

Appendix E

Alternatives Evaluation Process

City of Springfield TSP Alternative Evaluation

PREPARED FOR: City of Springfield

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Over the past year, the Springfield Transportation System Plan (TSP) project team has worked closely with the Stakeholder Advisory Committee (SAC) and Technical Advisory Committee (TAC) to identify and screen project ideas, develop and evaluate potential projects, and categorize projects for inclusion in the TSP. This evaluation process is intended to inform the development of the TSP. Since city priorities and needs will change over time, the evaluation process may be revisited to support future city decision making.

This technical memorandum summarizes the results of the project brainstorming and evaluation process and results. This memorandum is divided into the following four sections:

- Evaluation Framework
- Project Identification and Screening
- Project Evaluation
- Next Steps

Evaluation Framework

Early in the TSP process, the project team, working with the SAC, TAC, Planning Commission and City Council, developed an evaluation framework. The city’s draft TSP policies were translated into evaluation criteria that would help determine the relative priority of projects. The evaluation framework is presented in Table 1. This evaluation framework is not intended to provide a quantitative score for TSP projects, but is intended to highlight some of the city’s transportation goals to illustrate tradeoffs between different system investments.

Table 1

Evaluation Framework

Goal 1. Community Development

1A	Is consistent with community development goals and vision in the Springfield 2030 plan and Metro Plan
1B	Minimizes impacts on natural resources, scenic and historic areas and open spaces as reflected in the city’s Goal 5 Resource inventory
1C	Enhances connectivity within and between major activity centers including employment centers, high density residential areas and community resources like major parks
1D	Minimizes negative impacts to existing and future neighborhoods from transportation projects and policies
1E	Reduces GHG emissions from passenger vehicle travel through provision of services and facilities that reduce reliance on single occupancy vehicle travel
1F	Minimizes negative impacts to developable and developed commercial and industrial sites
1G	Supports safe and efficient multimodal access to major developable employment centers, city redevelopment priorities (e.g., Glenwood, downtown, Gateway and Jasper/Natron), and other key destinations
1F	Maintains the economic viability of existing commercial and industrial areas

Goal 2. System Management

2A	Improves mobility on designated freight, truck and rail routes over no build scenario
2B	Improves mobility for through traffic on highways and freeways over no build scenario
2C	Manages access on state, county and city roadways toward relevant standards
2D	Supports roadway improvements that provide safe access for all users, regardless of age, ability or mode of transportation

2E	Provides bike and pedestrian connectivity to transit corridors
2F	Provides support for reliable transit service on key routes
2G	Reduces delay at key arterial intersections
2H	Addresses known safety issues
Goal 3. System Design	
3A	Closes key gaps in the bike system
3B	Closes key gaps in the pedestrian system
3C	Addresses known safety issues
3D	Supports or enhances ability to implement key state or regional projects/priorities
3E	Promotes intermodal connectivity
3F	Addresses pedestrian and bike connectivity gaps and safety issues that affect key routes to schools (as defined in Safe Routes to Schools programs) and parks
3G	Provides transit, bike and pedestrian connections to multiuse paths
3H	Reduces trip lengths for all users
3I	Closes key gaps in the roadway system
3J	Closes key gaps in the transit system
Goal 4. System Financing	
4A	Prioritizes investments that provide maximum benefit for the associated cost
4B	Considers future operation and maintenance costs in investment choices
4C	Leverage investments in the existing system where the existing system can meet future needs

Project Identification and Screening

Potential TSP projects (project ideas) were identified from a variety of sources, including:

- Existing plans such as the Regional Transportation Plan and the Willamalane Parks and Recreation District Comprehensive Plan
- The TAC and SAC
- City of Springfield staff
- Community members through online comment maps or at public meetings

Through this process, approximately 110 project ideas were identified for further refinement and screening. These ideas were illustrated generally on five maps showing different geographic areas of the city and were grouped into the following general categories:

- Connectivity or multimodal improvement
- Bicycle or pedestrian improvement
- Transit improvement
- Off-street path improvement
- Safety or congestion improvement
- Ongoing studies
- Intersection or capacity improvement

Initially, these project ideas were represented by “fat lines” graphically and were not developed into specific projects. Rather, the ideas were discussed at a conceptual level by city staff, the TAC and SAC.

Once a complete initial list of ideas was developed, city staff and the project team screened project ideas based on the following questions:

- Does the project idea address a transportation problem?
- Is the project idea within the control/influence of the city to implement?

- Is the project idea technically and politically feasible?
- Could the project idea be constructed at a reasonable cost?

If the answer to any question was “no,” the project idea was set aside; all others were advanced for further study. The screened set of project ideas was reviewed by the SAC on April 30, 2012 and TAC on May 1, 2012.

