

Draft Memo #3: Project Lists and Prioritization



September 5, 2024

Project# 27003.12

To: Jay Higgins and Carly Rice; City of Gresham
Glen Bolen and Molly McCormick; Oregon Department of Transportation
From: Susan Wright, PE, PMP, Krista Purser, PE, Sutapa Banerjee; Kittelson & Associates, Inc.
RE: Gresham TSP 2045 Update

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Introduction

This memorandum identifies projects to be included in the unconstrained Combined Project List to be prioritized the Fiscally Constrained Project List in Memo #4. Projects from previous planning efforts were brought forward, reviewed for consistency with the Metro Regional Transportation Plan and Pleasant Valley Transportation System Plan (TSP) Refinement, checked for status of construction or near-term funding, and flagged for potential considerations associated with recent Transportation Planning Rule (TPR) amendments to implement the Climate Friendly and Equitable Communities (CFEC) rulemaking. This will be informed by conversations with the Project Management Team (PMT), Technical Advisory Committee (TAC), Stakeholder Advisory Committee (SAC), policy focus group participants, and key themes from community outreach.

Project Lists

This section describes the existing project lists, with vehicle projects brought forward from the 2013 Gresham TSP and active transportation projects from the 2018 Active Transportation Plan. Other projects identified in the Metro Regional Transportation Plan and Pleasant Valley TSP Refinement are incorporated in both lists. The full project list and evaluation of their status are included in Appendix A. This TSP process does not include identification of new projects, though the City may identify projects beyond the TSP process that help further the City's goals.

VEHICLE PROJECT LIST

The 2013 Gresham TSP described corridor-based and intersection-based projects, brief descriptions, and their costs. Vehicle projects were reviewed for the following:

- **Enhanced Review:** Does the project trigger "Enhanced Review" per rule 660-012-0830 in the TPR, specifically does it add lanes above a three-lane cross-section or add additional turn lanes at intersections, with improvements totaling over \$5 million? More about capacity-increasing roadway project requirements is shown in the subsection further below. As inflation and construction prices have increased substantially since 2013, projects previously estimated above \$1 million were highlighted to check. On corridors, if a vehicle project was adding lanes to provide a consistent cross-section between two 4- or 5-lane segments, the project was not flagged as capacity-increasing. At intersections, additional turn lanes were flagged and identified whether these were along 4+ lane segments or independent improvements. See projects shown as "Gap Fill" projects in Appendix A. These projects may need further evaluation or refinement to meet rule 0830 requirements.
- **Pleasant Valley TSP:** Is the project within the Pleasant Valley TSP Refinement study area and needs to be updated to the 2019 plan or ongoing study efforts in the area? These projects are highlighted, but descriptions are unchanged for now due to ongoing work.
- **Metro RTP Update:** Does the project match the Metro RTP description and extents?
 - Is the RTP project description only a portion of the TSP description (indicated only part of it is funded) or does the full description match?
 - Is the project on the Constrained or Unconstrained list?
- **Funded:** Is the project in the Capital Improvement Plan (CIP) or has it otherwise received other funding?
- **Constructed:** Has the project been partially or entirely constructed?

Appendix A includes the projects and these assessments. In addition to the existing projects, the City of Gresham identified the following new projects to add:

- Citywide Pedestrian Safety Study
- Access Control Program
- Several intersection improvements noted as "NEW" in Appendix A. These are funded for construction and included for reference, but would not be on the ultimate list given pending construction.

Capacity-Increasing Roadway Project Requirements

OAR 660-012-0830 includes requirements for enhanced review of some capacity-increasing roadway projects. This required additional analysis is not a prohibition of capacity-increasing roadway projects. It instead ensures that the community has reviewed and shared the trade-offs and impacts of the capacity-increasing projects they are considering. Enhanced review is required for the following types of roadway projects:

- A new or extended arterial street (wider than 3-lanes), highway, freeway, or bridge carrying general purpose vehicle traffic;
- New or expanded interchanges;
- An increase in the number of general purpose travel lanes for any existing arterial or collector street, highway, or freeway; and
- New or extended auxiliary lanes with a total length of one-half mile or more.

Rule 0830 does allow for exceptions of projects with the following characteristics. Projects that meet one or more of the following **do NOT need to complete** the enhanced review as described in rule 0830.

- *“Notwithstanding any provision in subsection (a), the following proposed facilities need not be reviewed or authorized as provided in this rule:*
 - *Changes expected to have a capital cost of less than \$5 million;*
 - *Changes that reallocate or dedicate right of way to provide more space for pedestrian, bicycle, transit, or high-occupancy vehicle facilities only;*
 - *Facilities with no more than one general purpose travel lane in each direction, with or without one turn lane;*
 - *Changes to intersections that do not increase the number of lanes, including implementation of a roundabout;*
 - *Access management, including the addition or extension of medians;*
 - *Modifications necessary to address safety needs; or*
 - *Operational changes, including changes to signals, signage, striping, surfacing, or intelligent transportation systems.*
- *Notwithstanding subsection (a), a city or county may carry forward a proposed facility in a major transportation system plan update without review as provided in this rule if it is a planned project in a transportation system plan acknowledged prior to January 1, 2023, and the project meets any of the following at the time of adoption of the update:*
 - *The project is included in a general obligation bond approved by voters prior to January 1, 2022;*
 - *The project is included as a project phase other than planning in the State Transportation Improvement Program adopted by the Oregon Transportation Commission, or a metropolitan planning organization’s transportation improvement program;*
 - *The project has received a decision under the National Environmental Policy Act of 1969; or*
 - *The project has been advertised for construction bids.”*

ACTIVE TRANSPORTATION PROJECT LIST

Project List

The active transportation project list follows a similar evaluation to the vehicle list but without the "Enhanced Review" evaluations related to increased vehicle capacity. Appendix B includes the projects and these assessments.

