Chapter 6:

Implementation

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.

Capital Improvement

Street Corridor Projects.
Examples include adding bike lanes to roadways, new multi-use trails, adding vehicle travel lanes for vehicles and freight and new sidewalks

Intersection Projects.
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.

Non-Capital Improvements

Technology Solutions -
Intelligent Transportation Systems and Transportations Systems Management and Operations. Examples include signal timing, corridor access management parking management and bicycle safety.

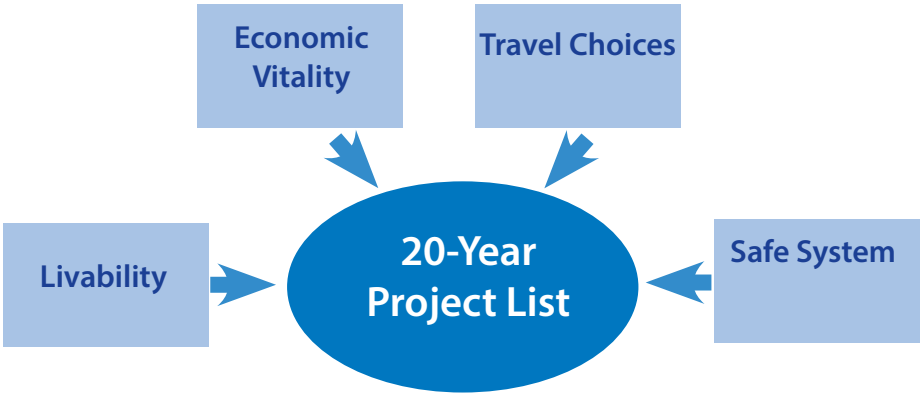
Planning.
Examples include corridor analysis of issues and opportunities and identification of solutions, or strategies to implement change.

Programs.
Examples include Safe Routes to School and non-auto Commute Challenges.

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 long-term ("50-year") or short-term ("20-year") depending on how critical they are to providing immediate needs for additional safety or capacity.

Projects on the "50-year" 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. This would be done within an approximate 50 year timeframe.

A sub-set of the 50-year project list is the "20-year" project list. 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.



The 20-year transportation street corridor project list is presented in Table 27 and Map 26. The additional transportation street corridor projects that comprise the 50-year project list are presented in Table 27 and Map 27. Intersection projects for both the 20-year and 50-year horizons are shown on map 25. From the 20-year project list, 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.

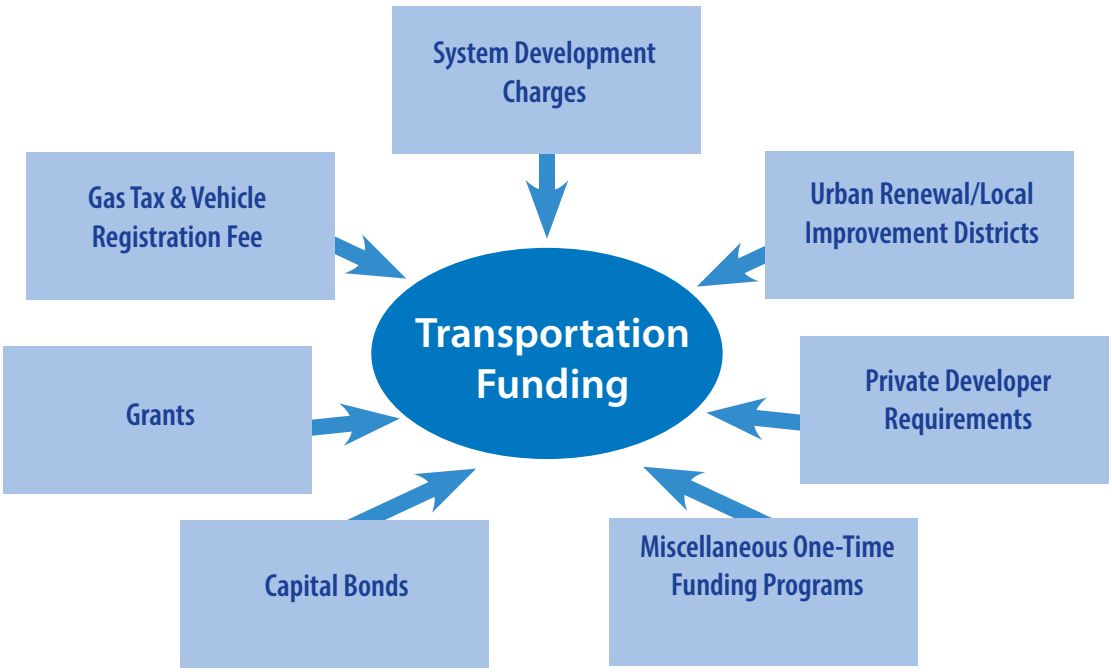
Subsequent design studies, environmental impact studies, capital improvement programs, unforeseen needs, unanticipated conditions, and changes in revenues, costs, or funding sources may necessarily result in changes to a listed project's description, functional classification, location, timing, cost, 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.

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

Gresham's funding forecast strategy includes several mechanisms to pay for the projects identified on the 20-year transportation project list.



System Development Charge (SDC)

SDCs are a one-time charge collected by the City when a development permit is issued. By law, SDCs are limited to use for improvements necessary to accommodate new development. The City's SDC list, and associated project costs, was updated concurrently with the TSP's project list. Those projects on the SDC list are indicated in Table 13. The SDC is development driven and forecasted to generate approximately $55 million over twenty years to pay for growth-related transportation improvements.

Grants

Federal, State, regional, and local grants provide an important source of funding for transportation improvements. Since many grants target specific types of strategies or improvements, they are often used to implement special programs and projects. Most grants also come with a local match requirement that can range from 10% to 40%. This funding strategy assumes the City will secure around $1.9 million per year on average in grant awards. This is consistent with the City's historic grant success.

Private Developer Requirements

New development has an obligation to mitigate its anticipated traffic impacts. Mitigation is typically determined by a traffic impact study (TIS) prepared by the developer and reviewed by the City. The City must approve the TIS prior to development entitlement. A standard development requirement is the dedication and

improvement of abutting streets to their designated functional classification and design. The City may require development to make specific improvements to address safety, circulation, or capacity issues on an abutting street, such as adding sidewalks, lane striping, turn lanes, corner reconstruction, median barriers, or traffic signals. When substantial traffic impacts are anticipated beyond the abutting streets, the City may require off-site improvements. When development affects a planned public street improvement, the City may work out cost-sharing agreements for some development-related improvements. To the extent that any requirement is included in the City's SDC Program, the cost to the development is offset by a SDC credit. The funding strategy forecasts $26 million in private developer requirements.

Capital Bond

Bonds are commonly used to finance large public facility improvements, including transportation projects. General Obligation (GO) Bonds are repaid from increased property tax rate. The authority to issue general obligation bonds, and raise property taxes to retire the debt must be granted by voters. This funding strategy assumes $5 million in GO bonds over the next 20 years.

The Rockwood/E 188th Avenue MAX light rail station received major upgrades in 2011.

Urban Renewal and Local Improvement Districts (LIDs)

Urban renewal and LIDs are mechanisms for funding local projects. Under urban renewal, improvements are funded by increased property tax revenues that are generated by increased property valuation over time. The tax rate within the urban renewal district is not increased. The 2020 TSP's funding strategy assumed two urban renewal districts in Gresham during its plan horizon, namely, Rockwood and Downtown. The Rockwood Urban Renewal District was established by city-wide vote in November 2003. It successfully completed several transportation capital improvement projects, including:

- significant upgrades to the traffic signal at 181st Avenue
- realignment of 187th/188th Avenues
- improvements on 197th Street from Burnside to Stark
- upgrade of Burnside Road to boulevard standards from 185th to 190th Avenues
- major upgrades and reconfiguration of the Rockwood/E 188th Avenue MAX light rail station
- upgrade of SE Stark Street to boulevard standards from 190th to 199th Avenue
- access and circulation improvements to Wilkes Road, a primary road serving industrial and employment land.

This TSP funding forecast assumes funds for one urban renewal district through year 2035 as the Downtown Urban Renewal District identified in the 2020 TSP has not been implemented.

Local Improvement Districts (LIDs) may be formed to fund specific improvements within a defined geographic district. The cost for improvements is financed by the local jurisdiction and repaid through special assessments on properties within that district.

This funding forecast assumes $2 million in revenue over the next 20 years from urban renewal districts and LIDs.

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

Gas Tax and Vehicle Registration Fee

State gas tax and vehicle registration fees pay primarily for maintenance and operation of the transportation system. However, some fees from this mechanism will contribute towards the capital improvement project list and is, therefore, included in the funding forecast as a funding mechanism. For example, by state law, 1% of the City's gas tax revenue must be used to fund improvements to bicycle and pedestrian facilities. This funding forecast assumes the gas tax and vehicle registration fees will contribute $2 million towards the 20-year transportation list.

Miscellaneous One-Time Funding Programs

Miscellaneous one-time funding includes infusions of federal, state, regional, or other transportation dollars intended to stimulate the local economy, enhance safety and livability, or reduce negative impacts of the transportation system on the natural environment. These infusions are not regularly established funding programs and are therefore unpredictable in terms of timing and amount. This TSP funding forecast predicts $10 million in revenue from this source over the next 20 years.