In addition to this formal screening process, a few projects were screened out later in the process because it became evident that one of the screening criteria was not met. Generally, this was because more detailed transportation operations analysis showed that a project did not address a transportation need.

Project Evaluation

A multistep evaluation process helped the TSP efforts to focus on a smaller number of projects that present investment tradeoffs. The results of this process are one of the considerations that will be used in developing the recommended TSP alternative. The evaluation process does not include any weighting of particular city goals, so the evaluation results cannot be interpreted numerically. The evaluation results will be used by city staff, the TAC and the SAC to inform their discussions of city priorities.

Categorization of Projects

The TSP will include projects that are likely to be implemented by the city, through partnerships with private entities and by other government agencies. The TSP will also include identified needs that will require more study to define a project. To focus the evaluation effort, projects were grouped into general categories. Those sorted into the following categories were advanced for inclusion in the TSP without additional evaluation:

- **As development occurs projects:** those that are likely to be needed as properties in the city develop or redevelop. These projects are not likely to be advanced by the city in the absence of this development. Because these projects are likely to be constructed to support or in partnership with development, they are categorized separately.
- **Opportunity projects:** lower cost and scale roadway projects that would generally not require right-of-way acquisition. These projects generally include intersection improvements and lower cost and scale pedestrian and bicycle projects that are on-street and primarily limited to restriping.
- **Study projects:** those requiring additional refinement prior to identifying an implementable project.
- **Transit projects:** those that Lane Transit District (LTD) would implement in consultation with the city and are generally included in the frequent transit network. These projects will be further refined during the Regional Transportation System Plan process.

The list of projects are provided in Attachment 1.

Qualitative Evaluation of Projects

The remaining projects, including all urban standards projects, higher cost and scale roadway projects, and higher cost and scale pedestrian and bicycle projects, were sorted into 20-year and beyond 20-year priority categories, by qualitatively applying the evaluation framework shown in Table 1.

The team initially considered all evaluation criteria, but the following criteria were most useful in differentiating among projects:

- Impacts to developable parcels, developed properties and neighborhoods.
- Support for new and redevelopment priorities.
- Mobility benefits for freight, through traffic and local traffic.
- Connectivity for all modes, particularly around major activity centers.
- Closure of gaps on pedestrian and bicycle routes and improved pedestrian and bicycle routes near major activity centers and schools.

- Safety benefits for all users.

The team reviewed the projects categorizations with the SAC and TAC in December 2012.

Detailed Evaluation of the 20-Year Projects

The project team applied the evaluation criteria in greater detail to the projects classified as 20-year priority projects. Descriptions of these projects are provided in Table A-1. This evaluation process considered roadway, urban standards and pedestrian-bicycle projects separately. Tables 2, 3, and 4 summarize the evaluation result and cost for each project. The cost estimate for each project should be interpreted as an order-of magnitude estimate; each estimate includes a 40 percent contingency to account for items that cannot be defined at the planning level and relies on many assumptions about eventual project design.

Roadway Projects

Thirteen roadway projects were identified as 20-year priorities through the qualitative evaluation process. Table 2 reflects the criteria most useful in differentiating among the roadway projects as well as the evaluation results and planning-level cost of each project.

Urban Standards Projects

Seven urban standards projects were identified as 20-year priorities through the qualitative evaluation process. Table 3 reflects the criteria most useful in differentiating among the urban standards projects and the evaluation results and planning-level cost of each project.

Pedestrian and Bicycle Projects

Eight pedestrian and bicycle projects were identified as 20-year priorities through the qualitative evaluation process. Table 4 illustrates the criteria were useful in differentiating among the pedestrian and bicycle projects as well as the evaluation results and planning-level cost of each project.

Next Steps

Now that the evaluation process is complete, the city will work with the SAC and TAC to confirm the 20-year priority projects evaluated in this memo. These projects will represent the city's current investment priorities and will help the city develop performance expectations for the transportation system. Even with those priorities defined, the TSP is intended to be a flexible document that allows for new priorities to emerge and to allow the city to advance projects as opportunities arise, needs change, and to support economic development opportunities.

