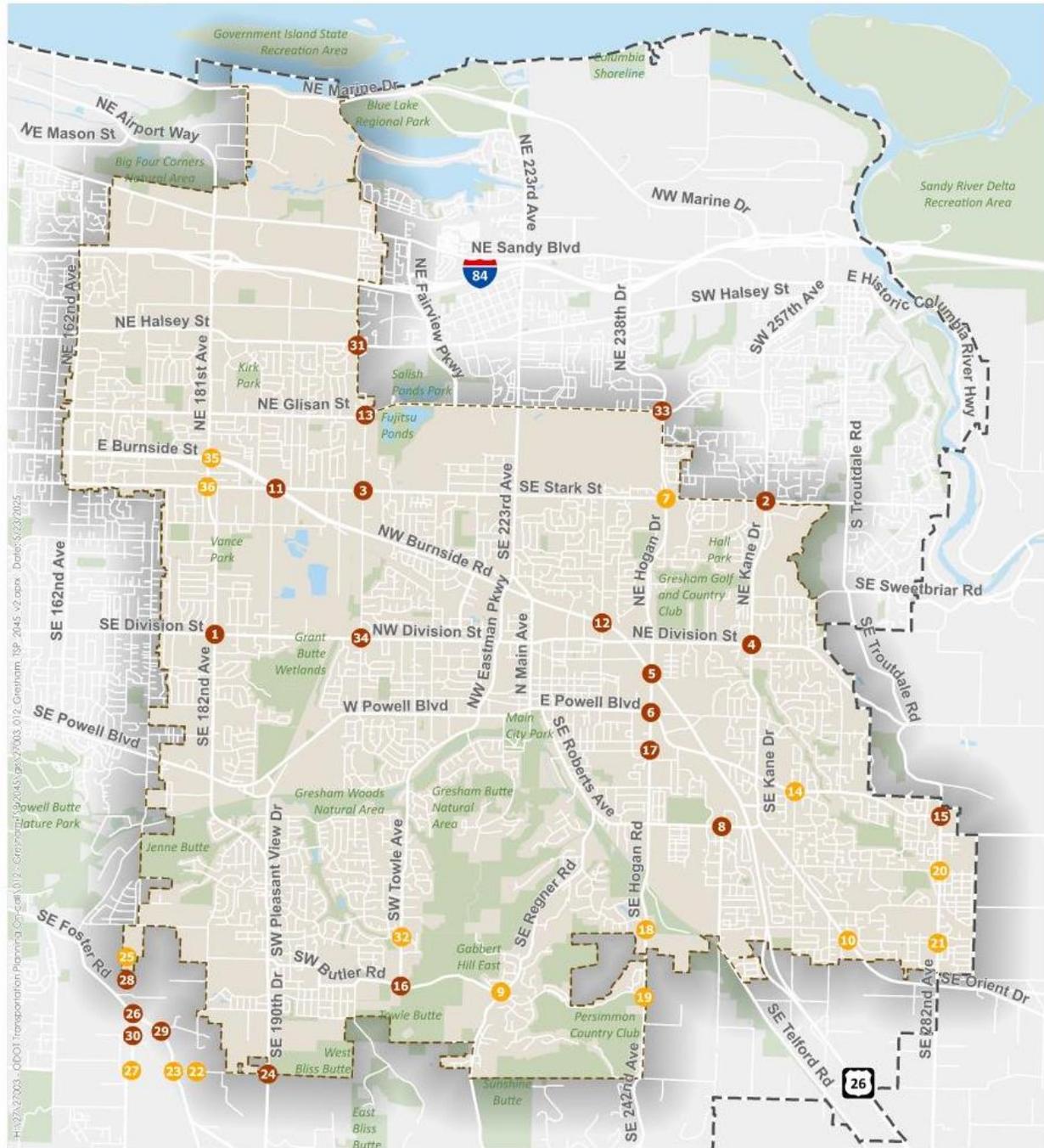
## Prioritized Project Lists

Projects were prioritized based on the goals and values established throughout public outreach, tying high (10), medium (5), and low (0) screening criteria to each goal. This scoring was then used to find a minimum score that all projects must be above to receive funding – the score being 25.9. These prioritized projects are shown in **dark red shading**. During subsequent rounds of outreach, the community shared that they would largely like to see more, smaller-scale improvements across the city, and more projects that were relatively high in scoring and low-cost were added to the prioritized lists and shown in **lighter red shading**. Project lists include:

- Corridors projects are shown in Figure 1 and Table 3.
- Intersection projects are shown in Figure 2 and Table 4.
- Pedestrian projects are shown in Figure 3 and Table 5.
- Bicycle projects are shown in Figure 4 and Table 6.



Figure 2. Prioritized Intersection Projects



-  Urban Growth Boundary
-  City Limits
-  Project Number

-  Constrained Project
-  Unconstrained Project



 **KITTELSON & ASSOCIATES**

  
**Intersection Projects  
 Gresham, Oregon**

**Table 3. Prioritized Corridor Projects**

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
1	Riverside Parkway	Riverside Parkway	Portal Way	Construct to minor arterial design, looping Riverside Parkway with Portal Way consistent with special street designation. New roadway segment.		\$9,500,000	0	0	0	8.3	5.0	13.3
2	169th Avenue	Wilkes Road	Halsey Street	Construct to standard collector cross section (Missing bicycle facilities)	X	\$980,000	5	0	0	10.0	2.5	17.5
3	San Rafael Street	181st Avenue	201st Avenue	Construct to minor arterial cross section (Missing bicycle facilities, sidewalk gaps exist)		\$18,980,000	10	0	0	8.3	0.0	18.3
4	Wilkes Road	181st Avenue	192nd Avenue	Construct to minor arterial cross section. (Missing bicycle facilities, sidewalk only along one side, some sidewalk gaps exist)		\$12,890,000	5	0	0	8.3	0.0	13.3
5	192nd Avenue	Wilkes Road	Halsey Street	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$7,280,000	10	0	0	5.0	0.0	15.0
6	201st/202nd Avenue	Glisan Street	San Rafael Street	Construct to standard collector cross section (Missing pedestrian and bicycle facilities)		\$11,590,000	10	0	0	5.0	2.5	17.5
7	201st Avenue	San Rafael Street	Sandy Boulevard	Construct to minor arterial cross section (Missing bicycle facilities, sidewalk only along one side, some sidewalk gaps exist)		\$15,840,000	5	0	0	5.0	0.0	10.0
8	Halsey Street	190th Place	201st Avenue	Construct to a modified minor arterial cross section (Missing pedestrian and bicycle facilities)		\$10,499,045	0	0	0	3.3	0	3.3
9	Halsey Street	181st Avenue	190th Place	Construct to modified minor arterial cross section (Missing pedestrian and/or bicycle facilities).		\$4,930,000	10	0	0	3.3	0	13.3
10	162nd Avenue	Halsey Street	City Limits	Construct to minor arterial cross section with 3 vehicle lanes, buffered bicycle lanes, and sidewalk.		\$8,490,000	0	0	10	10.0	0.0	20.0
11	Glisan Street	202nd Avenue	Fairview Parkway	Construct to standard arterial cross section. Project cost estimate is for full street build-out. Fill 5 lane section gap between 202nd Ave and Fairview Parkway.		\$12,920,000	0	0	0	5.0	0.0	5.0
12	190th Avenue	Division Street	Yamhill Street	Construct to standard collector cross section		\$1,730,000	0	0	5	6.7	2.5	14.2
13	192nd Avenue	Glisan Street	Stark Street	Construct to minor collector cross section (Missing pedestrian and bicycle facilities)	X	\$8,420,000	10	0	10	6.7	5.0	31.7
14	Burnside Street	162nd Avenue	197th Avenue	Complete to standard arterial standard and improve remaining segments to boulevard standards where designated and applicable	X	\$15,110,000	0	0	10	8.3	5.0	23.3

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
15	Main Street	Western City limits	SE 182nd Avenue	Construct to standard collector cross section (Missing pedestrian facilities)	X	\$4,470,000	10	0	5	8.3	2.5	25.8
16	Wallula Avenue	Division Street	Stark Street	Construct to standard collector cross section (Sidewalk gaps exist, missing bicycle facilities)	X	\$15,860,000	10	0	10	6.7	5.0	31.7
17	Division Street	Kelly Avenue	Burnside Road	Construct to standard arterial cross section and to boulevard cross section, where applicable.		\$3,780,000	0	0	10	3.3	0.0	13.3
18	NW Norman Avenue	Burnside Road	Division Street	Construct to major collector cross section consistent with Civic Neighborhood Plan design	X	\$4,750,000	0	0	10	6.7	5.0	21.7
19	16th Street	Eastman Parkway	NW Civic Drive	Construct to major collector cross section with Civic Neighborhood Plan design	X	\$4,750,000	0	0	10	6.7	5.0	21.7
20	Main Avenue	Division Street	5th Street	Ped to MAX project, improve pedestrian access to light rail transit	X	\$4,750,000	0	0	10	6.7	5.0	21.7
21	Cleveland Avenue	Stark Street	Burnside Road	Construct to minor arterial cross section. Reconstruct street from Stark to Burnside, with two travel lanes, center turn lane, bike lane, and sidewalk.		\$23,660,000	0	0	5	5.0	2.5	12.5
22	Beech Avenue	4th Avenue	5th Avenue	Complete street		\$670,000	0	0	0	6.7	5.0	11.7
23	Burnside Road	Wallula Avenue	Hogan Road	Construct to standard arterial cross section with boulevard design where applicable. Completed project. 5 lanes between streets. No gaps.	X	\$11,120,000	0	0	10	6.7	7.5	24.2
24	Hogan Road - Phase 2	Burnside Street	Powell Boulevard	Add northbound lane between Burnside Street and Powell Blvd.		\$22,030,000	5	0	0	8.3	5	18.3
25	Hogan Road - Phase 3	Powell Boulevard	Palmquist Road	Construct to 5-lane major arterial cross section.		\$32,660,000	10	0	0	8.3	2.5	20.8
26	Hogan Road - Phase 4	Palmquist Road	Rugg Road	Construct to 5-lane major arterial cross section.		\$64,620,000	10	0	0	5.0	2.5	17.5
27	Division Street	Kane Drive	UGB	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)	X	\$7,500,000	10	10	0	1.7	2.5	24.2
28	Burnside Road	Hogan Road	Powell Boulevard	Safety improvements and reconstruction	X	\$8,370,000	0	0	10	8.3	5.0	23.3
29	Powell Valley Road	Burnside Road	Kane Drive	Construct to standard arterial cross section with boulevard design where applicable. Extension of 5 lanes between Burnside Ave and Kane Rd		\$10,060,000	10	0	0	3.3	2.5	15.8