Cost Estimates

Per the State of Oregon's Transportation Planning Rule (TPR), the TSP funding forecast is required to address projects listed on the 20-year project list only. That forecast is tied to the Metro regional growth model that predicts regional population growth by Transportation Analysis Zone (TAZ) as explained in further detail in Chapter 5. For this TSP funding forecast, the cumulative total cost for transportation projects on the 20-year project list is proportionate to the metro model's forecasted growth over the next 20 years as follows:

- within current City of Gresham limits, 100% of land will be developed
- within the Pleasant Valley Plan Area, 9.1% of full build-out of that area will happen
- within the Springwater Plan Area, 12.6% of full build-out of that area will happen.

Applying this growth rate scenario methodology, the total transportation project costs over the next 20 years are estimated to be $138,000,000. Table 26 shows the revenue each funding mechanism must generate in order to fully implement the 20-year project list. Grants, system development charges and private development charges will fund the bulk of the system build-out through 2035. These are historically the mechanisms that have funded transportation projects and will likely continue to be through the next 20 years.

Table 26: Funding Forecast

Funding Tools/Mechanisms	Forecasted Revenue to Implement 20 Year Projects
Grants	$38,000,000
System Development Charges	$55,000,000
Private Development Charges	$26,000,000
Urban Renewal / Local Improvement Districts	$2,000,000
Capital Bonds	$5,000,000
Gas Tax / Vehicle Registration Fees	$2,000,000
Miscellaneous	$10,000,000
Total	**$138,000,000**

Maintenance and Operation

Maintenance and operation of the city's transportation system is vital to its safety, efficiency and longevity. Maintenance and operations includes road repair, traffic signal optimization and maintenance, sidewalk and bikeway enhancement and striping the roadways as well as engineering, planning and administration. The forecasted cost of maintaining and operating the transportation system over the next 20 years is $481,000,000.

Funding of maintenance and operations occurs primarily through state gas tax and vehicle registration fees. Gresham forecasts $258,700,000 in gas tax and vehicle registration fees through 2035. This leaves a gap between the expense of paying for maintenance and operations and forecasted revenue, and may necessitate a discussion about additional local or state funding sources.

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

20-Year and 50-Year Project Lists

Following are the Transportation System Plan's 20-Year and 50-Year project lists. The lists include the project location, a description and its cost estimate. The corresponding maps show project locations.

Map 26: 20 -and 50 -Year Street Corridor Projects

Table 27: 20-Year and 50-Year Street Corridor Project List

Project Number	On Street	From	To	Project Description	Phase	Cost Estimate
1	Riverside Parkway	Riverside Parkway	Portal Way	Construct to minor arterial design, looping Riverside Parkway with Portal Way consistent with special street designation.	20 year	$5,000,000
2	Sandy Boulevard	Eastern city limits	181st Avenue	Construct to major arterial cross section	20 year	$4,500,000
3	169th Avenue	Wilkes Road	Halsey Street	Construct to standard collector cross section	50 year	$515,706
4	San Rafael Street	181st Avenue	201st Avenue	Construct to minor arterial cross section	50 year	$9,990,952
5	Wilkes Road	181st Avenue	192nd Avenue	Construct to minor arterial cross section.	50 year	$6,781,698
6	192nd Avenue	Wilkes Road	Halsey Street	Construct to minor arterial cross section	20 year	$3,833,031
7	201st/202nd Avenue	Glisan Street	San Rafael Street	Construct to standard collector cross section	50 year	$6,100,075
8	201st Avenue	San Rafael Street	Sandy Boulevard	Construct to minor arterial cross section	50 year	$8,335,400
9	Halsey Street	181st Avenue	201st Avenue	Construct to standard arterial cross section	20 year	$8,118,088
10	162nd Avenue	Halsey Street	Glisan Street	Construct to standard arterial cross section	20 year	$4,467,107
11	Glisan Street	202nd Avenue	Fairview Parkway	Construct to standard arterial cross section. The northern half of this street section is within Multnomah County jurisdiction. Project cost estimate is for full street build-out.	20 year	$6,798,560
12	190th Avenue	Division Street	Yamhill Street	Construct to standard collector cross section	50 year	$910,000
13	192nd Avenue	Glisan Street	Stark Street	Construct to minor collector cross section	20 year	$4,432,624
14	181st Avenue	Glisan Street	Yamhill Street	Construct to standard arterial cross section with boulevard design where applicable	20 year	$11,440,061
15	Burnside Street	162nd Avenue	197th Avenue	Complete to standard arterial standard and improve remaining segments to boulevard standards where designated and applicable	50 year	$7,950,000
16	Main Street	Western City limits	SE 182nd Avenue	Construct to standard collector cross section	20 year	$2,350,226
17	Yamhill Street	181st Avenue	197th Avenue	Construct to minor collector cross section	50 year	$2,600,000
18	202nd Avenue (Birdsdale)	Glisan Street	Powell Boulevard	Construct to minor arterial cross section	50 year	$18,202,734
19	Wallula Avenue	Division Street	Stark Street	Construct to standard collector cross section	50 year	$8,347,988
20	Stark Street	202nd Avenue	205th Place	Construct sidewalk on both sides of the roadway	20 year	$43,797
21	Stark Street	215th Avenue	223rd Avenue	Construct sidewalk on both sides of the roadway	20 year	$31,902
22	223rd Avenue	Glisan Street	Stark Street	Pedestrian improvements	20 year	$102,229
23	Division Street	Kelly Avenue	Burnside Road	Construct to standard arterial cross section and to boulevard cross section, where applicable	20 year	$1,990,179
24	5th Street	Main Avenue	Cleveland Avenue	Construct to minor collector cross section consistent with the Green Shared Street designation per the Downtown Plan	20 year	$850,460

Project Number	On Street	From	To	Project Description	Phase	Cost Estimate
25	NW Norman Avenue	Burnside Road	Division Street	Construct to major collector cross section consistent with Civic Neighborhood Plan design	20 year	$2,500,000
26	Cleveland Avenue	Division Street	Powell Boulevard	Construct to standard collector cross section	20 year	$3,980,000
27	16th Street	Eastman Parkway	NW Civic Drive	Construct to major collector cross section with Civic Neighborhood Plan design	20 year	$2,500,000
28	Main Avenue	Division Street	5th Street	Ped to MAX project, improve pedestrian access to light rail transit	20 year	$2,500,000
29	Cleveland Avenue	Stark Street	Division Street	Construct to minor arterial cross section	20 year	$13,838,103
30	Beech Avenue	4th Avenue	5th Avenue	Complete street	20 year	$353,400
31	Burnside Road	Wallula Avenue	Hogan Road	Construct to standard arterial cross section with boulevard design where applicable	20 year	$5,850,000
32	Hogan Road Corridor	Stark Street	Rugg Road	Construct to major arterial cross section	Corridor with project phases	$69,302,529
32a	Hogan Road - Phase 1	Stark Street	Division Street	Construct sidewalks and planter strips	50 year	$6,505,877
32b	Hogan Road - Phase 2	Division Street	Powell Boulevard	Widen to major arterial cross section, construct sidewalks and planter strips	20 year	$11,595,863
32c	Hogan Road - Phase 3	Powell Boulevard	Palmquist Road	Construct to major arterial cross section	20 year	$17,191,272
32d	Hogan Road - Phase 4	Palmquist Road	Rugg Road	Construct to major arterial cross section	20 year	$34,009,517
33	Division Street	Kane Drive	UGB	Construct to minor arterial cross section	50 year	$3,945,711
34	Burnside Road	Hogan Road	Powell Boulevard	Safety improvements and reconstruction	20 year	$8,807,400
35	Powell Valley Road	Burnside Road	Kane Drive	Construct to standard arterial cross section	50 year	$5,294,917
36	1st Street	3rd Street	Kane Drive	Construct to standard collector cross section	20 year	$1,160,000
37	Barnes Road	Powell Valley Road	Hillyard Road	Construct to standard collector cross section	50 year	$7,135,229
38	Williams Road	Division Street	Powell Valley Road	Construct to standard collector cross section	20 year	$7,202,147
39	Powell Valley Road	Kane Drive	282nd Avenue	Construct to minor arterial cross section	20 year	$14,645,408
40	Walters Drive	Springwater Corridor Trail	7th Street	Construct to standard collector cross section	50 year	$2,519,478
41	7th Street	Eastman Avenue	Walters Drive	Construct to standard collector cross section	50 year	$1,553,194
42	Heiney Road	14th Drive	Binford Lake Parkway	Construct to standard collector cross section	50 year	$3,583,249
43	Towle Avenue	Binford Lake Parkway	Butler Road	Construct to minor arterial cross section	50 year	$11,897,840
44	Roberts Drive	Maple Loop	Regner Road	Construct to minor collector cross section consistent with special street designation	50 year	$419,913