Table 2
Evaluation of 20-Year Priority Projects – Roadway Projects

Evaluation Criterion	Minimizes impacts to developable parcels	Balances impacts to developable parcels with system and community needs	Minimizes impacts to Goal 5 resources	Improves freight mobility on designated freight, truck, and rail routes	Improves mobility for through traffic on highways and freeways	Reduces delay at key arterial intersections	Closes key gaps in the roadway system	Addresses known safety issues	Supports enhanced connectivity between major activity centers	Supports or enhances ability to implement key state or regional projects	Supports multi-modal access to major developable employment centers and redevelopment priorities	Rationale
R-3: Game Farm Road East to International Way. Cost: \$6.3 million	●	●	●	◐	◐	◐	●	○	●	●	●	Closes a key gap in the Gateway area.
R-9: Laura Street to Pioneer Parkway. Cost: \$3.3 million	◐	●	●	○	○	◐	●	●	◐	○	○	Improves east-west connectivity and helps relieve congestion on Q Street.
R-10: Q Street/Laura Street and Laura Street Interchange Area. Cost: \$1.6 million	◐	●	●	●	●	●	○	●	◐	●	○	Addresses a key safety issue.
R-13: Franklin Boulevard Multi-modal Improvements. Cost: \$54 million	○	●	◐	●	●	◐	○	○	●	●	●	Serves a key city redevelopment priority area, and improves an existing transit corridor.
R-14: Franklin Boulevard/McVay Highway Multi-lane Roundabout. Cost: \$7.0 million	◐	●	●	◐	◐	◐	○	○	●	●	●	Serves a key city redevelopment priority area, and improves a proposed transit corridor.
R-19: McVay Highway and East 19th Avenue Roundabout. Cost: \$2.5 million	●	●	●	○	○	○	◐	◐	◐	○	●	Supports multimodal access to the Glenwood Mixed Use Riverfront Area.
R-20: McVay Highway from East 19th Avenue to I-5. Cost: \$47 million	◐	●	○	○	●	○	◐	○	●	●	●	Improves multimodal access to the Glenwood Mixed Use Riverfront Area from I-5.
R-34: Centennial Boulevard/Industrial Avenue from 28th Street to 31st Street. Cost: \$9.5 million	◐	◐	○	○	○	○	●	○	◐	○	○	Provides a key east-west connection between Olympic Street and Main Street.
R-36: 42nd Street from Marcola Road to Railroad Tracks. Cost: \$6.2 million	●	●	◐	●	●	●	○	●	○	◐	◐	Reduces delay at ramp terminal to OR 126, addresses a safety issue, and improves a freight route.
R-39: Extend South 48th Street to Daisy Street. Cost: \$2.6 million	●	●	●	○	○	○	●	○	○	○	○	Closes a north-south gap in connectivity to Daisy Street.
R-40: OR 126/52nd Street Interchange Improvements. Cost: \$27 million	◐	●	◐	●	●	●	○	●	●	●	●	Addresses a known safety issue and improves mobility on OR 126.
R-41: South 54th Street from Main Street to Daisy Street. Cost: \$960,000	●	●	●	○	○	◐	◐	○	○	◐	◐	Improves north-south connectivity between Main Street and Daisy Street.
R-43: OR 126/Main Street Interchange Improvements. Cost: \$2.0 million	◐	●	●	●	●	●	○	●	◐	●	●	Improves safety, freight mobility, and access to Thurston and Jasper-Natron.

- Project positively addresses the evaluation criterion
- ◐ Project partially addresses the evaluation criterion
- Project does not address the evaluation criterion

Table 3
Evaluation of 20-Year Priority Projects – Urban Standards Projects

Evaluation Criterion	Minimizes impacts to developable parcels	Balances impacts to developable parcels with system and community needs	Minimizes impacts to Goal 5 resources	Supports enhanced connectivity between major activity centers	Supports or enhances ability to implement key state or regional projects	Supports multi-modal access to major developable employment centers and redevelopment priorities	Provides bike and pedestrian connectivity to transit corridors	Closes key gaps in the bicycle system	Closes key gaps in the pedestrian system	Addresses pedestrian and bicycle connectivity gaps and safety issues that affect key routes to schools	Rationale
US-1: Game Farm Road South from Mallard Avenue to Harlow Road. Cost: \$4.1 million	●	●	●	◐	○	○	●	●	●	◐	Improve multimodal access to Harlow Street for transit access and provides north-south multimodal connectivity.
US-3: Aspen Street from Centennial Boulevard to West D Street. Cost: \$2.8 million	●	●	●	○	○	○	●	●	●	◐	Closes a key gap for pedestrians and bicycles with access to a transit route (Centennial).
US-4: 21st Street from D Street to Main Street. Cost: \$2.3 million	●	●	●	◐	○	○	●	●	●	◐	Closes a key gap in the pedestrian and bicycle system and provides access to Main Street, a transit corridor.
US-5: 28th Street from Centennial Boulevard to Main Street. Cost: \$4.3 million	●	●	●	●	○	○	●	●	◐	◐	Closes a key gap in the north-south bicycle system and improves multimodal connectivity.
US-6: South 28th Street from Main Street to South F Street. Cost: \$6.0 million	●	●	●	◐	○	○	●	●	●	○	Improves multimodal access to Main Street, a transit corridor.
US-11: Clearwater Lane south of Jasper Road within urban growth boundary. Cost: \$470,000	●	●	●	○	○	○	○	◐	◐	○	Improves multimodal access to Clearwater Park and provides multi-modal north-south connectivity.
US-14: Thurston Road from Weaver Road to Urban Growth Boundary. Cost: \$4.8 million	●	●	●	○	○	○	○	●	●	●	Closes a key gap in the pedestrian and bicycle system and improves safety and access to Thurston Elementary School.