OTHER PROJECTS

In addition to infrastructure projects, the 2013 TSP identified intelligent Transportation System (ITS) and outreach and education projects to support transportation options and partnerships. These projects are still relevant and are maintained. Appendix C includes the projects.

Crossing Spacing and Treatment Standards

This section assesses pedestrian crash data and existing crossing spacing and considers industry best practices to recommend crossing spacing and treatment standards.

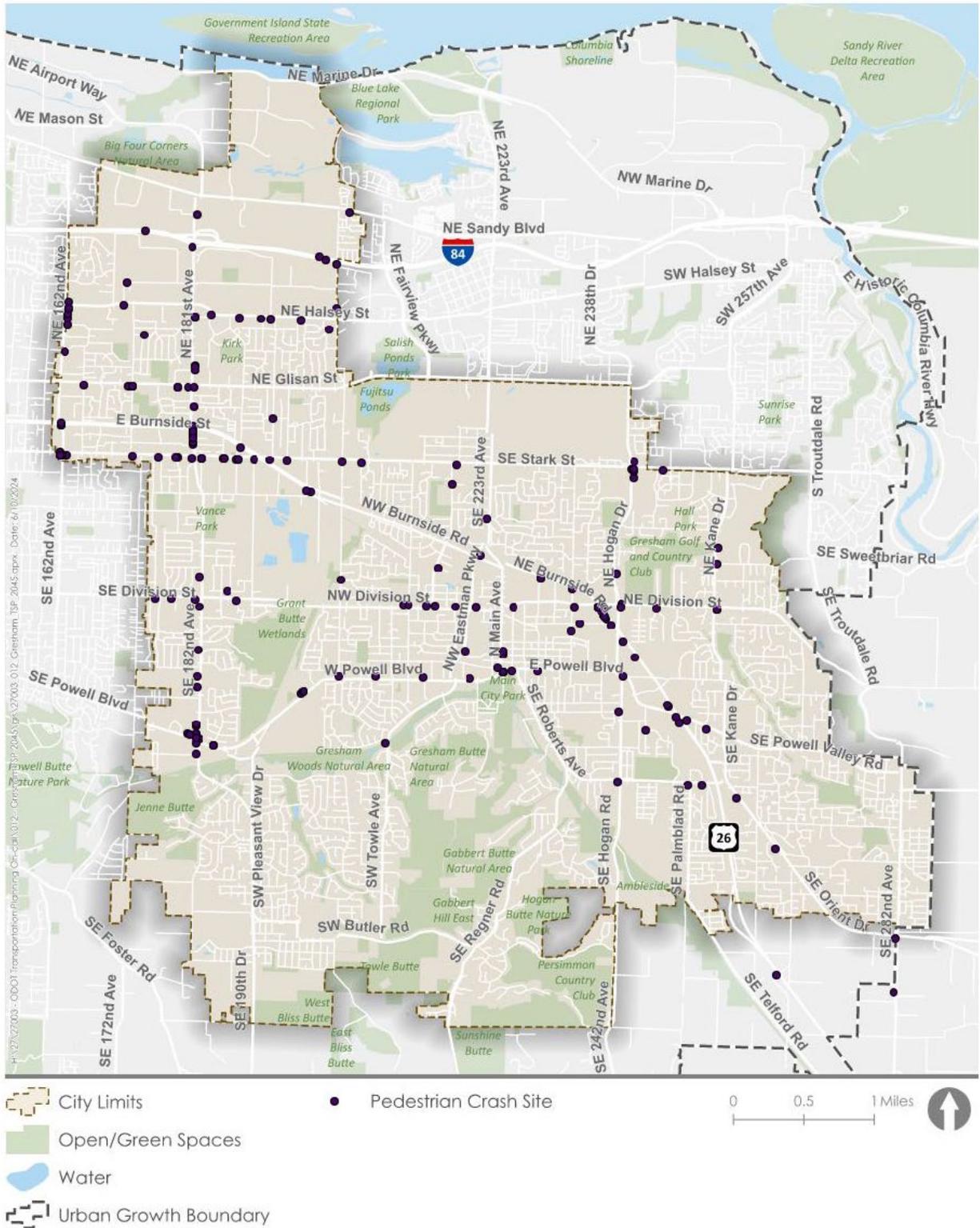
Table 1 shows corridors with more than one pedestrian collision, while Figure 1 highlights pedestrian crash data for the five-year period between 2017 and 2022. During this time, 185 total pedestrian crashes occurred in the City of Gresham, resulting in 24 pedestrian fatalities, and 174 pedestrian non-fatal injuries. As shown, existing marked crossings on these corridors are widely spaced, with most over 1,000 feet. Burnside, Stark St, Division St, Powell Blvd, and 181st/182nd St have high crash counts and generally long spacing, though these are also among the longer streets in Gresham. Some streets are relatively undeveloped, and may not have the pedestrian facilities or activity that would show crash patterns.

Table 1. Corridors with Pedestrian Collisions

Roadway	Direction	Total Pedestrian Crashes	Length in Gresham (approx. miles)	Approx. Number of Crossings in Gresham ¹	Existing Marked Crossing Spacing (approximate, ft)	Crashes per Mile
Interstate 84	E/W	4	2	0	N/A	2
AddHalsey St	E/W	10	1.9	4	2,500	5.2
Glisan St	E/W	9	2.1	4	2,500	4.2
Burnside	E/W	30	4.2	18	1,200	7.1
Stark St	E/W	23	5.1	18	1,500	4.5
Division St	E/W	17	4.9	65	400	3.4
Powell Blvd	E/W	17	4.1	22	1,000	4.1
Palmquist Rd	E/W	2	0.8	4	1,200	2.5
Powell Valley Rd	E/W	2	1.6	4	2,100	1.2
Mt Hood Hwy	E/W	1	1.4	2	3,000	0.7
Orient Dr	E/W	2	1.0	3	2,000	2
162nd St	N/S	7	1.6	6	1,500	4.3
181st/182nd St	N/S	22	4.0	18	1,200	5.5
Hogan Dr	N/S	9	4.6	10	2,500	1.9
Kane Dr	N/S	2	2.2	10	1,200	0.9
282nd Ave	N/S	1	1.1	1	5,200	0.9
Civic Dr	N/S	2	0.5	9	300	4
Eastman Pkwy	N/S	2	1.5	10	800	1.3
Main Ave	N/S	6	0.7	12	300	8.5

¹Based on aerial map assessment.