Project Number	On Street	From	To	Project Description	Phase	Cost Estimate
45	Regner Road	Gabbert Road	Butler Road	Construct to minor arterial cross section.	20 year	$13,511,800
46	282nd Avenue	Powell Valley Road	Southern City Limits	Construct to minor arterial cross section	20 year	$3,118,700
47	Salquist Road	Barnes Road	282nd Avenue	Construct to standard collector cross section	50 year	$5,528,671
48	Chase Road	Orient Drive	282nd Avenue	Construct to standard collector cross section	50 year	$2,494,006
49	Orient Drive	Palmquist Road	Springwater Major Arterial	Construct to standard arterial cross section	50 year	$8,700,000
50	Hillyard Road	Palmblad Road	Anderson Road	Construct to standard collector cross section	50 year	$9,628,553
51	252nd Avenue/ Palmblad Road	Hillyard Road	Rugg Road	Construct to minor arterial cross section	50 year	$6,549,250
52	Springwater Planned Road	Hogan Road	Fleming Avenue	Construct to standard collector cross section	20 year	$2,622,000
53	Fleming Avenue	19th Street extension	252nd Avenue	Construct to standard collector cross section	50 year	$4,416,000
54	19th Street	Hogan Road	100 feet west of Palmblad Road	Construct to minor arterial cross section	20 year	$4,108,000
55	Palmquist Road	Hogan Road	HWY 26	Construct to minor arterial cross section	20 year	$2,725,000
56	Palmblad Road	Palmquist Road	Hillyard Road	Construct to standard collector cross section	50 year	$7,828,750
57	40 Mile Loop Extension: Orient to Troutdale Rd.	Gresham City Limits at Troutdale Road	Orient Drive	Construct Multi-Use Trail	20 year	$11,000,000
58	Cheldelin Road	1,500 feet west of 190th Avenue (2013 western Gresham City limits)	190th Avenue	Construct to minor arterial cross section	20 year	$1,021,200
59	Giese Road	Gresham City Limits	190th Drive	Construct to minor arterial cross section and boulevard design where adjacent to town center.	20 year	$4,556,100
60	Knapp Street/41st Street	182nd Avenue	190th Drive	Construct to Standard or major collector cross section	20 year	$5,956,820
61	Pleasant Valley planned road	Pleasant Valley planned road #124	Cheldelin Road	Construct to standard collector cross section	20 year	$2,946,000
62	Pleasant Valley planned road	Springwater boundary	Chrystal Springs	Construct to standard collector cross section	50 year	$704,000
63	170th Avenue	Chrystal Springs Boulevard	Baxter Road	Construct to minor collector cross section	50 year	$1,356,000
64	Pleasant Valley planned road	Baxter Road	Pleasant Valley boundary	Construct to standard collector cross section	50 year	$713,000
65	Chrystal Springs Boulevard	172nd Avenue	Pleasant Valley planned road #66	Construct to standard collector cross section	50 year	$346,000
66	Pleasant Valley planned road	Chrystal Springs	Cheldelin Road	Construct to standard collector cross section	50 year	$1,285,000
67	Pleasant Valley planned road	172nd Avenue	182nd Avenue	Construct to standard collector cross section	50 year	$3,422,000
68	Pleasant Valley planned road	182nd Avenue	City Limits	Construct to standard collector cross section	20 year	$1,747,000

Project Number	On Street	From	To	Project Description	Phase	Cost Estimate
69	41st Street	190th Drive	Binford Avenue	Construct to minor collector cross section	20 year	$1,830,000
70	41st Street	Eleven Mile Avenue	Rodlun Road	Construct to minor collector cross section	20 year	$816,000
71	Crystal Springs	Pleasant Valley planned road #118	172nd Avenue	Construct to minor collector cross section	50 year	$456,000
72	Foster Road	Pleasant Valley planned road #140	Cheldelin Road	Construct to minor collector cross section	50 year	$694,000
73	Pleasant View Drive	Powell Boulevard	Highland Drive	Construct to minor arterial cross section	20 year	$4,000,000
74	Butler Road	Binford Way	Rodlin Road	Realign and widen between Binford Way and Rodlin Road.	20 year	$5,525,700
75	182nd Avenue	Giese Road	Richey Road	Construct to major collector cross section between Giese Road and Knapp Road and to standard collector cross section between Knapp Road and Richey Road	20 year	$6,659,098
76	Giese Road	Richey Road	Cheldelin Road	Construct to standard collector cross section except where adjacent to schools, then construct to major collector cross section.	50 year	$4,794,000
77	Giese Road	Pleasant Valley Boundary	Gresham City Limits	Construct to minor arterial cross section	50 year	$6,074,080
78	Cheldelin Road	Pleasant Valley western boundary	1,500 feet west of 190th Avenue (2013 western Gresham city limits)	Construct to minor arterial cross section.	50 year	$6,110,415
79	Pleasant Valley planned road	Giese Road	Gresham city limits	Construct to standard collector cross section	20 year	$3,317,000
80	Pleasant Valley planned road	Giese Road	Pleasant Valley planned road #79	Construct to minor collector cross section	20 year	$932,000
81	172nd Avenue	Jenne Road	Cheldelin Road	Construct to standard arterial cross section	50 year	$35,385,434
82	Pleasant Valley planned road	Giese Road	172nd Avenue	Construct to standard collector cross section	50 year	$1,819,000
83	Knapp Street	172nd Avenue	182nd Avenue	Construct to major collector cross section with boulevard design where applicable	50 year	$4,517,450
84	Pleasant Valley planned road	182nd Avenue	Knapp Street	Construct to standard collector cross section	20 year	$1,354,500
85	SE 190th Drive (Pleasant View Drive and Highland Drive)	11th Street	Cheldelin Road	Construct to minor arterial cross section	20 year	$17,008,240
86	Pleasant Valley planned road	Pleasant Valley boundary	Pleasant Valley planned road #82	Construct to standard collector cross section	50 year	$756,000
87	Welch Road	Anderson Road	282nd Avenue	Construct to standard collector design and intersection improvements	50 year	$9,507,235
88	Orient Drive	Springwater major arterial	282nd Ave	Construct to minor arterial cross section	50 year	$9,000,000
89	Springwater Planned Road	Springwater Planned Road #86	Rugg Road Extension	Construct to standard collector cross section	50 year	$1,667,000
90	Anderson Road	Orient Drive	Springwater collector	Construct to standard collector cross section	50 year	$2,553,000

Project Number	On Street	From	To	Project Description	Phase	Cost Estimate
91	Anderson Road	Springwater Collector	Rugg Road Extension	Construct to standard collector cross section	50 year	$5,634,000
92	Anderson Road	Rugg Road Extension	282nd Avenue	Construct to standard collector cross section	50 year	$6,266,000
93	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. Cost est for entire project length full build-out	20 year	$48,804,000
94	Springwater Planned Road	Hogan Road	Planned SW road ~4,000 feet east of Hogan Road	Construct to standard collector cross section	50 year	$5,520,000
95	Springwater Planned Road	Hogan Road 2,900 feet north of Rugg Road	McNutt Road	Construct to minor arterial cross section	50 year	$6,852,000
96	Springwater Planned Road	Hogan Road 1,300 feet north of Rugg Road	McNutt Road	Construct to minor arterial cross section with boulevard design.	20 year	$1,892,000
97	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.	20 year	$17,058,000
98	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	20 year	$9,912,000
99	Carl Street	Rugg Road extension	282nd Avenue	Construct to standard collector cross section	50 year	$3,450,000
100	Springwater Planned Road	Orient Drive	Stone Road	Construct to standard collector cross section	50 year	$12,924,000
101	Springwater Planned Road	Approximately 2,100 feet west of 252nd Avenue	252nd Avenue	Construct to standard collector cross section	50 year	$2,070,000
102	Springwater Planned Road	252nd Avenue	Rugg Road Extension	Construct to standard collector cross section	50 year	$11,337,000
103	Telford Road	252nd Avenue/ Palmblad Road	Southern Springwater boundary	Construct to minor arterial cross section	50 year	$29,419,888
104	East Buttes Loop Trail	190th Avenue	Springwater Trail	Construct new shared use trail (12' wide pervious asphalt)	50 year	$5,515,000
105	East Buttes Loop Trail	Springwater Trail	Rodlun Road	Construct new shared use trail (12' wide pervious asphalt)	50 year	$830,000
106	East Buttes Loop Trail	Rodlun Road	190th Avenue	Construct new shared use trail (12' wide pervious asphalt)	50 year	$2,800,000
107	Gresham/ Fairview Trail	Halsey	Marine Drive	Construct new multi-use trail	20 year	$4,608,799
108	Multi-Use Path	Ruby Junction Station	Hogan Drive	Construct new multi-use path from Ruby Junction Station to Hogan Drive	20 year	$3,800,000
109	East Buttes Powerline Trail	Springwater/ Gresham Fairview Trail	Clackamas Greenway	Build trail linking Gresham and the Clackamas River	50 year	$1,900,000
110	181st Street Planning Study	Sandy Boulevard	Powell Boulevard	Corridor Planning Study for 181st Avenue	20 year	$100,000