- Project positively addresses the evaluation criterion
- ◐ Project partially addresses the evaluation criterion
- Project does not address the evaluation criterion

Table 4
Evaluation of 20-Year Projects – Pedestrian-Bicycle Projects

Evaluation Criterion	Provides bike and pedestrian connectivity to transit corridors	Closes key gaps in the bicycle system	Closes key gaps in the pedestrian system	Addresses known safety issue	Addresses pedestrian and bicycle connectivity gaps and safety issues that affect key routes to schools	Supports multi-modal access to major developable employment centers and redevelopment priorities	Rationale
PB-2: Flamingo Avenue to Gateway Street. Cost: \$70,000	◐	●	●	○	○	●	Closes a gap in the pedestrian and bicycle system in the Gateway area.
PB-17: I-5 to Willamette River Bridges. Cost: \$2.5 million	◐	●	●	○	○	●	Provides east-west pedestrian and bicycle connectivity in the Glenwood mixed-use riverfront area, and between Springfield and Eugene.
PB-18: Willamette River Bridges to Urban Growth Boundary. Cost: \$2.9 million	◐	◐	◐	○	○	●	Provides north-south pedestrian and bicycle connectivity in Glenwood.
PB-19: Bridge between Downtown and Glenwood or Modify Willamette River Bridges. Cost: \$10.3 million	●	●	●	◐	○	●	Provides a bike and pedestrian connection between downtown and Glenwood.
PB-29: Mill Race Path. Cost: \$7.1 million	●	●	●	●	◐	○	Provides east-west connectivity and addresses a known safety issue on Main Street by providing an alternative route.
PB-32: McKenzie River Path from 42nd Street to 52nd Street. Cost: \$3.7 million	○	●	●	●	○	●	Provides key pedestrian and bicycle connectivity north of OR 126.
PB-37: Booth Kelly Road from South 28th Street to South 49th Place. Cost: \$2.8 million	●	●	●	●	◐	◐	Provides east-west connectivity and addresses a known safety issue on Main Street by providing an alternative route.
PB-46: Haul Road Path from South 49th Place to Urban Growth Boundary. Cost: \$3.6 million	◐	◐	◐	○	◐	●	Provides east-west connectivity to Jasper-Natron.

- Project positively addresses the evaluation criterion
- ◐ Project partially addresses the evaluation criterion
- Project does not address the evaluation criterion

Attachment A. 20-Year Projects and Beyond 20-Year Projects

20-Year Projects

20-Year Projects include roadway, urban standards, pedestrian-bicycle, study, and frequent transit network projects:

- Priority projects (Table A-1): Higher-cost and scale roadway, urban standards, and pedestrian-bicycle projects that would generally require right-of-way.
- Opportunity projects (Table A-2): Lower-cost and scale roadway, urban standards, and pedestrian-bicycle projects that would generally not require right-of-way and could be implemented as opportunities arise.
- As Development Occurs projects (Table A-3): Roadway and pedestrian-bicycle projects that would generally be implemented through a partnership with the City, other agencies, and/or private enterprise to support new development or redevelopment.
- Study projects (Table A-4): Projects that need further study and refinement.
- Frequent Transit Network projects (Table A-5): Frequent transit projects that have been developed through the ongoing Regional Transportation System Plan process.