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
30	1st Street	Burnside Road	Kane Drive	Construct to standard arterial cross section with boulevard design where applicable. Extension of 5 lanes between Burnside Ave and Kane Rd		\$2,200,000	10	0	0	1.7	2.5	14.2
31	Barnes Road	Powell Valley Road	Hillyard Road	Construct to standard collector cross section (Missing bicycle facilities)		\$13,560,000	10	0	0	6.7	0.0	16.7
32	Williams Road	Division Street	Powell Valley Road	Construct to standard collector cross section (Missing pedestrian and bicycle facilities)		\$13,680,000	10	0	0	1.7	2.5	14.2
33	Powell Valley Road	Kane Drive	282nd Avenue	Construct to minor arterial cross section (Missing bicycle facilities)		\$27,830,000	0	0	5	1.7	2.5	9.2
34	Walters Drive	Springwater Corridor Trail	7th Street	Construct to standard collector cross section (Missing pedestrian and bicycle facilities)		\$4,790,000	10	0	5	0.0	0.0	15.0
35	7th Street	Eastman Avenue	Walters Drive	Construct to standard collector cross section (Missing bicycle facilities)		\$2,950,000	10	0	5	0.0	0.0	15.0
36	Heiney Road	14th Drive	Binford Lake Parkway	Construct to standard collector cross section (Missing bicycle facilities)		\$6,810,000	10	0	0	0.0	0.0	10.0
37	Towle Avenue	Binford Lake Parkway	Butler Road	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$22,610,000	0	10	0	3.3	0.0	13.3
38	Roberts Avenue	Maple Loop	Regner Road	Construct to minor collector cross section consistent with special street designation		\$800,000	0	0	0	1.7	2.5	4.2
39	Regner Road	Gabbert Road	Butler Road	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$25,670,000	0	0	0	1.7	0.0	1.7
40	282nd Avenue	Powell Valley Road	Lusted Road	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$2,400,000	10	0	0	0.0	0.0	10.0
41	Salquist Road	Barnes Road	282nd Avenue	Construct to standard collector cross section ( Sidewalk gaps exist, missing bicycle facilities)		\$10,500,000	10	0	0	0.0	0.0	10.0
42	Chase Road	Orient Drive	282nd Avenue	Construct to standard collector cross section (Sidewalk gaps exist, missing bicycle facilities)		\$4,740,000	10	0	0	0.0	2.5	12.5
43	Orient Drive	Palmquist Road	Springwater Major Arterial	Construct to standard arterial cross section. Extension of 5 lanes between Salquist Rd and Springwater Major Arterial		\$16,530,000	0	0	0	3.3	2.5	5.8
44	Orient Drive	Palmquist Road	Springwater Major Arterial	Construct to standard arterial cross section (Missing pedestrian and bicycle facilities)		\$16,530,000	10	0	0	3.3	2.5	15.8
45	Hillyard Road	Palmblad Road	Anderson Road	Construct to standard collector cross section (Missing pedestrian and bicycle facilities)		\$18,290,000	10	0	0	8.3	2.5	20.8

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
46	252nd Avenue/ Palmblad Road	Hillyard Road	Rugg Road	Construct to minor arterial cross section ( Sidewalk gaps exist, missing bicycle facilities)		\$12,440,000	10	0	0	1.7	0.0	11.7
47	Springwater Planned Road	Hogan Road	Fleming Avenue	Construct to standard collector cross section (New road segment to be constructed)		\$4,980,000	0	0	0	8.3	2.5	10.8
48	Fleming Avenue	19th Street extension	252nd Avenue	Construct to standard collector cross section (New road segment to be constructed- Extension project)		\$8,390,000	0	0	0	8.3	0.0	8.3
49	Palmquist Road	Hogan Road	HWY 26	Construct to minor arterial cross section (Sidewalk gaps exist, missing bicycle facilities)	X	\$6,173,000	10	0	0	8.3	2.5	20.8
50	Palmblad Road	Palmquist Road	Hillyard Road	Construct to standard collector cross section (Sidewalk gaps exist, missing bicycle facilities)		\$14,870,000	10	0	0	8.3	2.5	20.8
51	Cheldelin Road	1,500 feet west of 190th Avenue	190th Avenue	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$13,550,000	10	0	0	3.3	0.0	13.3
52	Giese Road	Gresham City Limits	Pleasant Valley Boundary	Giese - 172nd to 190th: Complete Buildout; Construct 3 lane street to urban standards with sidewalks and buffered bike lanes.		\$792,000	0	0	0	3.3	5.0	8.3
53	Giese Road	190th Avenue	Gresham City Limits	Construct to minor arterial cross section and boulevard design where adjacent to town center(Missing pedestrian and bicycle facilities)		\$4,107,000	10	0	0	3.3	5.0	18.3
54	Pleasant Valley planned road	Pleasant Valley planned road	Cheldelin Road	Construct to standard collector cross section		\$5,600,000	0	0	0	3.3	0.0	3.3
55	Pleasant Valley planned road	Springwater boundary	Crystal Springs	Construct to standard collector cross section		\$1,340,000	0	0	0	3.3	0.0	3.3
56	170th Avenue	Crystal Springs Boulevard	Baxter Road	Construct to minor collector cross section (Missing pedestrian and bicycle facilities)		\$2,580,000	10	0	0	3.3	0.0	13.3
57	Pleasant Valley planned road	Baxter Road	Pleasant Valley boundary	Construct to standard collector cross section		\$1,350,000	0	0	0	3.3	0.0	3.3
58	Crystal Springs Boulevard	172nd Avenue	Pleasant Valley planned road #66	Construct to standard collector cross section (Missing pedestrian and bicycle facilities)		\$660,000	10	0	0	3.3	0.0	13.3
59	Pleasant Valley planned road	Crystal Springs	Cheldelin Road	Construct to standard collector cross section		\$2,440,000	0	0	0	3.3	0.0	3.3

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
60	Pleasant Valley planned road	182nd Avenue	190th Avenue	Construct to standard collector cross section		\$3,320,000	0	0	0	3.3	0.0	3.3
61	Crystal Springs	Pleasant Valley planned road #118	172nd Avenue	Construct to minor collector cross section		\$870,000	0	0	0	3.3	0.0	3.3
62	Foster Road	Pleasant Valley planned road #140	Cheldelin Road	Construct to minor collector cross section (Missing pedestrian and bicycle facilities)		\$1,320,000	10	0	0	3.3	0.0	13.3
63	Pleasant View Drive	Powell Boulevard	Highland Drive	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$7,600,000	10	0	0	3.3	0.0	13.3
64	Pleasant View Bridge	Powell Loop	Pleasant View Drive	Replace failing bridge. Construct multi-use path on west side as part of the Powerline Corridor trail.		\$11,027,000	0	0	0	3.3333	0.0	3.3
65	182nd Avenue	McKinley Road	Richey Road	Construct to major collector cross section (Missing pedestrian and bicycle facilities)	X	\$14,420,000	10	10	0	3.3	0.0	23.3
66	182nd Avenue	Richey Road	Cheldelin Road	Construct to standard collector cross section except where adjacent to schools, then construct to major collector cross section (Missing pedestrian and bicycle facilities)		\$9,110,000	10	0	0	3.3	0.0	13.3
67	Pleasant Valley planned road	Giese Road	Gresham city limits	Construct to minor collector cross section (New roadway)		\$6,300,000	0	0	0	3.3	5.0	8.3
68	172nd Avenue	Giese Road	Cheldelin Road	Construct to minor arterial cross section. Extension of 172nd between Foster Rd and Giese extension (New roadway)		\$5,891,000	0	0	0	3.3	5.0	8.3
69	Pleasant Valley planned road	Foster Road	172nd Avenue	Construct to minor arterial cross section (New roadway)		\$3,460,000	0	0	0	3.3	5.0	8.3
70	Knapp Street	172nd Avenue	182nd Avenue	Construct to major collector cross section (New roadway)		\$1,849,000	0	0	0	3.3	5.0	8.3
71	Pleasant Valley planned road	182nd Avenue	Knapp Street	Construct to minor collector cross section (New roadway)		\$2,570,000	0	0	0	3.3	0.0	3.3
72	SE 190th Drive (Pleasant View Drive and Highland Drive)	11th Street	30th Street	Construct to minor arterial cross section. Improve existing road to major arterial standards.		\$12,605,000	0	0	0	3.3	2.5	5.8
73	SE 190th Drive (Pleasant View Drive and Highland Drive)	30th Street	Cheldelin Road	Construct to minor arterial cross section. Improve existing road to major arterial standards, signalize 190th at Richey and Cheldelin.		\$19,715,000	0	0	0	3.3	2.5	5.8

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
74	Pleasant Valley planned road	Dahlquist Road	McKinley Road	Construct to minor collector cross section (New roadway)		\$1,440,000	0	0	0	3.3	0.0	3.3
75	Welch Road	Anderson Road	282nd Avenue	Construct to standard collector design and intersection improvements (Missing pedestrian and bicycle facilities)		\$18,060,000	10	0	0	0.0	0.0	10.0
76	Orient Drive	Springwater major arterial	282nd Ave	Construct to minor arterial cross section (Missing pedestrian and bicycle facilities)		\$17,100,000	10	0	0	0.0	5.0	15.0
77	Springwater Planned Road	Springwater Planned Road #86	Rugg Road Extension	Construct to standard collector cross section (New roadway)		\$3,170,000	0	0	0	1.7	0.0	1.7
78	Anderson Road	Orient Drive	Rugg Road Extension	Construct to standard collector cross section (Sidewalk gaps exist, missing bicycle facilities)		\$4,850,000	10	0	0	0.0	0.0	10.0
79	Anderson Road	Springwater Collector	Rugg Road Extension	Construct to standard collector cross section(Sidewalk gaps exist, missing bicycle facilities)		\$10,700,000	10	0	0	0.0	0.0	10.0
80	Anderson Road	Rugg Road Extension	282nd Avenue	Construct to standard collector cross section(Sidewalk gaps exist, missing bicycle facilities)		\$11,910,000	10	0	0	0.0	0.0	10.0
81	Rugg Road	242nd Avenue	Orient Drive	Construct to major arterial cross section per the SW IAMP alignment. Half of street from Hogan Rd east 4,100 ft is within Clackamas Co. jurisdiction.		\$92,730,000	0	0	0	0.0	5.0	5.0
82	Springwater Planned Road	Hogan Road	Planned SW road ~4,000 feet east of Hogan Road	Construct to standard collector cross section (New roadway)		\$10,490,000	0	0	0	1.7	0.0	1.7
83	Springwater Planned Road	Hogan Road 2,900 feet north of Rugg Road	McNutt Road	Construct to minor arterial cross section (New roadway)		\$13,020,000	0	0	0	1.7	0.0	1.7
84	Springwater Planned Road	Hogan Road 1,300 feet north of Rugg Road	McNutt Road	Construct to minor arterial cross section with boulevard design (New roadway)		\$3,590,000	0	0	0	1.7	0.0	1.7
85	McNutt Road	Intersection of planned roads #95 and 96	Planned Rugg Road extension	Construct to major arterial cross section per SW IAMP alignment and boulevard design where designated.. Extension and expansion of McNutt Rd between planned streets.		\$32,410,000	0	0	0	0.0	0.0	0.0