Project Number	On Street	From	To	Project Description	Phase	Cost Estimate
111	Transit Corridor Planning Study	Western city limits	Kane Drive	Corridor Planning Study for transit between Stark Street and Powell Boulevard	20 year	$100,000
112	190th Drive/ Highland Drive/ Pleasant View Drive	Powell Boulevard	Cheldelin Road	190th Drive/Highland Drive/Pleasant View Drive Corridor Study	20 year	$100,000
113	SE 172nd Extension and Foster Road Study	SE 172nd	Foster Road	Corridor Planning Study for SE 172nd extension and Foster Road	20 year	$100,000
114	40 Mile Loop Extension: Orient to Troutdale Rd.	Gresham City Limits at Troutdale Road	Orient Drive	Corridor Planning Study for Multi-Use Trail	20 year	$100,000
115	Hogan Road	Glisan Street	Rugg Road	Corridor Planning Study for Hogan	20 year	$100,000
116	282nd Avenue	Powell Valley Road	Orient Drive	282nd Corridor Access Study per Springwater Plan Area TSP	20 year	$100,000
117	Butler Road	Rodlin Road	Regner Road	Construct to minor arterial cross section. Consider special cross section design.	50 year	$7,926,000
118	Ped to MAX	Gresham Central TC	Cleveland Avenue Station	Planning study and mobility improvements to light rail and bus transit	20 year	$1,000,000
119	Regner Road	Roberts Avenue	Gabbert Road	Construct to minor arterial cross section.	50 year	$10,397,500
120	Regner Road	Butler Road	County Line	Construct to minor arterial cross section.	50 year	$5,198,700

Map 27: 20-Year and 50-Year Intersection Projects

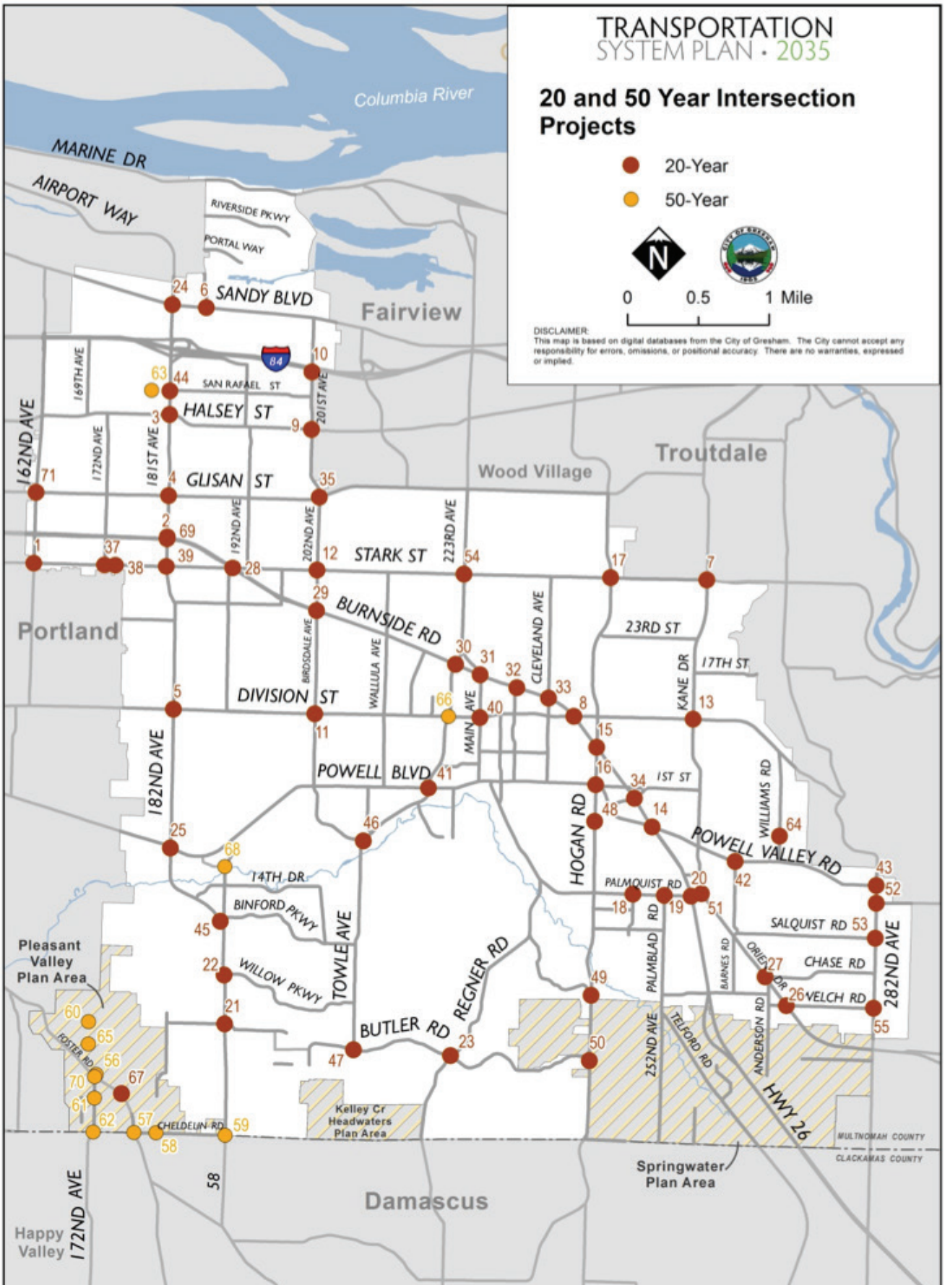


Table 28: 20-Year and 50-Year Intersection Projects

Project Number	Street	At	Description	Phase	Cost Estimate
1	Stark Street	162nd Avenue	Widen to add eastbound right-turn pocket. Restripe to increase storage for northbound and southbound left-turn pockets. Modify signal to add protected-permitted left-turn phasing on all approaches.	20 year	$684,160
2	Burnside Street	181st Avenue	Install access control in NE 181st Ave. to block left turns to and from NE Couch St. Restripe southbound left-turn pocket to increase storage.	20 year	$11,411
3	Halsey Street	181st Avenue	Widen to add second northbound left-turn pocket. Widen to add second southbound left-turn pocket and a southbound right-turn pocket.	20 year	$1,518,226
4	Glisan Street	181st Avenue	Widen to add southbound and westbound right-turn pockets. Modify signal to add protected-permitted left-turn phasing.	20 year	$875,876
5	Division Street	182nd Avenue	Widen to add dual left-turn pockets for eastbound and westbound approaches and to extend northbound and southbound right-turn pockets. Modify signal to add protected-permitted left-turn phasing and to add right-turn overlap phasing.	20 year	$814,726
6	Sandy Boulevard 185th Avenue Signal	185th Avenue	Widen to add eastbound left-turn pocket. Install signal.	20 year	$1,129,090
7	Stark Street	Kane Drive	Widen to add eastbound right-turn pocket. Modify signal to add protected-permitted left-turn and overlap right-turn phasing.	20 year	$305,075
8	Burnside Road	Division Street	Restripe to increase northwest-bound and southwest-bound left-turn pockets. Modify signal to add right turn overlap.	20 year	$38,080
9	Halsey Street	201st Avenue	Modify signal to add protected-permitted left-turn phasing on all approaches, to install vehicle detection, and to install pedestrian push buttons for all crossings.	20 year	$127,680
10	201st Avenue RR bridge	I-84	Construct new railroad bridge to accommodate motor vehicle travel lanes and the Gresham-Fairview Trail.	20 year	$2,359,125
11	Division Street	Birdsdale Avenue	Widen to add southbound right-turn pocket.	20 year	$448,372
12	Stark Street	202nd Avenue	Restripe to increase southbound left-turn pocket. Modify signal to add protected-permitted left-turn phasing.	20 year	$45,102
13	Division Street	Kane Drive	Add SB right turn lane and second EB left turn lane	20 year	$552,125
14	Burnside Road	Powell Boulevard	Restripe to prohibit eastbound and westbound left turns. Modify signal to add westbound right-turn overlap.	20 year	$22,982
15	Burnside Road	Hogan Drive	Add second southbound left-turn pocket and second southbound through lane. Add eastbound right-turn pocket. Modify signal to remove split phasing for northbound and southbound and introduce protected-only left-turn phasing for those approaches.	20 year	$1,456,765
16	Powell Boulevard	Hogan Road	Widen Hogan Rd. to 5-lane section through the intersection. Restripe to extend eastbound left-turn pocket.	20 year	$2,187,397
17	Stark Street	Hogan Drive	Widen to add dual left-turn pockets on all approaches. Widen to add northbound right-turn pocket. Connect southbound Hogan Dr. to SE Cherry Park Rd to provide a right-turn bypass of intersection.	20 year	$1,923,850
18	Palmquist Road	Fleming Avenue	Intersection widening.	20 year	$788,312
19	Palmquist Road Intersection	Palmblad Road	Widen Palmquist Rd. to full 3-lane section through intersection. Widen to add northbound left-turn pocket.	20 year	$707,507
20	Palmquist Road Intersection	US Highway 26	Widen to add second eastbound through lane and to extend eastbound left-turn pocket. Modify signal to remove split eastbound and westbound phasing and to introduce protected-only left-turn phasing. Improvements per the Springwater Interchange Area Manga*	20 year	$799,564