Table A-1
20-Year Priority Projects

Roadway Projects	
R-4	Game Farm Road East to International Way (Construct a new collector with a three-lane cross-section with sidewalks and bicycle lanes)
R-11	Laura Street to Pioneer Parkway (Construct a new collector with a three-lane cross-section with sidewalks and bicycle lanes in the EWEB powerline corridor with a right-in/right-out intersection at Pioneer Parkway)
R-14	Q Street/Laura Street and Laura Street Interchange Area (Construct a new signal at Laura Street/Q Street intersection, extend the second westbound through lane through the Laura Street intersection, and construct a westbound right-turn lane)
R-18	Franklin Boulevard Multi-modal Improvements (Construct multi-modal improvements on Franklin Boulevard from I-5 to the railroad tracks south of the Franklin Boulevard/McVay Highway intersection, and construct a roundabout at the Franklin Boulevard/Glenwood Boulevard intersection)
R-19	Franklin Boulevard/McVay Highway Multi-lane Roundabout (Construct a multi-lane roundabout)
R-24	McVay Highway and East 19th Avenue (Construct a two-lane roundabout)
R-25	McVay Highway from East 19th Avenue to I-5 (Construct a four-lane cross-section with sidewalks and bicycle lanes and two other lanes for bus rapid transit)
R-41	42nd Street from Marcola Road to Railroad Tracks (Improve 42nd Street with a three-lane cross-section and construct a signal at Marcola Road/OR 126 westbound ramps)
R-43	Centennial Boulevard/Industrial Avenue from 28th Street to 31st Street (Extend Centennial Boulevard/Industrial Avenue with a three-lane cross-section with sidewalks and bicycle lanes)
R-51	Extend South 48th Street to Daisy Street (Extend South 48th Street with three-lane cross-section with sidewalks and bicycle lanes)
R-52	South 54th Street from Main Street to Daisy Street (Construct a new two-lane collector with sidewalks and bicycle lanes)
R-58	OR 126/52nd Street Interchange Improvements (Construct a grade separated interchange on OR 126 at 52nd Street with ramps and new signals at ramp terminals on 52nd Street consistent with the Interchange Area Management Plan)
R-59	OR 126/Main Street Interchange Improvements (Construct a grade-separated interchange with ramps and new signals at ramp terminals on Main Street consistent with the Interchange Area Management Plan; needs further study)

Table A-1
20-Year Priority Projects

Urban Standards Projects	
US-1	Game Farm Road South from Mallard Avenue to Harlow Road (Modify and expand the Game Farm Road South cross-section to include bicycle lanes)
US-3	Aspen Street from Centennial Boulevard to West D Street (Improve Aspen Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-4	21st Street from D Street to Main Street (Improve 21st Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-5	28th Street from Centennial Boulevard to Main Street (Improve 28th Street to include sidewalks and bicycle lanes)
US-6	South 28th Street from Main Street to South F Street (Improve South 28th Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-11	Clearwater Lane south of Jasper Road within urban growth boundary (Modify and expand roadway cross-section to include sidewalks and bicycle lanes; coordinate with Lane County improvements)
US-14	Thurston Road from Weaver Road to urban growth boundary (Improve Thurston Road to a three-lane cross-section with sidewalks and bicycle lanes)
Pedestrian-Bicycle Projects	
PB-2	Flamingo Avenue to Gateway Street (Construct a 12-foot wide path south from Flamingo Avenue to Gateway Street south of Game Bird Park)
PB-17	Glenwood Area Willamette River Path – I-5 to Willamette River bridges (Construct a new multi-use 12-foot wide path from the end of the existing path east of I-5 to the Willamette River bridges)
PB-18	Glenwood Area Willamette River Path – Willamette River Bridges to urban growth boundary (Construct a new multi-use 12-foot wide path from the Willamette River bridges to the urban growth boundary)
PB-19	Bridge between downtown and Glenwood or modify Willamette River bridges (Construct a new pedestrian and bicycle bridge between downtown Springfield and Glenwood, or modify the existing Willamette River bridges)
PB-29	Mill Race Path (Construct a new multi-use 12-foot wide path from South 2nd Street to South 32nd Street/urban growth boundary)
PB-32	McKenzie River Path from McKenzie Levee Path to 52nd Street (Construct a new multi-use 12-foot wide path from the existing McKenzie Levee path at 42nd Street to 52nd Street)
PB-37	Booth Kelly Road from South 28th Street to South 49th Place (Construct a new multi-use 12-foot wide path from South 28th Street to South 49th Place)
PB-46	Haul Road path from South 49th Place to urban growth boundary (Construct a new multi-use 12-foot wide path from South 49th Place to the urban growth boundary)