Figure 1. Pedestrian Crash Data



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 2¹. In addition, Table 3 provides Metro’s Designing Livable Streets and Trails guidance².

Table 2. Urban Context Design (ODOT Blueprint for Urban Design Table 2-6)

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 3. 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)

¹ <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.>

² <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.

FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations provides the guidance summarized in Table 4³, and provides accompanying worksheets that use quantitative traffic characteristics, such as road volume, pedestrian volume, and speed limit to determine a recommended treatment.

Next Steps

This draft memorandum will be reviewed with the PMT, TAC, and SAC and revised with their feedback. The projects and evaluation criteria will be presented for public insights during Outreach Event #2, updated, and used to prioritize projects for feedback during Outreach Event #3. With consensus built, the projects will be prioritized into the Fiscally Constrained Project List in Memo #4. The City can use the guidance established in the Crossing Spacing and Treatments section for ongoing selection of new and improved crossings.

Appendices

- A. Vehicle Project List
- B. Active Transportation Project List
- C. Other Projects

³ https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/docs/STEP-guide-improving-ped-safety.pdf

Table 4. 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	■	■	■	■	■	■	■	■	■	■	■	■
Three Lanes With Raised Median	■	■	■	■	■	■	■	■	■	■	■	■
Three Lanes Without Raised Median	■	■	■	■	■	■	■	■	■	■	■	■
Multilane With Raised Median	■	■	■	■	■	■	■	■	■	■	■	■
Multilane Without Raised Median	■	■	■	■	■	■	■	■	■	■	■	■

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

■ Marked crosswalk

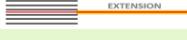
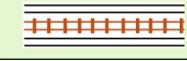
■ Marked crosswalk, geometric elements (ex. pedestrian island), enhanced signing and striping

■ Marked crosswalk, geometric elements, and RRFB

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

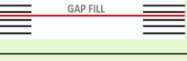
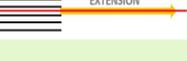
Appendix A. Vehicle Project List

Appendix A1: Street Corridor Project List

Project Number	On Street	From	To	Project Description	Recommended Action (If blank, keep)	Enhanced Review	Description	Pleasant Valley TSP	Metro RTP Update	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
1	Riverside Parkway	Riverside	Portal Way	Construct to minor arterial design,								
2	Sandy Boulevard	Eastern city limits	181st Avenue	Construct to major arterial cross section	Remove - funded or constructed.		Extension of 5 lanes between 181st Ave and Eastern city extents					Fully constructed.
3	169th Avenue	Wilkes Road	Halsey	Construct to standard collector cross								
4	San Rafael Street	181st Avenue	201st	Construct to minor arterial cross								
5	Wilkes Road	181st Avenue	192nd	Construct to minor arterial cross								
6	192nd Avenue	Wilkes Road	Halsey	Construct to minor arterial cross								
7	201st/202nd	Glisan Street	San Rafael	Construct to standard collector cross								
8	201st Avenue	San Rafael	Sandy	Construct to minor arterial cross								
9	Halsey Street	181st Avenue	201st Avenue	Construct to standard arterial cross section	Explore project impacts given potential for capacity-increasing. Confirm/update with Metro RTP description		Extension of 5 lanes between 190th Pl and 201st Ave			Constrained		
10	162nd Avenue	Halsey Street	Glisan Street	Construct to standard arterial cross section	Confirm gap-filling nature of project against CFEC rulemaking. Confirm/update with Metro RTP description		Gap fill between Halsey St and Glisan St			Constrained	Partially	
11	Glisan Street	202nd Avenue	Fairview Parkway	Construct to standard arterial cross section. The northern half of this street section is within Multnomah	Confirm gap-filling nature of project against CFEC rulemaking.		Gap fill between 202nd Ave and Fairview Parkway					
12	190th Avenue	Division Street	Yamhill	Construct to standard collector cross								
13	192nd Avenue	Glisan Street	Stark Street	Construct to minor collector cross								
14	181st Avenue	Glisan Street	Yamhill Street	Construct to standard arterial cross section with boulevard design where applicable	Remove - funded or constructed.		Completed project. 5 lanes between streets. No gaps.			Constrained	Yes	
15	Burnside Street	162nd Avenue	197th Avenue	Complete to standard arterial standard and improve remaining	Confirm/update with Metro RTP description.		Completed project. 5 lanes between streets. Left-turn lane			Constrained		
16	Main Street	Western City	SE 182nd	Construct to standard collector cross								
17	Yamhill Street	181st Avenue	197th	Construct to minor collector cross	Remove - funded or constructed.						Yes	Pending Construction
18	202nd Avenue	Glisan Street	Powell	Construct to minor arterial cross	Project No Longer Needed							
19	Wallula Avenue	Division Street	Stark Street	Construct to standard collector cross								
20	Stark Street	202nd Avenue	205th	Construct sidewalk on both sides of	Mostly complete; move to pedestrian project list for remaining							
21	Stark Street	215th Avenue	223rd	Construct sidewalk on both sides of	Remove - funded or constructed.							
22	223rd Avenue	Glisan Street	Stark Street	Pedestrian improvements	Remove - funded or constructed.							
23	Division Street	Kelly Avenue	Burnside Road	Construct to standard arterial cross section and to boulevard cross section, where applicable	Confirm/update with Metro RTP description.		Completed project. 5 lanes between streets. No gaps.			Unconstrained		
25	NW Norman	Burnside Road	Division	Construct to major collector cross								
26	Cleveland Avenue	Division Street	Powell	Construct to standard collector cross	Project No Longer Needed							
27	16th Street	Eastman	NW Civic	Construct to major collector cross								
28	Main Avenue	Division Street	5th Street	Ped to MAX project, improve								
29	Cleveland Avenue	Stark Street	Division Street	Construct to minor arterial cross section	Confirm/update with Metro RTP description; Update once constructed.					Constrained	Partially	Pending Construction
30	Beech Avenue	4th Avenue	5th Avenue	Complete street								
31	Burnside Road	Wallula Avenue	Hogan Road	Construct to standard arterial cross section with boulevard design where	Confirm/update with Metro RTP description.		Completed project. 5 lanes between streets. No gaps.			Constrained		
32	Hogan Road Corridor	Stark Street	Rugg Road	Construct to major arterial cross section	Explore project impacts given potential for capacity-increasing.		Extension of 5 lanes between Burnside Rd to Rugg Road					
33	Division Street	Kane Drive	UGB	Construct to minor arterial cross section	Confirm/update with Metro RTP description.					Unconstrained		