Project Number	On Street	From	To	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
86	Springwater Planned Road	Hogan Road ~5,200 feet north of Rugg Road	Hogan Road ~2,300 feet north of Rugg Road	Construct to standard collector cross section (New roadway)		\$18,830,000	0	0	0	1.7	0.0	1.7
87	Carl Street	Rugg Road extension	282nd Avenue	Construct to standard collector cross section (Missing pedestrian and bicycle facilities)		\$6,560,000	10	0	0	0.0	0.0	10.0
88	Springwater Planned Road	Orient Drive	Stone Road	Construct to standard collector cross section		\$24,560,000	0	0	0	0.0	0.0	0.0
89	Springwater Planned Road	Approximately 2,100 feet west of 252nd Avenue	252nd Avenue	Construct to standard collector cross section		\$3,930,000	0	0	0	1.7	0.0	1.7
90	Springwater Planned Road	252nd Avenue	Rugg Road Extension	Construct to standard collector cross section		\$21,540,000	0	0	0	1.7	0.0	1.7
91	Telford Road	252nd Avenue/ Palmbiad Road	Southern Springwater boundary	Construct to minor arterial cross section		\$55,900,000	0	0	0	1.7	0.0	1.7
92	Hogan Road	Powell Boulevard	Rugg Road	Corridor Planning Study for Hogan		\$190,000	10	0	0	3.3	2.5	15.8
93	282nd Avenue	Powell Valley Road	Orient Drive	282nd Corridor Access Study per Springwater Plan Area TSP		\$190,000	0	0	0	0.0	0	0.0
94	Butler Road	Rodlun Road	Regner Road	Construct to minor arterial cross section. Consider special cross section design.		\$15,060,000	0	0	0	1.7	0	1.7
95	Gresham Transit Design Study	Gresham Central TC	Cleveland Avenue Station	Planning study for transit center efficiency, safety, and street design		\$1,900,000	0	0	0	3.3	5	8.3
96	Regner Road	Roberts Avenue	Gabbert Road	Construct to minor arterial cross section.		\$19,760,000	0	0	0	1.7	0	1.7

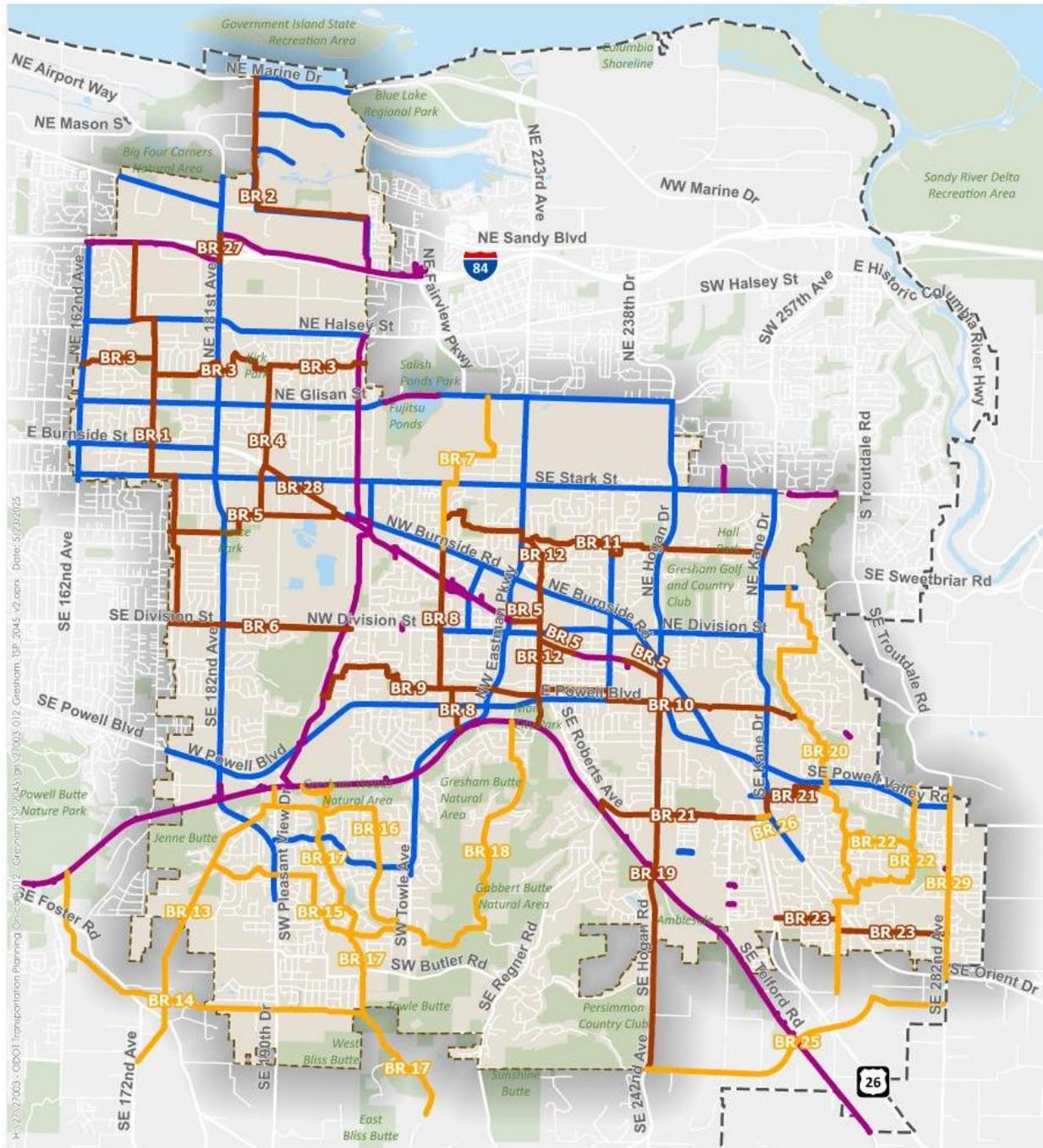
**Table 4. Prioritized Intersection Projects**

Project Number	Street	At	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
1	Division Street	182nd Avenue	Widen 182nd to add dual NB and SB left-turn pockets. Widen all approaches to separate right-turn pockets from bike lanes. Replace signal.	X	\$3,730,000	5	0	5	10.00	5	25.0
2	Stark Street	Kane Drive	Widen Kane to add dual NB left-turn pockets. Widen Stark to add EB right-turn pocket. Replace signal.	X	\$3,116,000	0	0	5	6.67	2.5	14.2
3	Stark Street	202nd Avenue	Widen 202nd to extend SB left-turn pocket and add SB right-turn pocket. Partial signal replacement.	X	\$1,366,000	0	0	2.5	6.67	0	9.2
4	Division Street	Kane Drive	Widen Division to add dual EB left-turn pockets. Replace signal. Replace ADA ramps and create more pedestrian waiting space.	X	\$1,224,000	0	0	5	5.00	2.5	12.5
5	Burnside Road	Hogan Drive	Widen Burnside to extend EB right turn pocket and to separate WB right turn pocket from bike lane. Partial signal replacement.	X	\$2,770,000	0	0	2.5	8.33	2.5	13.3
6	Powell Boulevard	Hogan Road	Widen Hogan to add second NB through lane between Powell & Burnside. Partial signal replacement.	X	\$7,529,000	0	0	2.5	8.33	2.5	13.3
7	Stark Street	Hogan Drive	Widen Hogan to add NB and SB dual left turns and EB, WB, and SB right turn lanes. Replace signal and implement adaptive signal timing.		\$6,920,000	0	0	0	6.67	2.5	9.2
8	Palmquist Road	Palmblad Road	Widen Palmquist Rd. to full 3-lane section through intersection. Widen to add northbound left-turn pocket.	X	\$1,340,000	0	0	0	8.33	0	8.3
9	Regner Road	Butler Road	Install single-lane roundabout		\$1,330,000	0	0	0	1.67	0	1.7
10	Orient Drive	Welch Road	Widen intersection to create a center turn lane on Orient Drive		\$361,152	0	0	0	0.00	2.5	2.5
11	Burnside Street	Stark Street	Widen to extend northwest-bound left-turn pocket	X	\$220,000	0	0	5	8.33	0	13.3
12	Burnside Road	Cleveland Avenue	Restripe to extend northbound and southbound left-turn pockets. Modify signal to add protected- permitted left-turn phasing.	X	\$1,120,000	0	0	5	6.67	2.5	14.2
13	Glisan Street	202nd Avenue	Widen 202nd to add SB right-turn pocket and to extend NB left-turn pocket. Partial signal replacement.	X	\$790,000	5	0	5	5.00	5	20.0
14	Powell Valley Road	Barnes Road	Widen to create a center turn lane on both Powell Valley Rd. approaches		\$642,000	0	0	0	1.67	0	1.7
15	Powell Valley Road	282nd Avenue	Install signal or single-lane roundabout	X	\$760,000	5	0	0	0.00	0	5.0