Table A-2
Opportunity Projects

Roadway Projects	
R-2	Gateway Road/International Way (Construct five-lane cross-section consistent with NEPA documentation)
R-11	5th Street/Q Street (Construct right-turn lanes to the eastbound and northbound approaches or a roundabout)
R-30	Marcola Road/19th Street (Construct right-turn lane on westbound approach or a roundabout)
R-31	28th Street/Marcola Road (Construct a roundabout)
R-32	42nd Street/Marcola Road (Construct a roundabout)
R-33	Centennial Boulevard/28th Street (Construct a roundabout)
R-38	South 42nd Street/Daisy Street (Construct a traffic signal or a roundabout)
R-48	Mountaingate Drive/Main Street (Install a new signal)
Pedestrian-Bicycle Projects (all on-street)	
PB-3	Oakdale Street/Pheasant Street/et.al. from Game Farm Road to Gateway Loop (Add signing and striping for a bicycle lane)
PB-5	Hartman Lane/Don Street south of Harlow Road to OR 126 with crossing of Harlow Road (Add signing and striping for a bicycle route and construct sidewalks to fill gaps)
PB-8	Hayden Bridge Way/Grovedale Drive, Hayden Bridge Way/3rd Street, Hayden Bridge Way /Castle Drive (Add a crosswalk with a rapid rectangular flashing beacon)
PB-9	EWEB Path crossings of 2nd Street., 9th Street, 11th Street, Rose Blossom Drive, Debra Street, 15th Street, 33rd Street, and 35th Street (Improve path crossings to emphasize path priority and to improve safety)
PB-10	2nd Street/Q Street (Add a crosswalk with a rapid rectangular flashing beacon)
PB-13	Anderson Lane between By-Gully path and Centennial Boulevard (Add signing and striping on Anderson Street and Quinalt Street for bicycle route and construct 12-foot wide multi-use path between Anderson Lane and Quinalt Street)
PB-14	Rainbow Drive from Centennial Boulevard to West D Street (Restripe for bicycle lanes with signing)
PB-15	West D from Mill Street to D Street Path (Add bicycle route signing and striping)
PB-16	West D from Aspen Street to D Street Path (Add bicycle route signing and striping and construct sidewalks to fill gaps)
PB-20	Mill Street from Centennial to Main Street, south of Main Street to Mill Race Park (Restripe for bicycle lanes with signing)
PB-21	Pioneer Parkway at D, E and F Streets (Add crosswalks on Pioneer Parkway with signage)
PB-22	5th Street/Centennial Boulevard intersection (Add a bicycle lane through the intersection area)
PB-23	5th Street from Centennial Boulevard to A Street (Add bicycle lane signing and striping)
PB-24	D, E or F Streets from 5th Street to 28th Street (Add bicycle route signing and striping)
PB-25	5th Street/D Street (Add signing and striping to improve visibility)
PB-26	A Street from Mill Street to 10th Street (Restripe for bicycle lanes with signing)
PB-30	33rd Street between V Street and EWEB Path (Add shared-use signing and striping)
PB-33	Main Street between 34th Street and 35th Street (Add a mid-block crosswalk with a rapid rectangular flashing beacon)
PB-34	Pedestrian crossing improvement on Main Street /38th Street

Table A-2
Opportunity Projects

	(Add a mid-block crosswalk with a rapid rectangular flashing beacon)
PB-35	Main Street/ 41st Street (Add a mid-block crosswalk with a rapid rectangular flashing beacon)
PB-36	Virginia Street and Daisy Street from South 32nd Street to Bob Straub Parkway (Add bicycle route signing and striping)
PB-39	Main Street between 48th Street and 49th Street (Add a mid-block crosswalk with a rapid rectangular flashing beacon)
PB-40	Main Street/ 51st Street (Add a crosswalk with signing)
PB-41	Main Street / Chapman Lane (Add a mid-block crosswalk with a rapid rectangular flashing beacon)
PB-42	Main Street /57th Street (Add a mid-block crosswalk with a rapid rectangular flashing beacon)
PB-43	Bob Straub Parkway/Daisy Street (Add a pedestrian/bicycle signal and crossing)
PB-44	Mountaingate Drive from Mountaingate Entrance to Dogwood Street (Add shared-use signing and striping and construct sidewalks and drainage improvements to fill gaps)
PB-45	Mt. Vernon Road/ Bob Straub Parkway (Add crosswalks at all four approaches with signing and striping and install pedestrian crossings on the north-south leg)
PB-47	Thurston Road and 66th Street (Add a crosswalk with a rapid rectangular flashing beacon)
PB-48	Thurston Road and 69th Street (Add a crosswalk with a rapid rectangular flashing beacon)
PB-49	South 67th Street from Ivy Street to Main Street (Add shared-use signing and striping and construct sidewalks to fill gaps)
PB-50	Ivy Street from South 67th Street to South 70th Street (Add shared-use signing and striping)
PB-51	South 70th Street from Main Street to Ivy Street (Add shared-use signing and striping)
PB-52	City-wide Rectangular Rapid Flashing Beacons (Install mid-block crossings city-wide with Rectangular Rapid Flashing Beacons)