Project Number	On Street	From	To	Project Description	Recommended Action (If blank, keep)	Enhanced Review	Description	Pleasant Valley TSP	Metro RTP Update	Metro RTP Constrained/Unconstrained. If blank- Not on List	Funded	Constructed
34	Burnside Road	Hogan Road	Powell Boulevard	Safety improvements and reconstruction	Remove - No longer needed							
35	Powell Valley Road	Burnside Road	Kane Drive	Construct to standard arterial cross section	Explore project impacts given potential for capacity-increasing. <i>Confirm/update with Metro RTP description.</i>		Extension of 5 lanes between Burnside Ave and Kane Rd			Unconstrained		
36	Powell Valley Road	Burnside Road	Kane Drive	Construct to standard arterial cross section	Explore project impacts given potential for capacity-increasing. <i>Confirm/update with Metro RTP description.</i>		Extension of 5 lanes between Burnside Ave and Kane Rd			Unconstrained		
37	Barnes Road	Powell Valley Road	Hillyard Road	Construct to standard collector cross section								
38	Williams Road	Division Street	Powell	Construct to standard collector cross								
39	Powell Valley Road	Kane Drive	282nd Avenue	Construct to minor arterial cross section						Unconstrained		
40	Walters Drive	Springwater Corridor Trail	7th Street	Construct to standard collector cross section								
41	7th Street	Eastman	Walters	Construct to standard collector cross								
42	Heiney Road	14th Drive	Binford	Construct to standard collector cross								
43	Towle Avenue	Binford Lake	Butler Road	Construct to minor arterial cross	Confirm/update with Metro RTP description.					Unconstrained		
44	Roberts Drive	Maple Loop	Regner	Construct to minor collector cross								
45	Regner Road	Gabbert Road	Butler Road	Construct to minor arterial cross	Confirm/update with Metro RTP description.					Unconstrained		
46	282nd Avenue	Powell Valley	Southern	Construct to minor arterial cross								
47	Salquist Road	Barnes Road	282nd Avenue	Construct to standard collector cross section								
48	Chase Road	Orient Drive	282nd	Construct to standard collector cross								
49	Orient Drive	Palmquist Road	Springwater Major Arterial	Construct to standard arterial cross section	Explore project impacts given potential for capacity-increasing. <i>Confirm/update with Metro RTP description</i>		Extension of 5 lanes between Salquist Rd and Springwater Major Arterial			Unconstrained		
50	Hillyard Road	Palmbled Road	Anderson	Construct to standard collector cross								
51	252nd Avenue/	Hillyard Road	Rugg Road	Construct to minor arterial cross								
52	Springwater	Hogan Road	Fleming	Construct to standard collector cross								
53	Fleming Avenue	19th Street extension	252nd Avenue	Construct to standard collector cross section								
54	19th Street	Hogan Road	100 feet	Construct to minor arterial cross								
55	Palmquist Road	Hogan Road	HWY 26	Construct to minor arterial cross								
56	Palmbled Road	Palmquist	Hillyard	Construct to standard collector cross								
57	40 Mile Loop	Gresham City	Orient	Construct Multi-Use Trail								
58	Cheldelin Road	1,500 feet	190th	Construct to minor arterial cross								
59	Giese Road	Gresham City Limits	190th Drive	Construct to minor arterial cross section and boulevard design where adjacent to town center.	Update with PV TSP changes. <i>Confirm/update with Metro RTP description.</i>			✓		Unconstrained		
60	Knapp Street/41st	182nd Avenue	190th Drive	Construct to Standard or major	Update with PV TSP changes.			✓				
61	Pleasant Valley	Pleasant Valley	Cheldelin	Construct to standard collector cross	Update with PV TSP changes.			✓				
62	Pleasant Valley	Springwater	Crystal	Construct to standard collector cross	Update with PV TSP changes.			✓				