Project Number	Street	At	Description	Phase	Cost Estimate
21	SE 190th Drive Intersection	Butler Road	Install signal	20 year	$205,884
22	SE 190th Drive Intersection	Willow Parkway	Intersection Improvements	20 year	$205,884
23	Regner Rd - D.	Butler Road	Install single-lane roundabout	20 year	$698,601
24	Sandy Boulevard 181st Avenue	181st Avenue	Widen Sandy Blvd. east and west of intersection to add second eastbound and westbound lane, replacing existing right-turn lanes. Widen to add dual left-turn pocket on westbound approach. Modify signal to add protected-permitted left-turn phasing.	20 year	$479,901
25	Powell Boulevard	182nd Avenue	Modify signal to add right-turn overlap phasing	20 year	$15,960
26	Orient Drive	Welch Road	Widen intersection to create a center turn lane on Orient Drive	20 year	$150,000
27	Orient Drive	Chase Road	Widen intersection to create a center turn lane on Orient Drive	20 year	$150,000
28	Burnside Street	Stark Street	Widen to extend northwest-bound left-turn pocket	20 year	$113,962
29	Burnside Street	202nd Avenue	Modify signal to add protected-permitted left-turn phasing	20 year	$31,920
30	Burnside Road	Eastman Parkway	Modify signal to add protected-permitted left-turn phasing	20 year	$19,152
31	Burnside Road	Main Avenue	Restripe to extend northbound left-turn pocket. Modify signal to add protected-permitted left-turn phasing.	20 year	$22,822
32	Burnside Road	Kelly Avenue	Modify signal to add protected-permitted left-turn phasing	20 year	$19,152
33	Burnside Road	Cleveland Avenue	Add southbound right-turn pocket. Restripe to extend northbound and southbound left-turn pockets. Modify signal to add protected-permitted left-turn phasing.	20 year	$591,070
34	Burnside Road	3rd St	Intersection Improvements	20 year	$100,000
35	Glisan Street	202nd Avenue	Widen to add northbound and southbound left-turn pockets. Widen to add eastbound and southbound right-turn pockets. Modify signal to add protected-permitted left-turn phasing.	20 year	$1,105,062
37	Stark Street	172nd Avenue	Install signal. Restripe to add southbound left-turn pocket.	20 year	$323,381
38	Stark Street	174th Avenue	Modify signal to add protected-permitted left-turn phasing	20 year	$7,980
39	Stark Street	181st Avenue	Restripe to increase northbound and southbound left-turn pockets. Modify signal to add protected-permitted left-turn phasing	20 year	$56,179
40	Division Street	Main Avenue	Restripe to extend northbound and southbound left-turn pockets. Modify signal to add protected-permitted left-turn phasing	20 year	$33,196
41	Powell Boulevard	Eastman Parkway	Widen to add southbound right-turn pocket. Remove planted median to extend southbound left-turn pocket. Modify signal to add protected-permitted left-turn phasing	20 year	$541,905
42	Powell Valley Road	Barnes Road	Widen to create a center turn lane on both Powell Valley Rd. approaches	20 year	$143,408
43	Powell Valley Road	282nd Avenue	Install signal or single-lane roundabout	20 year	$401,817
44	San Rafael	181st Avenue	Widen to add southbound right-turn pocket	20 year	$638,423
45	Pleasant View Drive	Highland Drive	Install signal	20 year	$516,000
46	Towle Road	Birdsdale Drive	Remove planted median north of intersection for 50 feet to create paved refuge for two-stage left turns from Birdsdale Dr.	20 year	$10,953
47	Towle Road	Butler Road	Install single-lane roundabout	20 year	$969,027
48	Hogan Road	SE 5th Street	Widen Hogan Rd. to 5-lane section through intersection. Replace signal.	20 year	$2,119,240
49	Hogan Road	Cleveland Drive	Widen Hogan Rd. to 5-lane section through intersection. Restripe to add eastbound right-turn pocket	20 year	$2,836,634
50	Hogan Road	Butler Road	Widen Hogan Rd. to 5-lane section through intersection. Construct new westbound approach with 100-foot left-turn pocket and through lane. Restripe to add eastbound left-turn pocket.	20 year	$2,342,720

Project Number	Street	At	Description	Phase	Cost Estimate
51	Kane Drive	Palmquist Road	Modify signal to add eastbound right-turn overlap phasing	20 year	$15,960
52	282nd Avenue	Lusted Road	Install signal or single-lane roundabout	20 year	$401,817
53	282nd Avenue	Salquist Road	Widen to add left turn lane	20 year	$89,568
54	Stark Street	223rd Avenue	Widen to add duel left-turn pockets on all approaches. Widen to add eastbound right-turn pocket. Widen to extend right-turn pockets on northbound, southbound, and westbound approaches. Modify signal to add right-turn overlap phasing.	20 year	$3,340,180
55	282nd Avenue	Welch Road	Widen to add left turn lane	20 year	$52,421
56	Foster Road	172nd Avenue	Bridge	50 year	$180,000
57	Cheldelin Road	182nd Avenue	Cheldelin and 182nd	50 year	$180,000
58	Cheldelin Road	Foster Road	Cheldelin and Foster	50 year	$180,000
59	Cheldelin Road	190th Avenue	190th and Cheldelin	50 year	$205,884
60	Giese Road	172nd Avenue	172nd and Giese	50 year	$180,600
61	Foster Road	172nd Avenue	Install roundabout or traffic signal	50 year	$342,000
62	Cheldelin Road	172nd Avenue	172nd and Cheldelin	50 year	$180,000
63	Banfield Industrial Park Truck Turn-around		Construct truck turn around	50 year	$139,971
64	5th Street	Williams Road	Add Crosswalks.	20 year	$5,000
65	172nd Avenue	Knapp Road	Signalize intersection.	50 year	$180,000
66	Eastman Parkway	Division Street	Improve functioning of intersection and reduce congestion. Add second northbound and south bound left turn lanes.	50 year	$912,928
67	Foster Road	Richey Road	Install roundabout or traffic signal	20 year	$180,000
68	Springwater Trail	Pleasant View/190th Avenue	Provide access to the Springwater Trail	50 year	$190,000
69	Rockwood TC 181st lightrail station and pedestrian enhancements		Enhancements at the Rockwood Town Center/181st Avenue lightrail station, including pedestrian enhancements	20 year	$8,919,615
70	SE 172nd	Crystal Springs Boulevard	Signalize intersection	50 year	$180,000
71	Glisan Street	162nd Avenue	Restripe to change northbound right-turn lane to a through lane and to extend that lane through the intersection. Modify signal to add protected-permitted left-turn phasing on all approaches.	20 year	$37,506

Table 29: Technology Solutions – Transportation Systems Management Operations/Intelligent Transportation Systems

Technology Solutions	Project Description	Cost Estimate
Halsey Street: Arterial Corridor Management System	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. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions.	$500,000
Stark Street: Arterial Corridor Management System	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. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions.	$1,800,000
Glisan Street: Arterial Corridor Management System	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. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions.	$1,200,000
Division Street: Arterial Corridor Management - Signal equipment	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. Provide realtime and forecasted traveler information on arterial roadways including current roadway conditions, congestion information, travel times, incident information, construction work zones, current weather conditions and other events that may affect traffic conditions.	$1,500,000
Powell Boulevard – Arterial Corridor Management	Reliability and Traveler Information: Improve arterial corridor operations by expanding traveler information and upgrading traffic signal equipment and timings.	$1,500,000
NE 181st/182nd Avenues: Arterial Corridor Management	Improve arterial corridor operations by upgrading traffic signal equipment and timings.	$700,000
Burnside: Arterial Corridor Management with Adaptive Signal Timing + Transit Priority	Improve arterial corridor operations by upgrading traffic signal equipment and timings.	$1,500,000
US 26 Roadside Travel Time Information	Improve arterial corridor operations by expanding traveler information.	$1,000,000

Table 30: Outreach and Education Transportation Projects

Outreach And Education	Project Description	Cost Estimate
Transportation Management Associations: Gresham Regional Center	Support public private partnerships in regional or town centers that assist employees and/or residents increase use of travel options.	$675,000
Transportation Management Associations: Rockwood Town Center	Support public private partnerships in regional or town centers that assist employees and/or residents increase use of travel options.	$675,000
Parking Management	Convene stakeholders to plan and implement parking management strategies. Ideally this action raises revenue to expand TDM solutions.	$100,000
Bike Sharing	Provide funding to implement bikes for loan or rent.	$200,000
Car Sharing Options	Support 3 or more car sharing vehicles in developing centers.	$1,800,000
Safe walking routes, missing links	Construct missing links and safe routes to school.	$4,000,000

Pedestrian and Bicycle Project Lists

From the Active Transportation Plan a prioritized project list was created for pedestrian and bicycle projects. The priortization process was key in implementing equity in the plan, as it allowed the results of the equity analysis to influence the priority of projects.

The project's Community Advisory Committee, guided by the goals of the Active Transportation Plan, developed criteria to rank the pedestrian and bicycle project lists. The seven criteria are: Destinations, Safety, Transit Access, Health, Equity, Public Priority, and Pedestrian Level of Comfort / Bike Network Connectivity.