Project Number	Street	At	Project Description	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
16	Towle Avenue	Butler Road	Install signal or single-lane roundabout	X	\$1,840,000	5	0	0	3.33	0	8.3
17	Hogan Road	SE 5th Street	Widen Hogan Rd. to 5-lane section through intersection. Replace signal.	X	\$4,030,000	0	0	0	8.33	2.5	10.8
18	Hogan Road	Cleveland Drive	Widen Hogan Rd. to 5-lane section through intersection. Restripe to add eastbound right-turn pocket		\$5,390,000	0	0	0	1.67	2.5	4.2
19	Hogan Road	Butler Road	Widen Hogan Road to construct a center turn lane.		\$115,938	0	0	0	1.67	2.5	4.2
20	282nd Avenue	Salquist Road	Widen to add left turn lane		\$500,000	0	0	0	0.00	0	0.0
21	282nd Avenue	Welch Road	Widen to add left turn lane		\$100,000	0	0	0	0.00	0	0.0
22	Cheldelin Road	182nd Avenue	Cheldelin and 182nd		\$340,000	0	0	0	1.67	0	1.7
23	Cheldelin Road	Foster Road	Cheldelin and Foster		\$340,000	0	0	0	1.67	0	1.7
24	Cheldelin Road	190th Avenue	Install roundabout	X	\$390,000	5	0	0	3.33	0	8.3
25	Giese Road	172nd Avenue	172nd and Giese		\$340,000	0	0	0	3.33	0	3.3
26	Foster Road	172nd Avenue	Install roundabout or traffic signal	X	\$650,000	5	0	0	3.33	0	8.3
27	Cheldelin Road	172nd Avenue	172nd and Cheldelin		\$340,000	0	0	0	3.33	0	3.3
28	172nd Avenue	Knapp Road	Signalize intersection.	X	\$340,000	5	0	0	3.33	0	8.3
29	Foster Road	Richey Road	Install roundabout or traffic signal	X	\$340,000	10	0	0	3.33	0	13.3
30	SE 172nd	Crystal Springs	Signalize intersection	X	\$340,000	5	0	0	3.33	0	8.3
31	182nd Avenue	Main Street	Construct new pedestrian hybrid signal to replace nearby RRFB.	X	\$650,000	5	0	5	5.00	2.5	17.5
32	Towle Avenue	Willow Parkway	Construct center turn lane on Towle Avenue.		\$480,000	0	0	0	3.33	0	3.3
33	Glisan Street	242nd Avenue	Reconstruct Glisan to the south to create a second westbound receiving lane through the intersection. Partial funding because the intersection is 1/4 Gresham's.	X	\$391,200	0	0	0	8.33	0	8.3
34	Division Street	Birdsdale Avenue	Widen Birdsdale to add SB right-turn pocket. Partial signal replacement.	X	\$604,000	5	0	5	6.67	5	21.7
35	181st	Burnside	Bus queue jump lane southbound.	X	\$606,000	0	0	10	8.33	10	28.3
36	181st	Stark	Bus queue jump lane northbound.	X	\$697,000	5	0	10	10.00	10	35.0



Figure 4. Prioritized Bicycle Projects



-  Urban Growth Boundary
-  City Limits
-  Project Number
-  Constrained Projects
-  Unconstrained Projects
-  Existing Bike Lane or Wide Shoulder
-  Existing Off-Street Multi-Use Path



Table 5. Prioritized Pedestrian Projects

Project Number	Main Facility Type	Location	Cross Street	Length (feet)	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
C1	Crossing enhancement	181st Ave	San Rafael St	N/A	X	\$175,000	10	5	5	10.0	5	35.0
C2	Crossing enhancement	Halsey St	169th Ave	N/A	X	\$175,000	5	5	5	10.0	5	30.0
C3	Crossing enhancement	Halsey St	192nd St	N/A		\$175,000	5	5	2.5	8.3	0	20.8
C4	Held											
C5	Crossing enhancement	162nd Ave	Glisan St	N/A	X	\$175,000	5	5	10	10.0	10	40.0
C6	Crossing enhancement	Glisan St	188th Ave	N/A	X	\$175,000	5	5	10	8.3	10	38.3
C7	Crossing enhancement	Glisan St	202nd Ave	N/A	X	\$175,000	10	5	5	5.0	0	25.0
C8	Crossing enhancement	Glisan St	219th Ave	N/A		\$175,000	5	5	5	5.0	0	20.0
C9	Crossing enhancement	Stark St	175th Pl	N/A	X	\$175,000	10	5	5	10.0	10	40.0
C10	Crossing enhancement	Stark St	Burnside St	N/A		\$181,000	5	5	0	3.3	0	13.3
C11	Crossing enhancement	182nd Ave	Stephens St	N/A	X	\$175,000	10	5	0	10.0	5	30.0
C12	Crossing enhancement	Division St	182nd Ave	N/A	X	\$180,000	10	5	5	10.0	5	35.0
C13	Crossing enhancement	182nd Ave	Clinton Street	N/A	X	\$175,000	10	5	5	10.0	5	35.0
C14	Crossing enhancement	182nd Ave	Powell Blvd	N/A	X	\$175,000	10	5	5	10.0	5	35.0
C15	Crossing enhancement	Powell Blvd	Duniway Ave	N/A	X	\$175,000	5	5	5	10.0	5	30.0
C16	Crossing enhancement	Pleasantview Dr	23rd St	N/A		\$175,000	5	5	0	3.3	0	13.3
C17	Crossing enhancement	Towle Ave	33rd St	N/A		\$175,000	5	5	0	3.3	0	13.3
C18	Crossing enhancement	Burnside Rd	193rd Avenue		X	\$2,000,000	0	5	10	6.7	10	31.6 67
C19	Crossing enhancement	Burnside Rd	209th Ave	N/A	X	\$175,000	10	5	5	5.0	0	25.0
C20	Crossing enhancement	223rd Ave	Morrison St	N/A	X	\$175,000	5	5	5	5.0	5	25.0
C21	Crossing enhancement	Burnside Rd	Eastman Pkwy	N/A	X	\$175,000	10	5	10	5.0	10	40.0

Project Number	Main Facility Type	Location	Cross Street	Length (feet)	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
C22	Crossing enhancement	Powell Blvd	Eastman Pkwy	N/A	X	\$175,000	10	5	10	5.0	10	40.0
C23	Crossing enhancement	Powell Blvd	Cleveland Ave	N/A	X	\$175,000	10	0	10	6.7	10	36.7
C24	Crossing enhancement	Cleveland Ave	25th St	N/A		\$175,000	0	0	0	5.0	5	10.0
C25	Crossing enhancement	Stark St	Kane Dr	N/A	X	\$175,000	5	0	5	6.7	5	21.7
C26	Crossing enhancement	17th St	La Mesa Pl	N/A		\$175,000	5	0	5	1.7	5	16.7
C27	Crossing enhancement	Division St	Cochran Dr	N/A		\$175,000	0	0	5	5.0	5	15.0
C28	Crossing enhancement	Division St	Hogan Dr	N/A	X	\$181,000	10	0	7.5	5.0	5	27.5
C29	Crossing enhancement	1st St	Kane Dr	N/A		\$175,000	5	0	2.5	3.3	0	10.8
C30	Crossing enhancement	Kane Dr	Powell Valley Rd	N/A		\$175,000	5	0	5	3.3	5	18.3
C31	Crossing enhancement study	US26	Palmquist Rd	N/A		\$175,000	5	0	0	8.3	0	13.3
C32	Crossing enhancement	Hogan Rd	Roberts Rd	N/A		\$175,000	10	0	2.5	6.7	0	19.2
C33	Crossing enhancement	Orient Dr	Hillyard Rd	N/A		\$175,000	5	0	0	3.3	0	8.3
C34	Crossing enhancement	SE 5th Street	Williams Road	N/A		\$175,000	10	0	0	3.3	0	13.3
S1	Sidewalk infill	201st Ave	Glisan St to Holladay St	1400	X	\$2,326,000	5	10	5	5.0	5	30.0
S2	Sidewalk infill	Burnside Rd	West of Eastman Pkwy	2000	X	\$3,323,000	5	10	5	6.7	10	36.7
S3	Sidewalk infill	176th Ave	Division St to Yamhill St	4100	X	\$6,813,000	5	10	5	8.3	5	33.3
S4	Sidewalk infill	176th Pl	Division St to Marie St	4100	X	\$6,813,000	5	10	0	10.0	5	30.0
S5	Sidewalk infill	190th Ave	North of Division St	2000	X	\$3,323,000	5	10	2.5	6.7	5	29.2
S6	Sidewalk infill	Birdsdale Ave	North & South of Division S	1600	X	\$2,659,000	5	10	5	5.0	5	30.0
S7	Sidewalk infill	Division St	Birdsdale Ave	840		\$4,533,038	0	0	7.5	5.0	5	17.5
S8	Sidewalk infill	Division St	Kane Dr to Centurion Dr	1500	X	\$2,493,000	5	10	0	1.7	5	21.7
S9	Sidewalk infill	Powell Valley Rd	Williams Rd	3500	X	\$5,816,000	5	10	0	1.7	5	21.7
S10	Sidewalk infill or multi-use path on east side	US 26	Powell Blvd to Palmquist Dr	7000	X	\$11,632,000	5	10	0	8.3	5	28.3

Project Number	Main Facility Type	Location	Cross Street	Length (feet)	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
S11	Sidewalk infill	Highland Dr	11th St to Springwater Corridor	500	X	\$831,000	5	10	0	10.0	5	30.0
S12	Sidewalk infill	Butler Rd	Towle Ave to Rodlun Rd	1700	X	\$2,825,000	5	10	0	3.3	5	23.3
S13	Sidewalk infill	17th St	La Mesa Pl	200	X	\$332,000	5	10	5	1.7	5	26.7