Project Number	On Street	From	To	Project Description	Recommended Action (If blank, keep)	Enhanced Review	Description	Pleasant Valley TSP	Metro RTP Update	Metro RTP Constrained/Unconstrained. If blank- Not on List	Funded	Constructed
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	Explore project impacts given potential for capacity-increasing.		Extension of Rugg Rd between 267th and Orient Dr and expansion of Rugg Rd between			Unconstrained		
94	Springwater	Hogan Road	Planned	Construct to standard collector cross								
95	Springwater	Hogan Road	McNutt	Construct to minor arterial cross								
96	Springwater	Hogan Road	McNutt	Construct to minor arterial cross								
97	McNutt Road	Intersection of planned roads #95	Planned Rugg Road extension	Construct to major arterial cross section per SW IAMP alignment and boulevard design where designated.	Explore project impacts given potential for capacity-increasing.		Extension and expansion of McNutt Rd between planned streets.					
98	Springwater	Hogan Road	Hogan	Construct to standard collector cross								
99	Carl Street	Rugg Road	282nd	Construct to standard collector cross								
100	Springwater	Orient Drive	Stone Road	Construct to standard collector cross								
101	Springwater Planned Road	Approximately 2,100 feet west of 252nd	252nd Avenue	Construct to standard collector cross section								
102	Springwater	252nd Avenue	Rugg Road	Construct to standard collector cross								
103	Telford Road	252nd	Southern	Construct to minor arterial cross								
104	East Buttes Loop	190th Avenue	Springwater	Construct new shared use trail (12'								
105	East Buttes Loop	Springwater	Rodlun	Construct new shared use trail (12'								
106	East Buttes Loop Trail	Rodlun Road	190th Avenue	Construct new shared use trail (12' wide pervious asphalt)						Constrained		
107	Gresham/ Fairview Trail	Halsey	Marine Drive	Construct new multi-use trail	Update to refer to unfunded portion.					Constrained	Partially Funded	
108	Multi-Use Path	Ruby Junction Station	Hogan Drive	Construct new multi-use path from Ruby Junction Station to Hogan Drive	Remove - funded or constructed.					Constrained		Yes
109	East Buttes Powerline Trail	Springwater/ Gresham Fairview Trail	Clackamas Greenway	Build trail linking Gresham and the Clackamas River	Update with PV TSP changes. Confirm/update with Metro RTP description.			✓		Constrained		
110	181st Street Planning Study	Sandy Boulevard	Powell Boulevard	Corridor Planning Study for 181st Avenue	Remove. Completed with C2C project and Metro 2020 bond. Identified needed crossings and possible transit							
111	Transit Corridor Planning Study	Western city limits	Kane Drive	Corridor Planning Study for transit between Stark Street and Powell	Remove. Complete with TriMet Forward Together 2.0.							
112	190th Drive/ Highland Drive/	Powell Boulevard	Cheldelin Road	190th Drive/Highland Drive/Pleasant View Drive Corridor Study	Remove. Completed with C2C project and Metro 2020 bond. Identified phasing, costs and coordination with Clackamas							
113	SE 172nd Extension and	SE 172nd	Foster Road	Corridor Planning Study for SE 172nd extension and Foster Road	Remove. Complete with PV TSP Project.			✓				
114	40 Mile Loop	Gresham City	Orient	Corridor Planning Study for Multi-Use								
115	Hogan Road	Glisan Street	Rugg Road	Corridor Planning Study for Hogan								
116	282nd Avenue	Powell Valley	Orient	282nd Corridor Access Study per								
117	Butler Road	Rodlun Road	Regner	Construct to minor arterial cross								
118	Ped to MAX	Gresham	Cleveland	Planning study and mobility								
119	Regner Road	Roberts Avenue	Gabbert Road	Construct to minor arterial cross section.	Confirm/update with Metro RTP description.					Unconstrained		
120	Regner Road	Butler Road	County Line	Construct to minor arterial cross section.	Confirm/update with Metro RTP description.					Unconstrained		

Project Number	On Street	From	To	Project Description	Recommended Action (If blank, keep)	Enhanced Review	Description	Pleasant Valley TSP	Metro RTP Update	Metro RTP Constrained/Unconstrained. If blank- Not on List	Funded	Constructed
32a	Hogan Road - Phase 1	Stark Street	Division Street	Construct sidewalks and planter strips	Remove - No longer needed					Unconstrained		
32b	Hogan Road - Phase 2	Division Street	Powell Boulevard	Widen to major arterial cross section, construct sidewalks and planter strips	Constructed -Southbound capacity, along with a multi-use path, was added in 2023 between Burnside and Powell		Extension of 5 lanes between Burnside Ave and Powell Blvd			Unconstrained		
32c	Hogan Road - Phase 3	Powell Boulevard	Palmquist Road	Construct to major arterial cross section	Confirm/update with Metro RTP description.		Gap filling between Palmquist Road and Powell Blvd			Constrained		
32d	Hogan Road - Phase 4	Palmquist Road	Rugg Road	Construct to major arterial cross section	Confirm/update with Metro RTP description.		Extension project. 5 lanes at intersection of Palmquist road only. Rest to be developed			Unconstrained		

Appendix A2. Intersection Projects

Project Number	Street	At	Description	Recommended Action (If blank, keep)	Enhanced Review	Pleasant Valley TSP	Metro RTP Constrained/Unconstrained. If blank- Not on List	Funded	Constructed
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.						
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.						
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.	Explore project impacts given potential for capacity-increasing.	Located along 5-lane planned improvement				
4	Glisan Street	181st Avenue	Widen to add southbound and westbound right-turn pockets. Modify signal to add protected-permitted left-turn phasing.	Remove - funded or constructed.					Constructed
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.	Remove - funded or constructed.			Constrained	Yes	
6	Sandy Boulevard 185th Avenue Signal	185th Avenue	Widen to add eastbound left-turn pocket. Install signal.	Remove - funded or constructed.	Project complete.				Constructed
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.					Yes	
8	Burnside Road	Division Street	Restripe to increase northwest-bound and southwest-bound left-turn pockets. Modify signal to add right turn overlap.	Remove - project no longer needed.			Unconstrained		
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.						
10	201st Avenue RR bridge	I-84	Construct new railroad bridge to accommodate motor vehicle travel lanes and the Gresham-Fairview Trail.	Remove - funded or constructed.				Yes	
11	Division Street	Birdsdale Avenue	Widen to add southbound right-turn pocket.	Remove - funded or constructed.			Unconstrained	Yes	
12	Stark Street	202nd Avenue	Restripe to increase southbound left-turn pocket. Modify signal to add protected-permitted left-turn phasing.	Remove - funded or constructed.			Constrained	Yes	
13	Division Street	Kane Drive	Add SB right turn lane and second EB left turn lane	Remove - funded or constructed.	Project complete.			Yes	Constructed
14	Burnside Road	Powell Boulevard	Restripe to prohibit eastbound and westbound left turns. Modify signal to add westbound right-turn overlap.	Revisit project - additional improvements may be necessary.					
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.	Remove - funded or constructed.	Located along 5-lane planned improvement		Constrained	Yes	
16	Powell Boulevard	Hogan Road	Widen Hogan Rd. to 5-lane section through the intersection. Restripe to extend eastbound left-turn pocket.	Remove - funded or constructed.	Located along 5-lane planned improvement;		Constrained	Yes	