**Table A-3
As Development Occurs Projects**

Roadway Projects	
R-1	North Gateway Collector from Maple Island Road/Royal Caribbean Way to International Way (Construct a new collector with new a three-lane cross-section with sidewalks and bicycle lanes)
R-4	Maple Island Road from Deadmond Ferry Road to Beltline Road (Extend Maple Island Road with a two-lane cross-section with sidewalk, bicycle lanes, and an intersection at Beltline)
R-5	Extend Riverbend Drive to Baldy View Lane (Extend Riverbend Drive with a three-lane cross-section with sidewalks and bicycle lanes)
R-6	Improvements to serve Riverbend Hospital (Improve Baldy View Lane/North link, construct a McKenzie-Gateway Loop connector/new collector and construct off-street path connections)
R-8	Mallard Avenue from Gateway Street to Game Farm Road (Improve Mallard Avenue to a two-lane cross-section with sidewalks and bicycle lanes and extend Mallard Avenue to Gateway Street with a two-lane cross-section with sidewalks and bicycle lanes)
R-12	Franklin Boulevard Riverfront Collector (Construct a new collector as shown in the Glenwood Plan; two travel lanes with on-street parking, sidewalks, and bicycle lanes)
R-16	East 17th Avenue from Glenwood Boulevard to Henderson Avenue (Improve East 17th Avenue to a three-lane cross-section with sidewalks and bicycle lanes)
R-17	Henderson Avenue from Franklin Boulevard to East 19th Avenue (Improve Henderson Avenue with a three-lane cross-section with sidewalks and bicycle lanes)
R-18	East 19th Avenue from Henderson Avenue to Franklin Boulevard (Improve East 19th Avenue with a three-lane cross-section with sidewalks and bicycle lanes)
R-24	19th Street from Hayden Bridge to Yolanda Avenue (Extend 19th Street with a two-lane cross-section with sidewalks and bicycle lanes)
R-25	Hayden Bridge Road from 19th Street to Marcola Road (Improve Hayden Bridge Road to a two-lane cross-section with sidewalks and bicycle lanes)
R-26	Yolanda Avenue from 23rd Street to 31st Street (Improve Yolanda Avenue to a two-lane cross-section with sidewalks and bicycle lanes)
R-27	Yolanda Avenue to 33rd Street (Connect Yolanda Avenue with 33rd Street with sidewalks and bicycle lanes)
R-28	Marcola Road to 31st Street (Construct a new collector with a three-lane cross-section with sidewalks and bicycle lanes)
R-29	31st Street from Hayden Bridge to U Street (Improve 31st Street to a two-lane cross-section with sidewalks and bicycle lanes)
R-37	Commercial Avenue from 42nd Street to 48th Street north of Main Street and North-South Connection (Extend Commercial Street and add a north-south connection; three-lane cross-section with sidewalks and bicycle lanes)
R-42	Glacier Street from 48th Street/Holly to South 55th Street (Construct a new collector with a two-lane cross-section with sidewalks and bicycle lanes)
R-45	Improvements within the Jasper-Natron Area (Construct multiple roadways in the Jasper-Natron area between Bob Straub Parkway, Jasper Road, and Mt. Vernon Road)
R-46	Bob Straub Parkway to Mountaingate Drive (Construct a new collector with a three-lane cross-section with sidewalks and bicycle lanes)
R-47	Haul Road from Mt. Vernon Road to urban growth boundary (Construct a two-lane green street in the Haul Road right-of-way)
R-49	79th Street from Main Street to Thurston Road (Extend 79th Street with a two-lane cross-section with sidewalks and bicycle lanes)
Pedestrian-Bicycle Projects (all Off-Street)	
PB-1	McKenzie Gateway Path from Existing Path to Maple Island Road (Construct a new multi-use 12-foot wide path from the end of the existing Riverbend Hospital path to Maple Island Road)
PB-4	Wayside Lane/Ann Court to Riverbend Path (Construct a new 12-foot wide path from Wayside Lane/Ann Court to the existing Sacred Heart Medical Center-Riverbend path)
PB-27	South 2nd Street to Mill Street (Construct a new multi-use 12-foot wide path from South 2nd Street to Mill Street)

Table A-4
Study Projects

S-1	Phase 2 of Beltline/Gateway improvements
S-2	OR 126 Expressway Management Plan
S-3	Pioneer Parkway/Q Street/Laura Street circulation study to improve Q Street/Laura Street/Ramp safety, access and capacity
S-4	Study a new crossing of OR 126 between 5th and 15th Streets
S-5	Centennial Boulevard from Prescott Lane to Mill Street operational improvements study
S-6	Pioneer Parkway/Centennial Boulevard intersection study to improve pedestrian safety
S-7	Centennial Boulevard from Mohawk Boulevard to Pioneer Parkway operational improvements study
S-8	Study safety and operational improvements in Mohawk Boulevard/Olympic Street/18th Street/Centennial triangle
S-9	Study a new bridge from Walnut Road/West D Street to Glenwood Boulevard/Franklin Boulevard intersection
S-10	Study Main Street/South A Street improvements from Mill Street to 21st Street
S-11	Refinement study for Glenwood industrial area
S-12	Pedestrian/bicycle bridge study between Glenwood and Dorris Ranch
S-13	Access plan study on Main Street between 21st Street and 48th Street
S-14	Study east-west connectivity between 28th Street and 32nd Street
S-15	Study a new crossing of OR 126 near Thurston High School
S-16	Connectivity study south of OR 126 and Jessica Street