Table 6. Prioritized Bicycle Projects

Project Number	Main Facility Type	Streets	Start (S or W)	Finish (N or E)	Length (Miles)	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
BR1	Bike boulevard	176th/172nd/169th	NW Division St	I-84	2.9	X	\$4,785,000	10	5	10	10.0	10	45.0
BR2	Multi-use path along road	185th Ave	NE Halsey St	NE Marine Dr	2.5	X	\$2,900,000	10	5	5	6.7	5	31.7
BR3	Bike boulevard	Holladay/Pacific/ Multnomah/Hassalo/ Holladay	NE 162nd Ave	NE 201st Ave	2.3	X	\$1,740,000	5	5	7.5	10.0	5	32.5
BR4	Bike boulevard	187th/188th	SE Yamhill St	NE Hassalo St	1	X	\$1,450,000	5	5	10	8.3	10	38.3
BR5	Bike boulevard	Main/Yamhill/ Wy'East Way	SE Main St	NE Hogan Dr	2.1	X	\$4,785,000	5	5	10	10.0	10	40.0
BR6	Separated bike lane	Division St	SE 176th Ave	Gresham-Fairview Trail	1.5	X	\$435,000	5	5	0	10.0	5	25.0
BR7	Bike boulevard	212th/214th/219th	NW Burnside Rd	NE Glisan St	1.4		\$1,595,000	5	5	2.5	5.0	5	22.5
BR8	Bike boulevard	Florence/Wallula	Springwater Corridor Trail	NW Burnside Rd	1.4	X	\$1,595,000	5	5	2.5	6.7	10	29.2
BR9	Bike boulevard	Battaglia/5th/1st/2nd	Gresham-Fairview Trail	N Main Ave	1.8	X	\$508,000	5	5	5	5.0	10	30.0
BR10	Bike boulevard	2nd/Cleveland/ Powell/1st Street	N Main Ave	NE Scott Dr	1.9	X	\$4,350,000	5	5	2.5	8.3	10	30.8
BR11	Bike boulevard	Yamhill/25th/24th/23rd	SE 212th Ave	NE Kane Dr	2.6	X	\$2,962,000	5	5	5	5.0	5	25.0

Project Number	Main Facility Type	Streets	Start (S or W)	Finish (N or E)	Length (Miles)	Fiscally Constrained	2025 Cost Estimate	Safety	Climate	Connectivity	Equity	Economic Development	Total
BR12	Bike boulevard	Main Ave/Salmon Dr	Springwater Corridor Trail	SE Salmon Ct	1.3	X	\$1,160,000	5	5	10	6.7	10	36.7
BR13	Trail	Powerline Trail/14th/ Pleasant View	City limits (South) Corridor Trail	Springwater	2.3		\$2,620,000	5	5	2.5	3.3	5	20.8
BR14	Trail	Kelley Creek Trail	Springwater Corridor Trail	Kelley Creek Trail end	2.7		\$3,076,000	5	5	0	3.3	5	18.3
BR15	Bike boulevard	Brittany/23rd/ Willow/31st	Powerline Trail	SW 33rd St	2		\$2,279,000	5	5	2.5	3.3	5	20.8
BR16	Bike boulevard	14th/Heiney/ Wonderview/ \Angeline	SW Pleasant View Dr	SW 33rd St	1.7		\$1,937,000	5	5	0	0.0	0	10.0
BR17	Trail	Butler Creek Greenway Trail	Kelley Creek Trail	Springwater Corridor Trail	2.2		\$2,506,000	5	10	2.5	0.0	5	22.5
BR18	Trail	Trail/Blaine/Walters	SW 33rd St	Springwater Corridor Trail	2.1		\$2,393,000	5	5	5	0.0	0	15.0
BR19	Multi-use path along road	Hogan Rd	NE Burnside Rd	City limits (South)	2.7	X	\$3,076,000	10	5	7.5	8.3	5	35.8
BR20	Bike boulevard	Anderson/Chase/ Williams/Greenway/ Scott/8th/Hacienda	SE Callister Rd	NE 17th	3.7		\$4,215,000	5	5	5	0.0	5	20.0
BR21	Bike boulevard	Regner/Roberts/ Palmquist/ 11th/10th Dr	Springwater Corridor Trail	SE Wendy Ave	1.8	X	\$2,051,000	5	5	0	8.3	5	23.3
BR22	Bike boulevard	School property/22nd/ Ironwood/16th	SE Baker Way	SE Old Woods Loop	1.7		\$1,937,000	5	5	2.5	0.0	5	17.5
BR23	Bike boulevard	Hillyard/Welch	Hwy 26	SE 282nd Ave	1.2	X	\$1,367,000	5	5	2.5	6.7	5	24.2
BR25	Multi-use path along road	Planned streets	SE 242nd Ave	SE 282nd Ave	2.3		\$2,620,000	5	5	0	1.7	0	11.7
BR26	Crossing Enhancement Study	Hwy 26	SE Palmquist Rd	SE Kane Dr	0.1		\$114,000	5	5	0	6.7	5	21.7
BR27	Separated bike lane	181st Ave	I-84 bike path	I-84 bike path	0.2	X	\$228,000	5	10	2.5	10.0	0	27.5
BR28	Multi-use path along road	Burnside Street	SE 188th Avenue	SE 197th Avenue	0.6	X	\$700,000	5	5	10	6.7	5	31.7
BR29	Multi-use path along road	SE 282nd Avenue	SE Orient Drive	SE Troutdale Road	1.4		\$1,634,000	5	5	0	1.7	0	11.7

Table 7 summarizes the prioritized projects by the total costs by project type, number of projects, average costs per project, and percent of the total cost. The prioritized projects totaled to near \$235 million, which is no more than 125% of the projected revenues as required by state law.

**Table 7. Prioritized Project Summary**

Project List	Costs	Number of Projects	Average Cost per Project	Percent of Total Cost
<b>Corridors</b>	\$106,673,000	13	\$8,205,615	46%
<b>Intersections</b>	\$34,843,200	23	\$1,514,922	15%
<b>Pedestrians</b>	\$57,957,000	32	\$1,811,156	25%
<b>Bicycles</b>	\$34,092,000	16	\$2,130,750	15%
<b>Total Costs</b>	<b>\$233,565,200</b>	<b>84</b>	<b>\$2,780,538</b>	<b>100%</b>
<b>100% Projected Revenues</b>	<b>\$195,719,000</b>			
<b>125% Projected Revenues</b>	<b>\$244,649,000</b>			

From these project lists, the City creates the transportation capital improvement program (CIP), which is a five-year plan for transportation projects that is reviewed and adopted annually. Through the CIP process these projects are evaluated annually in order to keep current with the city's needs.

Subsequent design studies, environmental impact studies, capital improvement programs, unforeseen needs, unanticipated conditions, and changes in revenues, costs, or funding sources may necessarily result in changes to a listed project's description, functional classification, location, timing, cost, source of funds, or provider. Modifications to listed project details may be made without amendment to the TSP when these are minor administrative changes or technical and environmental changes resulting from final engineering or environmental evaluation. Examples of administrative changes are modifications of estimated timing, cost, and source of funds. For listed projects whose source is a draft plan or program, needed modifications to project details will be made when a final plan or program is adopted.

The lists include the project location, a description, its cost estimate, and its evaluation scoring results. The corresponding maps show project locations.

## Programs

In addition to the project lists above, supporting efforts such as transportation systems management operations/intelligent transportation systems, outreach and education, crossing improvements guidance, micromobility, and technology can promote safety and mobility in Gresham. The following pages describe these strategies and programs, considerations, and key benefits.



# Transportation Systems Management Operations/ Intelligent Transportation Systems



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Transportation Systems Management and Operations (TSMO) and Intelligent Transportation Systems (ITS) are strategies that improve the efficiency, safety, and reliability of transportation networks by using advanced technology, data-driven solutions, and real-time management techniques. These approaches help maximize the capacity of existing infrastructure without requiring major expansions, making transportation systems more effective and sustainable.

TSMO focuses on optimizing the performance of transportation networks through proactive, coordinated, and real-time operational strategies. Key TSMO Strategies include:

- **Traffic Incident Management (TIM)** – Quick detection, response, and clearance of crashes or breakdowns to minimize congestion.
- **Active Traffic Management (ATM)** – Dynamic lane controls, variable speed limits, and ramp metering to improve flow.
- **Work Zone Management** – Reducing delays and improving safety during road construction or maintenance.
- **Transit Signal Priority (TSP)** – Adjusting traffic signals to give priority to buses and other transit vehicles.
- **Traveler Information Systems** – Real-time alerts on road conditions, congestion, and alternative routes (e.g., highway message boards, mobile apps).
- **Freight & Goods Movement Efficiency** – Managing truck traffic, dedicated freight corridors, and logistics coordination.
- **Bicycle & Pedestrian Systems Integration** – Enhancing non-motorized transportation through improved infrastructure and safety measures.

ITS is the use of advanced technologies—such as sensors, communication networks, and automation—to improve transportation safety and mobility. Key ITS Technologies include:

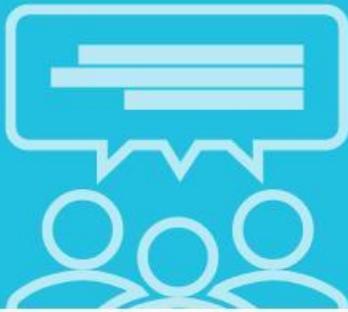
- **Adaptive Traffic Signals** – Traffic lights that adjust based on real-time demand to reduce congestion.
- **Connected & Autonomous Vehicles (CAVs)** – Vehicles that communicate with infrastructure and each other to improve safety and efficiency.
- **Smart Parking Systems** – Real-time data on parking availability to reduce search time and emissions.

- **Weigh-in-Motion (WIM) Systems** – Technology that allows trucks to be weighed while moving, reducing stops and improving freight efficiency.
- **Integrated Corridor Management (ICM)** – Coordination of freeways, arterial roads, and transit systems to optimize movement.
- **Real-Time Transit Tracking** – GPS-based systems that provide arrival times for buses, trains, and rideshare services.

## KEY BENEFITS OF THESE STRATEGIES INCLUDE:

- **Reduced Congestion** – Helps traffic move more efficiently without needing major infrastructure expansion.
- **Increased Safety** – Reduces crashes and incidents through real-time monitoring and automated responses.
- **Improved Travel Time Reliability** – Enhances predictability for commuters and freight movement.
- **Cost-Effective** – Maximizes existing infrastructure instead of costly road widening projects.
- **Environmental Benefits** – Reduces emissions by improving traffic flow and promoting eco-friendly transportation.

The City of Gresham currently has several arterial corridor management systems in-progress, with plans to install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection (including bicycle detection where appropriate) and routinely update signal timings on Glisan and on NE 181st/182nd Avenues.



# Outreach and Education



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## TRANSPORTATION MANAGEMENT ASSOCIATIONS (TMA)

A TMA is a nonprofit, member-based organization that works to improve transportation options, reduce traffic congestion, and enhance mobility in a specific geographic area, such as a business district, neighborhood, or region. TMAs are often formed by a coalition of local businesses, government agencies, developers, and community groups to address transportation challenges collectively.