Project Number	Street	At	Description	Recommended Action (If blank, keep)	Enhanced Review	Pleasant Valley TSP	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
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.	Explore project impacts given potential for capacity-increasing. Confirm/update with Metro RTP description.	Located along 5-lane planned improvement		Constrained	Partially	
18	Palmquist Road	Fleming Avenue	Intersection widening.	Remove - no longer needed					
19	Palmquist Road Intersection	Palmblad Road	Widen Palmquist Rd. to full 3-lane section through intersection. Widen to add northbound left-turn pocket.					Yes	
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*	Project Constructed or Fully Funded	Project complete.				Constructed
21	SE 190th Drive Intersection	Butler Road	Install signal	Remove - funded or constructed.					
22	SE 190th Drive Intersection	Willow Parkway	Intersection Improvements	Remove - funded or constructed.					Constructed
23	Regner Rd - D.	Butler Road	Install single-lane roundabout						
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.	Remove - funded or constructed.	Project complete.		Unconstrained		Constructed
25	Powell Boulevard	182nd Avenue	Modify signal to add right-turn overlap phasing	Remove - funded or constructed.			Constrained		Constructed
26	Orient Drive	Welch Road	Widen intersection to create a center turn lane on Orient Drive					Yes	
27	Orient Drive	Chase Road	Widen intersection to create a center turn lane on Orient Drive	Remove - funded or constructed.					Constructed
28	Burnside Street	Stark Street	Widen to extend northwest-bound left-turn pocket						
29	Burnside Street	202nd Avenue	Modify signal to add protected-permitted left-turn phasing					Yes	
30	Burnside Road	Eastman Parkway	Modify signal to add protected-permitted left-turn phasing	Revisit project - additional improvements may be necessary.					
31	Burnside Road	Main Avenue	Restripe to extend northbound left-turn pocket. Modify signal to add protected-permitted left-turn phasing.	Revisit project - additional improvements may be necessary.					
32	Burnside Road	Kelly Avenue	Modify signal to add protected-permitted left-turn phasing	Revisit project - additional improvements may be necessary.			Unconstrained		
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.						
34	Burnside Road	3rd St	Intersection Improvements	Remove - funded or constructed.					Constructed
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.	Remove - funded or constructed.	Project complete.			Yes	Constructed
37	Stark Street	172nd Avenue	Install signal. Restripe to add southbound left-turn pocket.	Remove - project no longer needed.					
38	Stark Street	174th Avenue	Modify signal to add protected-permitted left-turn phasing	Revisit project - additional improvements may be necessary.					

Project Number	Street	At	Description	Recommended Action (If blank, keep)	Enhanced Review	Pleasant Valley TSP	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
39	Stark Street	181st Avenue	Restripe to increase northbound and southbound left-turn pockets. Modify signal to add protected-permitted left-turn phasing	Revisit project - additional improvements may be necessary.					
40	Division Street	Main Avenue	Restripe to extend northbound and southbound left-turn pockets. Modify signal to add protected-permitted left-turn phasing	Revisit project - additional improvements may be necessary.					
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	Remove - project no longer needed.					
42	Powell Valley Road	Barnes Road	Widen to create a center turn lane on both Powell Valley Rd. approaches					Yes	
43	Powell Valley Road	282nd Avenue	Install signal or single-lane roundabout					Yes	
44	San Rafael	181st Avenue	Widen to add southbound right-turn pocket	Remove - project no longer needed.					
45	Pleasant View Drive	Highland Drive	Install signal	Remove - funded or constructed.					Constructed
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.	Remove - project no longer needed.					
47	Towle Road	Butler Road	Install single-lane roundabout					Yes	
48	Hogan Road	SE 5th Street	Widen Hogan Rd. to 5-lane section through intersection. Replace signal.	Explore project impacts given potential for capacity-increasing.	Located along 5-lane planned improvement			Yes	
49	Hogan Road	Cleveland Drive	Widen Hogan Rd. to 5-lane section through intersection. Restripe to add eastbound right-turn pocket	Explore project impacts given potential for capacity-increasing.	Located along 5-lane planned improvement		Unconstrained	Yes	
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.	Explore project impacts given potential for capacity-increasing.	Located along 5-lane planned improvement			Yes	
51	Kane Drive	Palmquist Road	Modify signal to add eastbound right-turn overlap phasing	Revisit project - additional improvements may be					
52	282nd Avenue	Lusted Road	Install signal or single-lane roundabout	Have the signal but not the ped improvements				Yes	Partially
53	282nd Avenue	Salquist Road	Widen to add left turn lane						
54	Stark Street	223rd Avenue	Widen to add dual 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.	Remove - funded or constructed.	Existing 5-lane roadways		Constrained	Yes	
55	282nd Avenue	Welch Road	Widen to add left turn lane						
56	Foster Road	172nd Avenue	Bridge	Confirm/update with Metro RTP description. Update with PV TSP changes.		✓	Constrained		
57	Cheldelin Road	182nd Avenue	Cheldelin and 182nd	Update with PV TSP changes.		✓			
58	Cheldelin Road	Foster Road	Cheldelin and Foster	Update with PV TSP changes.		✓			
59	Cheldelin Road	190th Avenue	190th and Cheldelin	Update with PV TSP changes.		✓	Unconstrained		
60	Giese Road	172nd Avenue	172nd and Giese	Update with PV TSP changes.		✓			
61	Foster Road	172nd Avenue	Install roundabout or traffic signal	Update with PV TSP changes.		✓			
62	Cheldelin Road	172nd Avenue	172nd and Cheldelin	Update with PV TSP changes.		✓			
63	Banfield Industrial Park Truck Turn-around		Construct truck turn around	Remove - project no longer needed.					
64	SE 5th Street	Williams Road	Add Crosswalks.	Move to Pedestrian Project List					
65	172nd Avenue	Knapp Road	Signalize intersection.	Update with PV TSP changes.		✓			