Table A-5
Frequent Transit Network Projects

T-1	Transit on Centennial Boulevard from I-5 to Mohawk Boulevard
T-2	Transit on Franklin Boulevard/Main Street/South A Street to OR 126/Main Street
T-3	Transit on Franklin Boulevard and McVay Highway to 30th Street
T-4	Transit on Mohawk Boulevard from Centennial Boulevard to 19th Street/Marcola Road to 28th Street/Olympic Street to Mohawk Boulevard

Note: These projects are included in the current Regional Transportation System Plan. The final transit network will be developed through the Regional Transportation System Plan process.

Beyond 20-Year Projects

Beyond 20-Year Projects (Table A-6) include roadway, urban standards, and pedestrian-bicycle projects.

Table A-6
Beyond 20-Year Projects

Roadway Projects	
R-7	South of Kruse Way and east of Gateway Road (Construct a new roadway to improve connectivity in the general South of Kruse Way/east of Gateway Road area)
R-15	Glenwood Boulevard from I-5 to Franklin Boulevard (Convert Glenwood Boulevard from 3 lanes to 5 lanes)
R-21	Pioneer Parkway to South 2nd Street (Construct a new collector between Pioneer Parkway and South 2nd Street)
R-22	Extend South 14th Street South of Railroad Tracks (Extend South 14th Street south of the Union Pacific Railroad mainline with a three-lane cross-section with sidewalks and bicycle lanes)
R-23	South B Street from South 5th to South B Street (Extend South B Street with a three-lane cross-section with sidewalks and bicycle lanes)
R-35	OR 126/42nd Street Interchange Improvements (OR 126/42nd Street interchange improvements)

Table A-6
Beyond 20-Year Projects

R-44	Daisy Street crossing of Bob Straub Parkway (Construct an at-grade crossing or undercrossing of Bob Straub Parkway)
Urban Standards Projects	
US-2	Laura Street from EWEB powerline corridor to Game Farm Road (Improve Laura Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-7	South 28th Street from F Street to urban growth boundary (Improve South 28th Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-8	35th Street from Olympic to Commercial Avenue (Improve South 35th Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-9	Commercial Avenue from 35th to 42nd Street (Improve Commercial Avenue to a three-lane cross-section with sidewalks and bicycle lanes)
US-10	36th Street from Commercial Avenue to Main Street (Improve 36th Street to a three-lane cross-section with sidewalks and bicycle lanes)
US-12	Jasper Road from South 42nd Street to northwest of Mt. Vernon Road (Improve Jasper Road to a three-lane cross-section with sidewalks and bicycle lanes)
US-13	Bob Straub Parkway from Mt. Vernon Road to urban growth boundary (Improve Bob Straub Parkway to a three-lane cross-section with sidewalks and bicycle lanes)
US-15	Main Street east of 72nd Street to urban growth boundary (Improve Main Street to a three-lane cross-section with sidewalks and bicycle lanes)
Pedestrian-Bicycle Projects (all Off-Street)	
PB-6	SCS Channel Path from Dornoch Street to Laura Street (Construct a new multi-use 12-foot wide path from Dornoch Street to Laura Street)
PB-7	Extend EWEB Trail from Pioneer Parkway to Don Street (Construct a new multi-use 12-foot wide path in the EWEB powerline corridor from Pioneer Parkway to Don Street with a crossing of Pioneer Parkway and Laura Street)
PB-11	By-Gully Path Extension from Pioneer Parkway to 5th Street (Construct a new multi-use 12-foot wide path from the existing By-Gully path at Pioneer Parkway to 5th Street)
PB-12	I-5 Path – Willamette River Area Path to By-Gully Path (Construct a new multi-use 12-foot wide path parallel to I-5 from Willamette River area path/Eastgate Woodlands to the end of the By-Gully path)
PB-28	South 3rd Street to South 5th Street (Construct a new multi-use 12-foot wide path from South 3rd Street to South 5th Street)
PB-31	Quarry Ridge Lane to Marcola Road (Construct a new multi-use 12-foot wide path Quarry Ridge Lane to Marcola Road)
PB-38	Haul Road: Daisy Street to Booth Kelly Road (Construct a new multi-use 12-foot wide path in the Haul Road right-of-way from Daisy Street to Booth Kelly Road)