For each criterion, high priority projects were given a score of 10 points, medium priority projects received 5 points, and low priority received no points. The "public priority" criterion reflects feedback received on project prioritization from the ATP project focus groups, survey, and online map comments. A project is deemed to be a "high priority" if it was prioritized by at least two focus groups and mentioned at least one additional time in a focus group, online map comment, or survey. Medium priority projects were prioritized at least once in a focus group or mentioned as an important project in the online map comments, survey, or focus group. Low priority projects were not mentioned at all during the prioritization comment process.

Each prioritized project list is intended as a menu of projects that need to be completed, not a sequential "to-do list". This flexibility allows matching the right top-scored project to a funding source.

Prioritization Criteria for Pedestrian and Bicycle Networks

Criterion	Brief description	Input	Rank	Measurement
Serve Key Destinations	Is the project located in an area with high demand for walking?	The pedestrian network should serve locations of high potential demand. Areas with higher levels of potential walking activity should have higher priorities for installing sidewalks.	High	Project is located in a regional/town Center, or within an area zoned for high density residential (more than 16 units per acre), or within 1/4 mile of a hospital or health clinic.
			Medium	Project is within 1/4 mile of a school, library, or park.
			Low	Does not connect to a major destination.
Transit Access	Does this project improve pedestrian access to the transit network?	Transit ridership by stop (boardings)	High	Project is within 1/2 mile of a transit stop with more than 100 boardings a day.
			Medium	Project is within 1/4 mile of a transit stop with 20 to 100 boardings a day.
			Low	Project is within 1/4 mile of a transit stop with less than 20 boardings a day.
Promote Safety	Does this project provide an immediate safety improvement at a location with a recorded safety concern?	Collision analysis shows intersections and street corridors with highest crash rates. Crashes are included if they are within 100 feet of the project.	High	Two or more pedestrian crashes have occurred along the segment or intersection in the last five years for which there is data.
			Medium	A pedestrian crash has occurred along the segment or intersection in the last five years for which there is data.
			Low	No reported crash occurred
Level of Comfort for Pedestrians	Does the segment provide a comfortable walking environment?	Pedestrian Level of Service score; prioritize segments with a higher score for filling gaps and improvements to improve comfort on the most challenging sections first.	High	Pedestrian Level of Service score of 5
			Medium	Pedestrian Level of Service score of 3 or 4
			Low	Pedestrian Level of Service score 1 or 2
Bike Network Connectivity	Does the segment contribute the Gresham Greenways network?	Connections to the Gresham Greenways network or multiuse path infrastructure.	High	Project fills a gap in the Gresham Greenways and multiuse path network by connecting to it on both ends
			Medium	Project extends the Gresham Greenways and multiuse path network by connecting to it on one end
			Low	Project does not improve the Gresham Greenways and multi-use path network
Promote Health	Does the segment provide options for healthy food in areas with higher incidence of diabetes?	Health score with a 1/4-mile proximity to stores with healthy food and/or proximity to block groups of higher incidence of diabetes.	High	Project is within 1/4 mile of a healthy food store and in a census tract with a diabetes rate of over 10%.
			Medium	Project is within 1/4 mile of a healthy food store or in a census tract with a diabetes rate of over 10%.
			Low	Project is not within 1/4 mile of a healthy food store or in a census tract with a diabetes rate over 10%.
Equity	Does the project benefit underserved communities?	Equity composite measure showing geographies (block groups) where pedestrian improvements could benefit under-served, vulnerable populations.	High	Block group scored in top tier in the Equity Index.
			Medium	Block group scored in the middle tier in the Equity Index.
			Low	Block group scored in the lowest tier in the Equity Index.
Public Priority	Do Gresham community members prioritize this project?	Aggregated community prioritization from focus groups, survey, and online map comments.	High	Project was prioritized by at least two focus groups and mentioned at once in a focus group, online map comment, or survey.
			Medium	Project was prioritized or mentioned at least once in the outreach.
			Low	Project was not prioritized or mentioned during the outreach.

Prioritized Project List: *Pedestrian*

ID	Main Facility Type	Location	Cross Street	Length (feet)	Destinations	Transit Access	Pedestrian LOS	Promote Safety	Promote Health	Equity	Public Priority	Overall Score
C12	Crossing enhancement	181st Ave	Stark St	N/A	10	10	10	10	10	10	10	70
C6	Crossing enhancement	181st Ave	Glisan St	N/A	10	10	10	10	10	10	10	70
C15	Crossing enhancement	Division St	182nd Ave	N/A	10	10	10	10	5	10	10	65
S1	Sidewalk infill	162nd Ave	Glisan St to Halsey St	2400	10	10	10	10	5	10	10	65
C10	Crossing enhancement	Stark St	165th Ave	N/A	10	10	5	10	10	10	10	65
C17	Crossing enhancement	182nd Ave	Powell Blvd	N/A	10	10	5	10	10	10	10	65
S10	Sidewalk infill	Division St	Gresham Fairview Trail to Wallula Ave	3200	10	10	10	10	10	5	5	60
C13	Crossing enhancement	Stark St	Burnside St	N/A	10	10	5	10	10	10	5	60
C28	Crossing enhancement	Stark St	Kane Dr	N/A	10	10	5	10	10	10	5	60
C31	Crossing enhancement	Division St	Hogan Dr	N/A	10	10	5	10	10	10	5	60
S13	Sidewalk infill	Highland Dr	11th St to Springwater Corridor	500	10	10	5	10	10	10	0	55
S12	Sidewalk infill	US 26	Powell Blvd to Palmquist Dr	7000	10	5	10	10	10	5	5	55
S5	Sidewalk infill	176th Ave	Division St to Yamhill St	4100	10	10	0	10	10	10	5	55
S9	Sidewalk infill	Division St	Kane Dr to Centurion Dr	1500	10	5	10	10	5	10	5	55
C14	Crossing enhancement	182nd Ave	Stephens St	N/A	10	10	10	0	10	10	5	55
C23	Crossing enhancement	Burnside Rd	Eastman Pkwy	N/A	10	10	5	10	10	5	5	55
C26	Crossing enhancement	Powell Blvd	Cleveland Ave	N/A	10	10	5	5	10	10	5	55
C5	Crossing enhancement	162nd Ave	Glisan St	N/A	10	10	10	5	5	10	5	55
C7	Crossing enhancement	Glisan St	188th Ave	N/A	10	10	10	0	5	10	10	55
C16	Crossing enhancement	182nd Ave	Brooklyn St	N/A	10	10	5	0	10	10	5	50
C18	Crossing enhancement	Powell Blvd	Duniway Ave	N/A	10	10	10	0	10	5	5	50
C4	Crossing enhancement	181st Ave	Wasco St	N/A	10	5	10	5	5	10	5	50
C21	Crossing enhancement	Burnside Rd	208th Ave	N/A	10	10	10	5	5	5	5	50
S16	Sidewalk infill	17th St	La Mesa Pl	200	5	10	10	5	5	10	0	45
S6	Sidewalk infill	176th Pl	Division St to Marie St	4100	5	10	0	5	10	10	5	45
C25	Crossing enhancement	Kelly Ave	8th St	N/A	10	10	0	10	5	10	0	45

Prioritized Project List: *Pedestrian* (Continued)

ID	Main Facility Type	Location	Cross Street	Length (feet)	Destinations	Transit Access	Pedestrian LOS	Promote Safety	Promote Health	Equity	Public Priority	Overall Score
C30	Crossing enhancement	Division St	Cochran Dr	N/A	10	10	5	5	5	10	10	45
C33	Crossing enhancement	Kane Dr	Powell Valley Rd	N/A	10	5	5	10	5	10	0	45
S7	Sidewalk infill	190th Ave	North of Division St	2000	10	10	5	0	5	10	5	45
C11	Crossing enhancement	Stark St	175th Pl	N/A	10	10	5	0	5	10	5	45
C32	Crossing enhancement	1st St	Kane Dr	N/A	10	5	5	0	10	10	5	45
C2	Crossing enhancement	Halsey St	169th Ave	N/A	10	5	10	0	0	10	10	45
C29	Crossing enhancement	17th St	La Mesa Pl	N/A	5	10	5	5	5	10	0	40
S8	Sidewalk infill	Birdsdale Ave	North & South of Division S	1600	10	10	5	0	5	10	0	40
C24	Crossing enhancement	Powell Blvd	Eastman Pkwy	N/A	10	5	5	5	5	5	5	40
S4	Sidewalk infill	Burnside Rd	West of Eastman Pkwy	2000	10	10	5	0	5	5	0	35
C22	Crossing enhancement	223rd Ave	Morrison St	N/A	10	5	5	5	0	5	5	35
C34	Crossing enhancement	US26	Palmquist Rd	N/A	10	0	10	5	0	5	5	35
C1	Crossing enhancement	181st Ave	San Rafael St	N/A	10	5	5	0	5	5	5	35
C3	Crossing enhancement	Halsey St	192nd St	N/A	10	0	10	0	5	5	5	35
S2	Sidewalk infill	Halsey St	201st Ave	2700	10	5	5	0	5	5	0	30
C9	Crossing enhancement	Glisan St	219th Ave	N/A	10	5	10	0	0	5	0	30
C8	Crossing enhancement	Glisan St	202nd Ave	N/A	10	0	5	0	5	5	5	30
S3	Sidewalk infill	201st Ave	Glisan St to Holladay St	1400	5	5	5	0	5	5	0	25
S11	Sidewalk infill	Powell Valley Rd	Williams Rd	3500	5	0	5	0	5	5	5	25
C35	Crossing enhancement	Hogan Rd	Roberts Rd	N/A	10	0	0	0	0	10	5	25
C36	Crossing enhancement	Orient Dr	Hillyard Rd	N/A	10	0	10	0	0	0	5	25
C27	Crossing enhancement	Cleveland Ave	25th St	N/A	5	5	0	0	0	10	0	20
S14	Sidewalk infill	Butler Rd	Towle Ave to Binford Ave	2100	5	0	5	0	0	5	5	20
S15	Sidewalk infill	Orient Dr	Salquist Dr to Welch Rd	5300	10	0	10	0	0	0	0	20
C19	Crossing enhancement	Pleasantview Dr	23rd St	N/A	5	0	10	0	0	5	0	20
C20	Crossing enhancement	Towle Ave	33rd St	N/A	5	0	0	0	0	5	0	10