Project Number	Street	At	Description	Recommended Action (If blank, keep)	Enhanced Review	Pleasant Valley TSP	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
66	Eastman Parkway	Division Street	Improve functioning of intersection and reduce congestion. Add second northbound and south bound left turn lanes.	Remove - project no longer needed.	Existing 5-lane roadways				
67	Foster Road	Richey Road	Install roundabout or traffic signal	Update with PV TSP changes.		✓			
68	Springwater Trail	Pleasant View/190th Avenue	Provide access to the Springwater Trail	Remove - project no longer needed.					
69	Rockwood TC 181st lightrail station and pedestrian enhancements		Enhancements at the Rockwood Town Center/181st Avenue lightrail station, including pedestrian enhancements	Confirm/update with Metro RTP description.	No capacity increases.		Constrained		
70	SE 172nd	Crystal Springs Boulevard	Signalize intersection	Update with PV TSP changes.		✓			
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.	Remove - funded or constructed.					Constructed
NEW	182nd Avenue	Main Street	Relocate RRFB crosswalk 100 feet north of current location. Remove median at intersection to allow for two-stage left turns from Main.	Remove - funded or constructed.				Yes	
NEW	282nd Avenue	Chase Road	Widen Chase to add eastbound left turn lane.	Remove - funded or constructed.				Yes	
NEW	Towle Road	Willow Creek Parkway	Widen Towle to add center two-way left-turn lane for dual-stage left turns from Willow Creek Parkway.	Remove - funded or constructed.				Yes	

Appendix B. Active Transportation Project List

Appendix B1. Project List: Pedestrian

ID	Main Facility Type	Location	Cross Street	Length (feet)	Recommended Action (If blank, keep)	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
C1	Crossing enhancement	181st Ave	San Rafael St	N/A	Further refine project - existing signal at location.			
C2	Crossing enhancement	Halsey St	169th Ave	N/A	Keep - Note this project is also a bicycle project.			
C3	Crossing enhancement	Halsey St	192nd St	N/A				
C4	Crossing enhancement	181st Ave	Wasco St	N/A	No longer needed - nearby intersection funded instead.			
C5	Crossing enhancement	162nd Ave	Glisan St	N/A	Further refine project - existing signal at location.			
C6	Crossing enhancement	181st Ave	Glisan St	N/A	Further refine project - existing signal at location.			
C7	Crossing enhancement	Glisan St	188th Ave	N/A	Keep - Note this project is also a bicycle project.			
C8	Crossing enhancement	Glisan St	202nd Ave	N/A	Further refine project - existing signal at location.			
C9	Crossing enhancement	Glisan St	219th Ave	N/A	Keep - Note this project is also a bicycle project.			
C10	Crossing enhancement	Stark St	165th Ave	N/A	Further refine project - existing signal at location.			
C11	Crossing enhancement	Stark St	175th Pl	N/A	Keep - Note this project is also a bicycle project.			
C12	Crossing enhancement	181st Ave	Stark St	N/A	Further refine project - existing signal at location.			
C13	Crossing enhancement	Stark St	Burnside St	N/A	Further refine project - existing signal at location.			
C14	Crossing enhancement	182nd Ave	Stephens St	N/A				
C15	Crossing enhancement	Division St	182nd Ave	N/A	Further refine project - existing signal at location.			
C16	Crossing enhancement	182nd Ave	Brooklyn St	N/A				
C17	Crossing enhancement	182nd Ave	Powell Blvd	N/A				
C18	Crossing enhancement	Powell Blvd	Duniway Ave	N/A	Remove - funded or constructed.		Yes	
C19	Crossing enhancement	Pleasantview Dr	23rd St	N/A				
C20	Crossing enhancement	Towle Ave	33rd St	N/A				
C21	Crossing enhancement	Burnside Rd	208th Ave	N/A				
C22	Crossing enhancement	223rd Ave	Morrison St	N/A				

ID	Main Facility Type	Location	Cross Street	Length (feet)	Recommended Action (If blank, keep)	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
C23	Crossing enhancement	Burnside Rd	Eastman Pkwy	N/A	Further refine project - existing signal at location.			
C24	Crossing enhancement	Powell Blvd	Eastman Pkwy	N/A	Further refine project - existing signal at location.			
C25	Crossing enhancement	Kelly Ave	8th St	N/A	Confirm/update with Metro RTP description.	Constrained		
C26	Crossing enhancement	Powell Blvd	Cleveland Ave	N/A	Keep - Note this project is also a bicycle project.			
C27	Crossing enhancement	Cleveland Ave	25th St	N/A	Remove - funded or constructed.		Yes	
C28	Crossing enhancement	Stark St	Kane Dr	N/A	Further refine project - existing signal at location.			
C29	Crossing enhancement	17th St	La Mesa Pl	N/A	Keep - Note this project is also a bicycle project.			
C30	Crossing enhancement	Division St	Cochran Dr	N/A	Remove - funded or constructed.		Yes	
C31	Crossing enhancement	Division St	Hogan Dr	N/A	Further refine project - existing signal at location.			
C32	Crossing enhancement	1st St	Kane Dr	N/A	Further refine project - existing signal at location.			
C33	Crossing enhancement	Kane Dr	Powell Valley Rd	N/A	Further refine project - existing signal at location.			
C34	Crossing enhancement	US26	Palmquist Rd	N/A	Further refine project - existing signal at location.			
C35	Crossing enhancement	Hogan Rd	Roberts Rd	N/A	Further refine project - existing signal at location.			
C36	Crossing enhancement	Orient Dr	Hillyard Rd	N/A				
S1	Sidewalk infill	162nd Ave	Glisan St to Halsey St	2400	Remove - funded or constructed.		Yes	
S2	Sidewalk infill	Halsey St	201st Ave	2700				
S3	Sidewalk infill	201st Ave	Glisan St to Holladay St	1400				
S4	Sidewalk infill	Burnside Rd	West of Eastman Pkwy	2000				
S5	Sidewalk infill	176th Ave	Division St to Yamhill St	4100				