### Key Functions of TMAs:

- **Commuter Services** – Provide programs like carpool/vanpool matching, shuttle services, and incentives for public transit use.
- **Employer Programs** – Help businesses develop commuter benefits, such as pre-tax transit passes, bike-to-work incentives, and telework options.
- **Traffic & Congestion Management** – Advocate for traffic signal improvements, parking management strategies, and alternative transportation modes.
- **Bicycle & Pedestrian Support** – Promote bike-friendly infrastructure, walking initiatives, and Safe Routes to School programs.
- **Public Transit Advocacy** – Work with transit agencies to improve service, increase accessibility, and expand transit coverage.
- **Sustainability & Air Quality Improvements** – Encourage green transportation initiatives, such as electric vehicle adoption and emissions reduction programs.

### Benefits of TMAs:

- **Reduced Traffic Congestion** – By promoting alternatives to single-occupancy vehicles.
- **Cost Savings** – Helps employers and commuters save money on parking, fuel, and transportation expenses.
- **Improved Air Quality** – Reduces emissions by shifting trips to cleaner modes of transportation.
- **Enhanced Mobility** – Provides better access to jobs, schools, and essential services.
- **Stronger Communities** – Supports economic development and livability by improving local transportation networks.

Existing TMAs are established within the Gresham Regional Center and Rockwood Town Center.

## SAFE ROUTES TO SCHOOL (SRTS)

SRTS programs are community-driven initiatives that promote safe, accessible, and active transportation options for students traveling to and from school. These programs aim to make walking and biking to school safer and more appealing for children, while also addressing traffic congestion, public health, and environmental concerns.

### Key Components of SRTS Programs:

- **Education:** Teaching students and families about pedestrian and bicycle safety, traffic rules, and the benefits of active transportation.
- **Encouragement:** Promoting walking and biking through activities like “Walk to School Day,” bike rodeos, and incentive programs.
- **Engineering:** Improving infrastructure such as crosswalks, sidewalks, bike lanes, and traffic signals to enhance safety.
- **Enforcement:** Partnering with law enforcement to ensure traffic laws are followed around schools.
- **Evaluation:** Assessing program effectiveness and identifying areas for improvement.

SRTS programs exist at local, state, and national levels, often receiving funding from government agencies, schools, and non-profit organizations.

### Benefits of SRTS Programs:

- **Increased Safety:** Reduces pedestrian and cyclist injuries by improving infrastructure and raising awareness.
- **Healthier Students:** Encourages physical activity, reducing the risk of obesity and related health issues.
- **Less Traffic Congestion:** Decreases the number of cars around schools, leading to safer drop-off zones and reduced pollution.
- **Stronger Communities:** Fosters community engagement by encouraging families to participate in safe travel initiatives.



# Crossing Improvements



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## RECOMMENDED CROSSING SPACING

Industry-recommended considerations for crosswalk spacing include block length, street width, building entrances, and traffic signals, which provide a spatial framework for crosswalk placement. Critically, crosswalks should be implemented on all legs of signalized intersections unless pedestrians are prohibited from the roadway. Although marked crosswalks are not required at unsignalized intersections, they are permitted at all intersections with professional judgment. Other optional considerations include infrastructure and network factors such as the pedestrian network, surrounding built environment, and desire lines. For instance, higher pedestrian volumes typically warrant more frequent or more protected crossings. In areas with high pedestrian activity, such as downtowns or commercial districts, crossing spacing should be designed to provide frequent and convenient crossing opportunities for pedestrians. In areas with lower pedestrian demand, such as suburban or less densely populated areas, longer crossing spacing may be acceptable. ODOT's Blueprint for Urban Design provides guidance shown in Table 1<sup>1</sup>. In addition, Table 2 provides Metro's Designing Livable Streets and Trails guidance<sup>2</sup>.

*Table 1. Urban Context Design (ODOT Traffic Manual Table 310.1-A, Highway Design Manual Section 802.5)*

Urban Context	Target Pedestrian Crossing Spacing Range (feet)
Traditional Downtown/Central Business District	250 – 550 (1-2 blocks)
Urban Mix	250 – 550 (1-2 blocks)
Commercial Corridor	500 – 1,000
Residential Corridor	500 – 1,000
Suburban Fringe	750 – 1,500
Rural Community	250 – 750

*Table 2. Metro's Designing Livable Streets and Trails Guidance*

2040 Land Use Design Type	Design Classification	Pedestrian Design
Any	Freeways	Crossings every 200 to 1200 feet
Any	Highways	Crossings every 200 to 1200 feet
Centers, station, communities and some main streets	Regional and community boulevards	Crossings every 200 to 530 feet (1 to 2 blocks)
Corridors, neighborhoods, some main streets, employment and industrial centers	Regional and community streets	Crossings every 200 to 530 feet (1 to 2 blocks)
Employment and industrial centers	Industrial streets	Crossings every 200 to 530 feet (1 to 2 blocks)

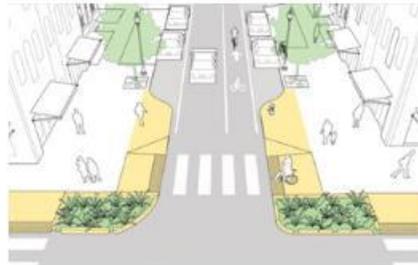
<sup>1</sup> <https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/crosswalks-and-crossings/#:~:text=They%20should%20typically%20be%20permitted,be%20provided%20at%20closer%20intervals.>

<sup>2</sup> <https://www.oregonmetro.gov/tools-partners/guides-and-tools/guidelines-designing-livable-streets-and-trails>

## RECOMMENDED TREATMENTS

Recommended treatments at pedestrian crossings can be determined based on review of quantitative characteristics, such as pedestrian volume, street crossing width, traffic volume, and traffic speed. Treatments may include:

- Marked crosswalks using high-visibility crosswalk markings.
- Pedestrian refuge islands provide a safe place for pedestrians to stop halfway across the street.
- Curb extensions reduce the crossing distance and improve visibility.
- Rectangular Rapid Flashing Beacons (RRFBs) allow user-activated lights that enhance pedestrian visibility at crossings.
- Pedestrian Hybrid Beacons (HAWK Signals) are traffic control devices that provide a signalized crossing for pedestrians when activated.
- Advanced stop lines and yield markings are lines painted further back from the crosswalk to encourage vehicles to stop farther back, improving pedestrian safety.



**Curb Extensions**



**Refuge Islands**



**Rapid Rectangular Flashing Beacons (RRFBs)**



**Raised Crosswalks**

FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations provides the guidance summarized in Table 3<sup>3</sup>, and provides accompanying worksheets that use quantitative traffic characteristics, such as road volume, pedestrian volume, and speed limit to determine a recommended treatment.

It is important to note that all crossings are reviewed by an engineer to ensure the treatment is appropriate.

**Table 3. Recommended Crosswalk Treatments based on Quantitative Factors**

Road Type	Vehicle ADT >4,000 – 9,000			Vehicle ADT >9,000 – 12,000			Vehicle ADT >12,000 – 15,000			Vehicle ADT >15,000		
	≤30 MPH	35 MPH	≥40 MPH	≤30 MPH	35 MPH	≥40 MPH	≤30 MPH	35 MPH	≥40 MPH	≤30 MPH	35 MPH	≥40 MPH
Two Lanes	Grey	Grey	Blue	Grey	Grey	Blue	Grey	Grey	Blue	Grey	Blue	Blue
Three Lanes With Raised Median	Grey	Grey	Blue	Grey	Grey	Blue	Grey	Grey	Blue	Grey	Blue	Blue
Three Lanes Without Raised Median	Grey	Orange	Green	Grey	Blue	Green	Blue	Blue	Green	Blue	Blue	Green
Multilane With Raised Median	Orange	Orange	Green	Orange	Blue	Green	Blue	Blue	Green	Blue	Blue	Green
Multilane Without Raised Median	Orange	Blue	Green	Orange	Blue	Green	Blue	Blue	Green	Blue	Blue	Green

■ Marked crosswalk

■ Marked crosswalk, geometric elements, and RRFB

■ Marked crosswalk, geometric elements (ex. pedestrian refuge island), enhanced signing and striping

■ Marked crosswalk, geometric elements, half signal, or full signal

<sup>3</sup> [https://www.fhwa.dot.gov/innovation/everydaycounts/edc\\_5/docs/STEP-guide-improving-ped-safety.pdf](https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/docs/STEP-guide-improving-ped-safety.pdf)



# Micromobility



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Micromobility devices – often collectively referred to as electric micromobility, e-micromobility, or micromobility – are typically defined as lower-weight, lower-speed vehicles that are operated through some combination of human power and an onboard battery and electric motor. The motor may provide power assistance to the rider as they pedal and/or independently propel the vehicle using a throttle. Non-powered vehicles, like a standard bicycle, may also be considered under the micromobility definition.

Most commonly, *micromobility* is used to refer to e-bikes and electric scooters. However, the term may refer to:

- e-bikes (including cargo bikes, cargo tricycles, recumbents, and adaptive bikes for people with disabilities)
- e-scooters (including those with 2 or 3 wheels, with and without seats)
- small personal electric vehicles (PEVs) (including electric unicycles, hoverboards, electric skateboards, and segways)
- personal mobility devices (including wheelchairs and mobility scooters)
- electric mopeds
- electric motorcycles

Including a variety of devices “grows the pie” to include people that cannot or will not bike. Most existing programming includes e-bikes alone. Integrating accessible adaptive devices – such as recumbent e-bikes – into programs is essential for inclusivity.

Conversion kits convert a non-powered bicycle to an e-bike by adding a battery and motor. As a wider variety of ready-made e-bikes has become available and their purchase prices have decreased, the market share of conversions has drastically decreased. A decade ago, half of all e-bikes in the U.S. were conversion kits. Today, less than 6% are.<sup>1</sup>

## TYPES OF MICROMOBILITY DEVICES



e-bikes



e-scooters



small personal electric vehicles (PEVs)



personal mobility devices



electric mopeds



electric motorcycles

<sup>1</sup> Thesis: A Survey of North American Electric Bicycle Owners (PSU)

## MICROMOBILITY UNDER OREGON LAW

Oregon law provides detailed definitions for e-bikes, e-scooters, small personal electric vehicles (PEVs), personal mobility devices, electric mopeds, and electric motorcycles.