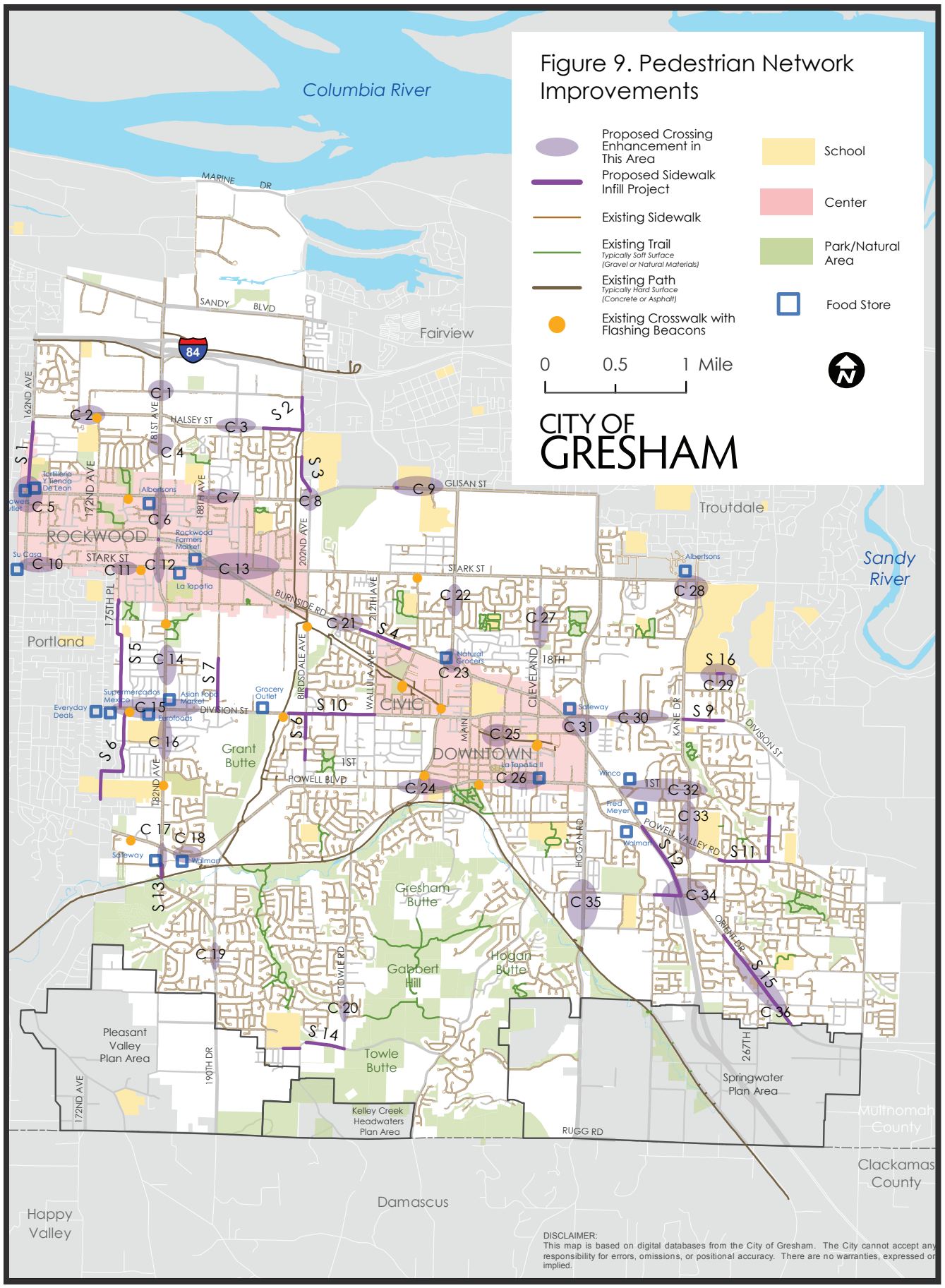


Figure 9. Pedestrian Network Improvements
Proposed Crossing Enhancement in This Area
Proposed Sidewalk Infill Project
Existing Sidewalk
Existing Trail
Typically Soft Surface (Gravel or Natural Materials)
Existing Path
Typically Hard Surface (Concrete or Asphalt)
Existing Crosswalk with Flashing Beacons
School
Center
Park/Natural Area
Food Store
0 0.5 1 Mile
CITY OF GRESHAM
Columbia River
Sandy River
Fairview
Troutdale
Portland
Gresham Butte
Hogan Butte
Gabbert Hill
Towle Butte
Pleasant Valley Plan Area
Springwater Plan Area
Kelley Creek Headwaters Plan Area
Happy Valley
Damascus
Multnomah County
Clackamas County
ROCKWOOD
CIVIC
DOWNTOWN
Grant Butte
MARINE DR
SANDY BLVD
HALSEY ST
GLISAN ST
STARK ST
BURNSIDE RD
DIVISION ST
POWELL BLVD
1ST
MAIN
CLEVELAND
HOGAN RD
TOWLE RD
RUGG RD
ORIENE DR
POWELL VALLEY RD
162ND AVE
172ND AVE
181ST AVE
188TH AVE
190TH DR
202ND AVE
212TH AVE
175TH PL
182ND AVE
267TH
18TH
KANE DR
WALLULA AVE
BIRDSDALE AVE
Albertsons
Safeway
Walmart
Fred Meyer
Winco
La Tapatia
La Tapatia II
Rockwood Farmers Market
Natural Grocers
Grocery Outlet
Asian Food Market
Supermercados Mexico
Everyday Deals
Tortilleria Y Tienda De Leon
Su Casa
Outlet
DISCLAIMER:
This map is based on digital databases from the City of Gresham. The City cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied.

Prioritized Project List: *Bicycle*

ID	Main Facility Type	Start (S or W)	Finish (N or E)	Length (miles)								
BR1	Bike boulevard	NW Division St	I-84	2.9	10	10	5	10	10	10	10	65
BR5	Bike boulevard	SE Main St	NE Hogan Dr	2.1	10	10	5	10	10	10	10	65
BR6 Trail	Separated bike lane	SE 176th Ave	Gresham-Fairview	1.5	10	10	5	10	10	10	10	65
BR10	Bike boulevard	N Main Ave	NE Scott Dr	1.9	10	10	0	10	10	10	5	55
BR4	Bike boulevard	SE Yamhill St	NE Hassalo St	1.0	10	10	0	5	10	10	10	55
BR8	Bike boulevard	Springwater Corridor Trail	NW Burnside Rd	1.4	10	10	5	10	5	5	5	50
BR12	Bike boulevard	Springwater Corridor Trail	SE Salmon Ct	1.3	10	10	5	5	10	5	5	50
BR2	Trail	NE Halsey St	NE Marine Dr	2.5	10	5	5	5	5	10	10	50
BR3	Bike boulevard	NE 162nd Ave	NE 201st Ave	2.3	10	5	5	0	10	10	10	50
BR9	Bike boulevard	Gresham-Fairview Trail	N Main Ave	1.8	10	10	5	5	5	5	10	50
BR11	Bike boulevard	SE 212th Ave	NE Kane Dr	2.6	10	10	0	5	10	5	5	45
BR27	Separated bike lane jog	I-84 bike path	I-84 bike path	0.2	10	5	10	0	5	5	10	45
BR19	Separated bike lane	NE Burnside Rd	City limits (South)	2.7	10	10	5	10	5	0	0	40
BR7	Bike boulevard	NW Burnside Rd	NE Glisan St	1.4	10	10	0	5	5	5	5	40
BR21	Bike boulevard	Springwater Corridor Trail	SE Wendy Ave	1.8	10	5	5	10	0	5	0	35
BR13	Trail	City limits (South) Corridor Trail	Springwater	2.3	10	10	0	0	5	5	5	35
BR20	Bike boulevard	SE Callister Rd	NE 17th	3.7	10	10	0	5	0	5	5	35
BR17	Trail	Kelley Creek Trail	Springwater Corridor Trai	2.2	5	10	5	0	0	0	5	25
BR18	Trail	SW 33rd St	Springwater Corridor Trail	2.1	10	5	5	0	0	0	5	25
BR14	Trail	Springwater Corridor Trail	Kelley Creek Trail end	2.7	10	5	5	0	0	0	5	25
BR23	Bike boulevard	Hwy 16	SE 282nd Ave	1.2	10	0	0	5	0	0	0	15
BR25	Trail	SE 242nd Ave	SE 282nd Ave	2.3	10	0	5	0	0	0	0	15
BR22	Bike boulevard	SE Williams Ave & SE Baker Way	SE Old Woods Loop	1.7	5	0	0	0	0	5	5	15
BR16	Bike boulevard	SW Pleasant View Dr	SW 33rd St	1.7	10	0	0	0	0	0	5	15
BR26	Overpass	SE Palmquist Rd	SE Kane Dr	0.1	10	0	0	0	0	0	5	15
BR15	Bike boulevard	Powerline Trail	SW 33rd St	2.0	5	0	0	0	0	0	5	10