ID	Main Facility Type	Location	Cross Street	Length (feet)	Recommended Action (If blank, keep)	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
S6	Sidewalk infill	176th Pl	Division St to Marie St	4100				
S7	Sidewalk infill	190th Ave	North of Division St	2000				
S8	Sidewalk infill	Birdsdale	North & South of Division S	1600				
S9	Sidewalk infill	Division St	Kane Dr to Centurion Dr	1500				
S10	Sidewalk infill	Division St	Gresham Fairview Trail to Wallula Ave	3200	Remove - funded or constructed.	Constrained	Yes	
S11	Sidewalk infill	Powell Valley Rd	Williams Rd	3500				
S12	Sidewalk infill	US 26	Powell Blvd to Palmquist Dr	7000				
S13	Sidewalk infill	Highland Dr	11th St to Springwater Corridor	500				
S14	Sidewalk infill	Butler Rd	Towle Ave to Binford Ave	2100		Unconstrained		
S15	Sidewalk infill	Orient Dr	Salquist Dr to Welch Rd	5300				
S16	Sidewalk infill	17th St	La Mesa Pl	200		Unconstrained		

Appendix B2. Prioritized Project List: *Bicycle*

ID	Main Facility Type	Start (S or W)	Finish (N or E)	Recommended Action (If blank, keep)	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
BR1	Bike boulevard	NW Division St	I-84	Some sharrows, signs, and crossings installed; maintain on list for other bike boulevard improvements.			
BR2	Trail	NE Halsey St	NE Marine Dr	Update extents given partial funding/ construction between Halsey and Sandy.		Partially	
BR3	Bike boulevard	NE 162nd Ave	NE 201st Ave	Some sharrows, signs, and crossings installed; maintain on list for other bike boulevard improvements.		Partially	
BR4	Bike boulevard	SE Yamhill St	NE Hassalo St	Some sharrows, signs, and crossings installed; maintain on list for other bike boulevard improvements.			
BR5	Bike boulevard	SE Main St	NE Hogan Dr				
BR6 Trail	Separated bike lane	SE 176th Ave	Gresham-Fairview				
BR7	Bike boulevard	NW Burnside Rd	NE Glisan St				
BR8	Bike boulevard	Springwater Corridor Trail	NW Burnside Rd				
BR9	Bike boulevard	Gresham-Fairview Trail	N Main Ave				
BR10	Bike boulevard	N Main Ave	NE Scott Dr				
BR11	Bike boulevard	SE 212th Ave	NE Kane Dr				
BR12	Bike boulevard	Springwater Corridor Trail	SE Salmon Ct				
BR13	Trail	City limits (South) Corridor Trail	Springwater				

ID	Main Facility Type	Start (S or W)	Finish (N or E)	Recommended Action (If blank, keep)	Metro RTP Constrained/ Unconstrained. If blank- Not on List	Funded	Constructed
BR14	Trail	Springwater Corridor Trail	Kelley Creek Trail end				
BR15	Bike boulevard	Powerline Trail	SW 33rd St				
BR16	Bike boulevard	SW Pleasant View Dr	SW 33rd St				
BR17	Trail	Kelley Creek Trail	Springwater Corridor Trail	Update extentsto Rodlun Road			
BR18	Trail	SW 33rd St	Springwater Corridor Trail				
BR19	Separated bike lane	NE Burnside Rd	City limits (South)				
BR20	Bike boulevard	SE Callister Rd	NE 17th				
BR21	Bike boulevard	Springwater Corridor Trail	SE Wendy Ave				
BR22	Bike boulevard	SE Williams Ave & SE Baker Way	SE Old Woods Loop				
BR23	Bike boulevard	Hwy 16	SE 282nd Ave				
BR25	Trail	SE 242nd Ave	SE 282nd Ave				
BR26	Overpass	SE Palmquist Rd	SE Kane Dr				
BR27	Separated bike lane jog	I-84 bike path	I-84 bike path	Confirm/update with Metro RTP description.	Constrained		

Appendix C. Other Projects

Appendix C1. Transportation Systems Management Operations/Intelligent Transportation Systems

	Project Description	2013 Cost Estimate	Recommended Action (If blank, keep)
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	Update - complete except for Halsey and 192nd
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	Remove equipment upgrades - this effort is funded. Update description to remove traveller realtime info - now
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	Remove - funded or constructed.
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	Remove - funded or constructed.
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	Remove - funded or constructed.
US 26 Roadside Travel Time	Improve arterial corridor operations by expanding traveler information.	\$1,000,000	Remove - funded or constructed.

Appendix C2. Outreach and Education Transportation Projects

Outreach and Education	Project Description	2013 Cost Estimate	Recommended Action (If blank, keep)
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	Update - complete except for Halsey and 192nd
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	Remove - funded, downtown parking committee to inform Parking Management Manual.
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	\$1,800,000	
Safe walking routes, missing links	Construct missing links and safe routes to school.	\$4,000,000	Remove and identify specific projects in pedestrian and bicycle lists.

Prioritization Criteria for Pedestrian Network

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
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.