Recent legislation (Oregon House Bill 4103, effective January 1, 2025, amending Oregon Revised Statutes (ORS) 801.258 “Electric assisted bicycle”) has provided an updated definition of “electric assisted bicycles”, being “a bicycle that is equipped with an electric motor”, stratified by three classes. All classes must be equipped with pedals.

E-Bike Class (per OR HB 4103)	1	2	3
Throttle	No	Yes	No
Top speed (mph)	20	20	28

Development of further legislation is underway in Oregon to clarify micromobility device definitions, as well as requirements around user age, helmet usage, maximum speeds, and educational programs.

## OWNERSHIP MODELS

Micromobility devices may be owned by individuals, shared in publicly accessible systems, or managed by a business or government entity. Each of these models caters to different use cases and provides different opportunities for programmatic involvement.

Micromobility Ownership Models			
	Private	Shared	Fleet
Characteristics	<ul style="list-style-type: none"> <li>Devices owned by individuals</li> <li>Users typically charge at home, occasionally at work; rarely in public</li> </ul>	<ul style="list-style-type: none"> <li>Devices are rented on a time basis</li> <li>Current trend towards swappable batteries; charging occurs at an off-site location</li> <li>Can have fixed docking stations or be “free floating”</li> <li>Systems typically have defined and geofenced service areas</li> <li>Often serves as a supplement to public transit</li> </ul>	<ul style="list-style-type: none"> <li>Dedicated devices used for business operations</li> <li>Devices typically charged at a hub location</li> <li>Can include delivery fleets to serve customer needs or internal fleets for organizational use supporting job functions</li> </ul>
Opportunities	<ul style="list-style-type: none"> <li>Maximizes potential for GHG reduction through VMT substitution</li> <li>Offers the most straightforward program evaluation and justification</li> </ul>	<ul style="list-style-type: none"> <li>Higher rates of acceptance and use among communities without strong traditions of cycling and with barriers to individual ownership</li> <li>Simpler interface with public transportation systems</li> <li>Many existing equity-focused initiatives</li> </ul>	<ul style="list-style-type: none"> <li>High potential for GHG reduction through VMT substitution</li> <li>Emerging opportunity with demonstrated success, globally</li> <li>Opportunities for direct partnerships; lower likely administrative costs compared to programs supporting individuals or households</li> </ul>

# KEY CONSIDERATIONS FOR INVOLVEMENT

## Community Outreach

- Engage in physical events in communities to increase engagement.
- Partner with local community-based organizations to develop perspectives from customers in different communities.
- Consider compensated engagement—providing cash, gift cards, food, or other incentives to outreach participants—to increase participation rates, quality of engagement, and relationships with the community.
- Provide all materials available in multiple languages and formats.
- Incorporate education on the basics of different micromobility devices, including lessons on how to use them. Create opportunities for hands-on learning, device practice and demonstration.
- Host programs in schools.
- Emphasize driver education and promote micromobility benefits to enhance safety and adoption.

## Support of Shared Micromobility

- Eliminate upfront costs and provide financial assistance to increase accessibility. Shared systems have comparatively low upfront costs to users, making them available to a wider range of incomes.
- Capitalize on a strong interest in regional collaboration for bikeshare programs to lower costs and improve accessibility across city boundaries.
- Provide specific support for unbanked people. Collaborate with Portland-based nonprofit Suma.
- Consider pursuing integration with transit passes.
- Establish rental programs based at transit stations.
- Pilot parking and charging stations.

## Infrastructure Provision

- Support the development of dedicated infrastructure to facilitate a broad range of use cases, including safe and comfortable bike lanes and pathways.
  - Smaller cities face challenges with existing infrastructure and need to ensure safe and comfortable riding environments. Strategic infrastructure development is key.
  - The suburbanization of poverty provides a challenge for adoption among low-income communities because infrastructure in outlying areas is typically less safe than in central cities.

- Consider passing width for speed differences between powered and unpowered devices when designing new bicycle or shared-use facilities.
- The presence of bicycle infrastructure can dramatically reduce the likelihood of sidewalk riding.<sup>2</sup>
- Develop a network of charging infrastructure to provide for a variety of needs.
  - The vast majority of charging for privately-owned devices takes place at home and work. Sufficient secure parking should be provided by multifamily housing developments and employers.
  - Public parks and grocery stores are identified as key locations for charging stations. Outdoor dining is an opportunity for charging – activity is supervised.
  - Other public charging will need to be secured – bike lockers or similar.
  - Out-of-home charging may not be necessary for A-to-B-to-A commutes but may unlock more complex trips. This is a chicken and egg problem.
  - Installation of public charging infrastructure alone will not be sufficient to encourage use; education and communication efforts must accompany installations.
  - Charging infrastructure may be developed as a social hub.
    - Spaces can house charging opportunities for fleet systems and individual devices.
    - A “loophole” in the development code may allow the establishment of a logistics center in a neighborhood if a given percentage of the development is used for commercial purposes.

## Direct Purchase Subsidies, Incentives, and Distribution of Free Devices

- Consider tiered benefits by income level, other qualifiers.
- Approve individuals or households for rebates using information from other income-qualified programs.
- Provide point-of-sale rebates to lower barriers to participation for low-income populations.
- Incentives should cover peripherals like theft protection and safety and security accessories.
- Provide reimbursement for bike shops under a robust process that ensures fast turnaround and ensures funding to minimize the liability taken on by participating retailers.

<sup>2</sup> Paper: [Safety Insights from E-Scooter Rider and Bicyclist Behavior Observations in Two U.S. Cities](#)

## TECHNOLOGIES

To determine which technologies will best support and advance City goals, the City should work with its partners and the community to implement the first four action items:

1. Intelligent Transportation Systems
2. Micromobility guidelines
3. Electric Vehicle infrastructure and fleet
4. Curb management guidelines and infrastructure

The process of identifying and implementing these actions can be summarized as follows:

### **Task 1: Identify mobility gaps, and determine service needs.**

- Gaps and needs can be gathered via input from the community and potential private and public partners.

### **Task 2: Determine technology that best suits the community's needs.**

- Focus first on what best meets the needs, rather than the specific technology.

### **Task 3: Establish Public-Private Partnerships.**

- Developing public-private partnerships (PPP) is a critical step in implementation as service providers are needed to provide technology, software, and mobility platforms to address areas' unique transportation challenges.

### **Task 4: Evaluate Challenges, Accessibility, and Impacts.**

- Common challenges involved in implementation include limited funding availability, low demand, gaining trust in the community, adequate broadband coverage, ADA accessibility, and access to smartphone and bank accounts.

### **Task 5: Funding and Implementation.**

- Many technology services are capital-light business models, and benefit more from assistance for operational expenses. Identify potential funding both for initial and ongoing costs.

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# Performance Measures

## REGIONAL REQUIREMENTS FOR PERFORMANCE MEASURES

Consistent with [-0900](#), [0905](#) and [-0910](#), the City of Gresham will be required to coordinate its planning process with Metro's Climate Smart Strategy performance measures documented in the [Metro 2023 Regional Transportation Plan](#). The following Table 8 documents the current implementation and performance monitoring results from the Metro 2023 *Regional Transportation Plan*.

These measures should be considered or evaluated, if needed, during the existing and future conditions analysis to establish baselines for the performance measures, establish targets for the -0905 performance measures if a target has not been set already, and identify needs. They should influence modal plan development and be used to evaluate future performance of the system.

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**Table 8. Metro 2023 RTP Climate Smart Strategy Implementation and Performance Monitoring**

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2023 RTP Base Year (2020)	RTP 23 +STS Target Scenario Constrained (2045)
<b>1. Implement the 2040 Growth Concept and local adopted land use and transportation plans</b>				
a. Share of households living in a walkable mixed used development in the UGB	26%	37%	29%	37%
b. New residential units built through infill and redevelopment in the UGB <sup>1</sup>	58%	65%	TBD	75%
c. New residential units built on vacant land in the UGB <sup>1</sup>	42%	35%	TBD	25%
d. Acres of urban reserves <sup>1</sup>	Not applicable	12,000	Not applicable	TBD
e. Daily vehicle miles per capita	19	17	15	10
<b>2. Make transit convenient, frequent, accessible and affordable</b>				
a. Daily transit service revenue hours (excluding C-TRAN service hours)	4,900	9,400	7,390	10,192
b. Share of households within 1/4-mile all day frequent transit service	30%	37%	44%	41%
c. Share of low-income households within 1/4-mile all day frequent transit service	39%	49%	74%	82%
d. Share of employment within 1/4-mile all day frequent transit service	41%	52%	64%	67%
<b>3. Make biking and walking safe and convenient</b>				
a(1). Daily trips made walking	505,000	768,000	1,416,311	2,129,413
a(2). Daily trips made biking	179,000	280,000	91,000	121,552
b(1). Per capita biking miles per week	2.1	3.4	1.1	1.3
b(2). Per capita pedestrian miles per week	1.3	1.8	2.8	3.3
c(1 and 2). See 4a(2) and 4a(3) below		See 4a(2) and 4a(3) below		
d(1). New miles of bikeways <sup>2</sup>	623 existing miles	421	626 existing miles	76
d(2). New miles of sidewalks <sup>2</sup>	5072 existing miles	Data not available	TBD	59

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2023 RTP Base Year (2020)	RTP 23 +STS Target Scenario Constrained (2045)
d(3). New miles of regional trails <sup>2</sup>	229 existing miles	140	247 existing miles	80
<b>4. Make streets and highways safe, reliable</b>				
a(1). Fatal and severe injury crashes - motor vehicles <sup>3</sup>	398	199	433	No forecast data
a(2). Fatal and severe injuries – pedestrians <sup>3</sup>	63	32	78	No forecast data
a(3). Fatal and severe injuries - bicyclists <sup>3</sup>	35	17	26	No forecast data
b. Change in travel time and reliability in regional mobility corridors	Data not available	Not evaluated	Data not available	No forecast data
c. Share of freeway lanes blocking crashes cleared within 90 minutes	Data not available	100%	Data not available	No forecast data
<b>5. Use technology to actively manage the transportation system</b>				
a. Share of arterial delay reduced by traffic management strategies	10%	35%	Data not available	No forecast data
b. Share of regional transportation system covered with system management/TSMO	Data not available	Data not available	Data not available	No forecast data
<b>6. Provide information and incentives to expand the use of travel options</b>				
a. Share of households participating in individual marketing	9%	45%	0.3%	0.6%
b. Share of workforce participating in commuter programs	20%	30%	17%	14%
<b>7. Manage parking to make efficient use of vehicle parking and land dedicated to parking</b>				
a(1). Share of work trips occurring in areas with actively managed parking	13%	30%	TBD	TBD
a(2). Share of non-work trips occurring in areas with actively managed parking	8%	30%	TBD	TBD
<b>8. Support transition to cleaner low carbon fuels, efficient fuels and pay-as-you-go insurance</b>				
a(1). Share of registered passenger cars that are electric or plug-in-hybrid electric	1%	8%	3%	48%