Figure 10. Bike Routes for Everyone
Proposed Routes Most People Feel Comfortable Using
Existing Path
Food Store
Park/Natural Area
School
Center
0
0.5
1 Mile
CITY OF GRESHAM
Columbia River
Sandy River
Fairview
Troutdale
Portland
Gresham
Happy Valley
Damascus
Multnomah County
Clackamas County
ROCKWOOD
CIVIC
DOWNTOWN
Grant Butte
Gresham Butte
Gabbert Hill
Hogan Butte
Towle Butte
Pleasant Valley Plan Area
Springwater Plan Area
Kelley Creek Headwaters Plan Area
BR 1
BR 2
BR 3
BR 4
BR 5
BR 6
BR 7
BR 8
BR 9
BR 10
BR 11
BR 12
BR 13
BR 14
BR 15
BR 16
BR 17
BR 18
BR 19
BR 20
BR 21
BR 22
BR 23
BR 25
BR 26
BR 27
I-84 BIKE PATH
GRESHAM / FAIRVIEW TRAIL
WY'EAST WAY PATH
SPRINGWATER CORRIDOR
MARINE DR
SANDY BLVD
HALSEY ST
GLISAN ST
STARK ST
MAIN ST
YAMHILL ST
BURNSIDE RD
DIVISION ST
POWELL BLVD
PALMQUIST RD
RUGG RD
HILLYARD RD
CHASE RD
WELCH RD
ORIENT DR
HOGAN RD
WALTERS DR
HENRY RD
EASTWOOD AVE
CRODLUN RD
185TH DR
181ST AVE
201ST AVE
169TH AVE
172ND AVE
188TH AVE
162ND
175TH PL
176TH AVE
182ND AVE
212TH AVE
WALLULA AVE
MAIN AVE
KANE DR
SCOTT DR
10TH DR
15TH ST
8TH ST
1ST ST
2ND ST
22ND ST
23RD ST
24TH ST
25TH ST
5TH ST
29TH DR
190TH DR
267TH AVE
Albertsons
Safeway
Walmart
Fred Meyer
Winco
Natural Grocers
Grocery Outlet
Asian Food Market
Eurofoods
Supermercados Mexico
Everyday Deals
Rockwood Farmers Market
La Tapatia
La Tapatia II
Su Casa
Growers Outlet
Tortilleria Y Tienda De Leon
*City of Gresham would have to coordinate with property owner when private parking lots are used.
NOTE: Gresham has a bike network that covers the entire city. This map focuses on a Bike Routes for Everyone Network that most people will be comfortable using.
DISCLAIMER: This map is based on digital databases from the City of Gresham. The City cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied.

Priority Project Costs & Implementation

Planning-level costs were developed for the top priority pedestrian and bike projects. These costs will be further refined when a project is selected for funding. Many pedestrian priority areas were identified at existing signals and crossings. Further evaluation is needed to determine the correct improvements at these locations.

The priority Active Transportation Plan projects are only a fraction of the total projects that are needed to complete the overall pedestrian and bicycle systems. In addition there are ADA ramp upgrades, miles of sidewalk to be built on local streets, unmarked crossings that could be improved, and bicycle safety improvements to be implemented. A more robust accounting of pedestrian and bicycle deficiencies is still needed.

Dedicated pedetrian and bicycle project funding is tiny compared to the needs within Gresham. While state law requires 1% of all gas tax revenues to be spent on pedestrian and bicycle infrastructure there is far more pedestrian and bicycle needs than funding. Recently the City has had success bundling bicycle and pedestrian projects into other initiatives, such as Hitting the Streets which installed ADA ramps during local street repaving. Successful grant applications have also allowed important projects to move forward, but available grants are few and success is not garaunteed. To build a bicycle and pedestrian system in Gresham that is safe and convenient for all users, a regular funding plan is needed.

Figure 21. Priority Pedestrian Project Costs

Project ID	Location	Estimated costs	Scope of work / Notes
C12	181st & Stark	$655,000	• Construct new traffic signal at 181st & Pine. • Reconstruct ADA ramps, curbs, and some sidewalks associated wtih signal installation.
C6	181st & Glisan	$110,000	• Construct new RRFB/enhanced crosswalk at 181st & Everett.
C15	Division & 182nd	$124,000	• Construct new RRFB/enhanced crosswalk on Division between 185th & 186th.
S1	162nd North of Glisan	$2,750,000	• Construct new RRFB/enhanced crosswalk at Holladay & 162nd. • Assumes 2500' length of project for estimation purposes. • Construction of full roadway improvements is not included in the cost. The following elements would need to be completed for sidewalk construction with additional funding of $4,500,000: 50' of roadway widening to standard arterial (8/16 ac/rock), 24' of ROW acquisition throughout the length of the project, 135 lb/cf for aggregate and 157 lb/cf for AC.
C13	Stark & Burnside	$125,000	• Construct new RRFB/enhanced crosswalk on Stark between 192nd & 194th.
C31	Division & Hogan	$125,000	• Construct new RRFB/enhanced crosswalk on Burnside & 8th.
TOTAL		**$3,889,000**	

Figure 22. Priority Bicycle Project Costs

Project	Cost	Location	Scope of work / Notes
BR1	$3,300,000	SE 176th, SE 172nd and NE 169th - from SE Division to I-84	• New enhanced bike crossing at 172nd or 174th and Halsey. • New sharrows on bike boulevards. • Bi-directional bike lanes on Halsey between 172nd & 169th. • Bi-directional bike lanes on Stark between 174th and 172nd.
BR 5	$3,300,000	SW Main, SW Yamhill and NE 10th - from SE 175th to NE Hogan	• New 12' wide multi-use path from Cleveland Station to Hogan (.3 miles). • Assumes specialty security fencing and access gates adjacent to PGE property • Extend existing multi-use path to Vance Park at west end of Wy'East Way Path.
BR6	$300,000	SE Division - from City Border to Gresham Fairview Trail	• Buffered bike lanes with driveway crossing paint and flexible delineators. • Bike boxes at major intersections and enhanced striping at right turn approaches.
BR10	$3,000,000	NW 2nd, E Powell and SE 1st - from N Main to NE Scott	• Traffic signal modification at Powell & Cleveland and Powell & Hogan. • Construct bi-directional bike lanes on Powell between Cleveland & 1st. Includes removal of existing curb extensions and planter areas. Physically separated from travel lanes with curb and delineator posts.
BR4	$1,000,000	SE 187th and NE 188th - from SE Yamhill to NE Hassalo	• New traffic signal or HAWK at Glisan & 188th, which includes ROW acquisition. • New sharrows on 188th from Hassalo to Yamhill on bike boulevards.
BR8	$1,100,000	SW Florence and SW Wallulla - from Springwater Coorridor to NW Burnside	• Install enhanced crosswalk at Eastman & Florence; traffic signal or midblock HAWK at Florence & Powell; widened 10' sidewalk on Powell between Florence. • Re-stripe for new bike lanes between Burnside and Shattuck/Clay. • Assumes ROW acquisition for widened sidewalk.
BR12	$800,000	N Main and NW Salmon - from W Powell to SE Salmon	• Traffic signal modification at Burnside & Main to add bike signal. • Install sharrows as needed on bike boulevards. • Construct multi-use path through private parking lot between Burnside & 18th.
BR2	$2,000,000	Gresham Fairview Trail - from NE Halsey to NE Marine Drive	• Planning level estimate. Scope undefined due to coordination needs for two RR bridges.
BR3	$1,200,000	NE Hassalo and NE Wasco - from NE 162nd to NE 201st	• Consider alternate crossing of 181st, install traffic signal/HAWK at 181st & Pacific. • Sharrows as needed on bike boulevards. • Construct 12' multi-use path through Columbia View Park.
BR9	$350,000	NW 5th and NW 1st - from Gresham Fairview Trail to N Main	• ADA ramp upgrades around existing multi-use paths. • Install sharrows as needed on bike boulevards.
TOTAL		**$16,350,000**	

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
Active Transportation Mode Share	Commute 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.
Connectivity	Network completion	Complete 25% of high priority pedestrian projects by 2040 and complete 50% of the Bike Routes for Everyone Network by 2040.
Safety	Collision reduction	Reduce serious injuries and fatalities of bicyclists and pedestrians by half (50%) between 2017 and 2040.
Equity	Equity project completion	Projects with the top equity score are completed at an equal rate (or higher) as the network as a whole.
Transit access	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.