	Climate Smart Strategy Baseline (2010)	Climate Smart Strategy Monitoring Target (2035)	2023 RTP Base Year (2020)	RTP 23 +STS Target Scenario Constrained (2045)
a(2). Share of registered light trucks that are electric or plug-in-hybrid electric	1%	2%	2%	9%
b. Share of households using pay-as-you-go insurance	1%	40%	6%	91%
<b>9. Secure adequate funding for transportation investments</b>				
a. Address local, regional, and state transportation funding gap	Not evaluated		Regional funding discussions are ongoing	
<b>10. Demonstrate leadership on climate change</b>				
a. Region-wide annual tons per capita greenhouse gas emissions (MTCO <sub>2</sub> e) from household light-duty vehicles within the Target Rule area	Not evaluated		2.3	0.36
b. Region-wide annual tons per capita greenhouse gas emissions (MTCO <sub>2</sub> e) from all vehicles within the Target Rule area	Not evaluated		TBD	

**Table Notes:**

1. Data is derived from the 2018 Urban Growth Report adopted by the Metro Council in Dec. 2018.
2. Climate Smart Strategy target reflects number of miles of new bikeways, sidewalks and trails for projects in the 2014 RTP. 2023 RTP values reflect number of miles of new bikeways, sidewalks and trails for projects on planned regional networks in the 2023 RTP.
3. Climate Smart Strategy target reflects the 50 percent reduction target adopted in 2014 RTP. The 2023 RTP includes a target of zero fatal and severe injury crashes by 2035. The region does not currently have a safety predictive model to forecast this information, but will track progress toward the target through periodic RTP updates as required by federal transportation performance management requirements. Data shown for 2023 RTP Base Year (2020) reflects the annual average number of fatal and severe injury crashes reported by the Oregon Department of Transportation for the years 2016-2020.

Source: Metro 2023 Regional Transportation Plan Draft Climate Smart Strategy Implementation and Performance Monitoring

## STATE REQUIREMENTS FOR PERFORMANCE STANDARDS

Performance standards are selected from performance measures used to develop the TSP and contain specified thresholds. Performance standards are adopted metrics used to review comprehensive plan and land use regulation amendments and analyze transportation impacts as part of development review.

[OAR 660-012-0215\(3\)](#) requires Gresham to adopt at least two local transportation performance standards. Historically, performance standards have been heavily focused on the accommodation of vehicular travel such as level of service (a vehicular delay-based standard) or volume to capacity (a roadway/intersection-based capacity standard). Under the new rules, at least one performance standard must support increasing transportation options and avoiding principal reliance on the automobile. Collectively, the performance standards must also support achieving the targets for the performance measures from the Climate Smart Strategy section of the Metro 2023 Regional Transportation Plan developed to address OAR 660-044 greenhouse gas reduction requirements. Additionally, the performance standards must collectively evaluate at least two of the following objectives for the transportation system, for any or all modes of transportation:

1. Reducing climate pollution: creating feasible transportation options that reduce carbon emissions
2. Equity: consideration for existing or proposed transportation-related disparities and barriers experienced by historically underserved populations
3. Safety: providing a transportation system that reduces injuries and fatalities and that people feel comfortable using
4. Network connectivity: modal networks that provide route options to users and minimize out-of-direction travel
5. Accessibility: the ease of reaching (and interacting with) destinations or activities distributed in space
6. Efficiency: the maximization of transportation services at the lowest possible cost
7. Reliability: dependably provides users with a consistent range of predictable travel times
8. Mobility: the ability to move freely and easily

The performance standards could be based on a measure from the Metro Climate Smart Strategy or measures identified based on the City's TSP goals and objectives. While multiple performance measures will be considered during the development of the TSP, two or more need to be adopted as standards.

Table 9 shows the performance measures that have been included in a toolkit in ODOT's Analysis Procedures Manual to identify and select performance standards to meet the TPR requirements in [OAR 660-12-0215](#). Jurisdictions may adopt performance standards based on different measures; however, these measures have been identified as good candidates for the City of Gresham. This is based on their ability to document incremental changes impacted by projects, plan amendments, site developments and mitigations, their overall flexibility, ease of application and potential data availability. Table 9 also identifies the [OAR 660-012-0215\(3\)](#) objectives that the potential performance standards could have a primary impact upon (the two adopted standards must collectively address two or more of these performance measures) and which potential performance standards would support increasing transportation options and avoiding principal reliance on the automobile (at least one performance standard must meet this criteria). Additional information on each of these potential performance standards is included in ODOT's Analysis Procedures Manual.

**Table 9. Candidate Performance Measures for Adopting as Performance Standards (Source: APM)**

<b>Performance Measures</b>	<b>OAR 660-012-0215(3) Objectives with Primary Impact</b>	<b>Supports increasing transportation options and avoiding principal reliance on the automobile?</b>
Accessibility to key destinations	Accessibility, Equity	Yes
Accessibility to employment	Accessibility, Equity	Yes
Accessibility to transit	Accessibility, Equity	Yes
Bicycle level of traffic stress (BLTS)	Accessibility	Yes
Pedestrian level of traffic stress (PLTS)	Accessibility	Yes
System completeness	Network Connectivity, Accessibility	Yes
Bicycle crash risk	Safety	Yes
Pedestrian crash risk	Safety	Yes
Walking and biking facility condition	Accessibility	Yes
Pedestrian crossing spacing	Network Connectivity, Accessibility	Yes
AADT/capacity	Efficiency, Mobility	No
Hours of congestion/Duration of congestion	Efficiency, Reliability, Mobility	No
Level of service	Efficiency, Reliability, Mobility	No
Queuing	Mobility	No
Existing and predicted total crashes	Safety	No
Travel speed	Efficiency, Mobility	No
Vehicle hours traveled (VHT)	Reducing Climate Pollution	No
Household-based vehicle miles traveled (VMT) per capita	Reducing Climate Pollution	No
Volume-to-capacity ratio (V/C) at Intersections	Efficiency, Mobility	No
V/C for roadway links	Efficiency, Mobility	No

When selecting measures to adopt as performance standards, the City of Gresham needs to consider the following criteria:

- Does the standard help support progress for at least one of the [OAR 660-012-0215\(3\)](#) objectives? If so, which ones?
- Does the standard support increasing transportation options and avoiding principal reliance on the automobile? (One of the two measures must meet this criterion.)
- Can the City support the staff time or consultant time and expense to report on the standard or review the impact of the standard for transportation projects and land use and development applications?
- Does the City have the data available? If not, can they collect the necessary data and will they have the resources needed to do so?
- Does the standard support progress towards the TSP goals and objectives and support achieving the targets for the performance measures from the Metro Regional Transportation Plan? If so, which ones? Greater consideration could be given to standards that address multiple goals and performance measures.
- What will the thresholds be for the standard and will they create outcomes desired by the community?
- What standards do partner and neighboring agencies use and is there a benefit in coordinating standards? How will the two or more selected standards work together? Per [OAR 660-012-0215\(3\)](#), updated Transportation System Plans “must clearly establish how to apply the multiple performance standards to a proposal that meets some, but not all, of the transportation performance standards.”

## ATP PERFORMANCE MEASURES

As the City builds out the pedestrian and bicycle networks it is important to track and show progress compared to the overall plan. Performance measures show how the City is doing year by year. This information will be posted to the City website to maintain transparency and accountability.

Some of the recommended targets for pedestrian and bicycles trips and infrastructure are ambitious. In order to give walking and bicycling appropriate urgency, ambitious targets and the means to meet them are essential.

Goals	Recommended Measure	Recommended Target
<b>Active Transportation Mode Share</b>	Commuter trip mode share	Triple the share of trips completed by biking, walking, or transit by 2040.
	All trip mode share	Triple the share of trips completed by biking, walking, or transit by 2040.
<b>Connectivity</b>	Network completion	Complete 25% of high priority pedestrian projects by 2040 and complete 50% of the Bike Routes for Everyone Network by 2040.
<b>Safety</b>	Collision reduction	Reduce serious injuries and fatalities of bicyclists and pedestrians by half (50%) between 2017 and 2040.
<b>Equity</b>	Equity project completion	Projects with the top equity score are completed at an equal rate (or higher) as the network as a whole.
<b>Transit access</b>	Routes to transit	50% of major transit stops served by a Bike Route for Everyone by 2040 and 50% of all transit stops are along a comfortable walking route.

## Commute trip mode share

Baseline / 2017	2018	2019	Target / 2040
Bicycling: 0.4% Walking: 3.3% Transit: 9.3%	Bicycling: % Walking: % Transit: %	Bicycling: % Walking: % Transit: %	Bicycling: 3% Walking: 13% Transit: 20%

## All trip mode share

Baseline / 2017	2018	2019	Target / 2040
City will need to request data from Metro to determine baseline.	TBD	TBD	TBD

## Network completion

Baseline / 2017	2018	2019	Target / 2040
0% of the high priority pedestrian network	TBD	TBD	Complete 25% of high priority pedestrian projects.
23% of Bike Routes for Everyone network (15 of 65 miles completed).	TBD	TBD	Complete 50% of the Bike Routes for Everyone network.

## Collision reduction

Baseline / 2017	2018	2019	Target / 2040
(2010-2014) 27 serious pedestrian injuries and 6 fatalities. 8 serious bicycle injuries and 0 fatalities.	TBD	TBD	Reduce the number of bicycle and pedestrian serious injuries and fatalities by 50%.

## Equity project completion

Baseline / 2017	2018	2019	Target / 2040
Projects have been identified in 2017 ATP. Baseline is 0 completed.	TBD	TBD	Top equity projects are completed at an equal or higher rate as others.

## Network completion

Baseline / 2017	2018	2019	Target / 2040
Calculate based on Final Network Map from Gresham ATP.	TBD	TBD	50% of major transit stops served by Bike Routes for Everyone.
Calculate based on Final Network Map from Gresham ATP.	TBD	TBD	50% of all transit stops along a comfortable walking route.