

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON**

RESOLUTION NO. 2013-055

Approving the Multnomah County Fiscal Years 2014-2018 Transportation Capital Improvement Plan and Program

The Multnomah County Board of Commissioners Finds:

- a. Multnomah County's roads, Willamette River Bridges, bikeways, pedestrianways, and related structures are vital to an orderly and balanced transportation system and must be maintained and preserved to provide for the safe and efficient movement of people and commerce.
- b. A unified approach to long-range facilities planning and capital investment programming is a County goal.
- c. The Multnomah County Land Use and Transportation Program (LUTP) has established a process, consistent with County Comprehensive Framework Plan: Trafficways Policy #32, to develop a County Land Use and Transportation Capital Improvement Plan and Program (Transportation CIPP).
- d. The Transportation CIPP establishes priorities for capital improvements that will maximize the use of financial resources and provide for the safe and reliable public use of the County roads, Willamette River Bridges, bikeways, pedestrian ways, and related structures.
- e. The Multnomah County FY 2010-2014 Transportation CIPP was approved by this Board on April 8, 2010 by Resolution 2010-039;
- f. The Capital Improvement Program is updated biennially to reflect new and completed projects as well as the most current revenue projections. This action would approve the biennial update of the FY 2010-14 CIPP.
- g. LUTP staff has updated the 2010-2014 Transportation CIPP. Staff analyzed and evaluated new facility needs identified through public meetings, workshops with East County cities and meetings with the East Multnomah County Transportation Committee (EMCTC), and the County's Bicycle and Pedestrian Citizen Advisory Committee. The update also includes needs identified through the East Metro Connections Plan completed in 2012.
- h. The Public Review Draft of the Transportation CIPP has been available for public review since March 8, 2013 and was presented and discussed at the Sauvie Island Open House, EMCTC, and Bicycle/Pedestrian CAC meetings.

- i. At its April 1, 2013 meeting, EMCTC recommended approval of the Transportation CIPP.
- j. The LUTP staff recommends the County Board approve the attached 2014-2018 Transportation CIPP.

The Multnomah County Board of Commissioners Resolves:

- 1. The Multnomah County Fiscal Years 2014-2018 Transportation Capital Improvement Plan and Program is approved.

ADOPTED this 9th day of May, 2013.



BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Jeff Cogen, Chair

REVIEWED:
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FOR MULTNOMAH COUNTY, OREGON

By
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Multnomah County
Department of Community Services



Multnomah County
Transportation Capital
Improvement Plan
And Program
Fiscal Years 2014-2018



Prepared by
Multnomah County
Land Use and Transportation Program

**Multnomah County
Capital Improvement Plan and Program
FY 2014-2018 Transportation**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
LIST OF TABLES	ii
INTRODUCTION	1
CAPITAL IMPROVEMENT PLAN & PROGRAM SUMMARY TABLE	3
ROADWAY CAPITAL IMPROVEMENT PLAN	7
BIKEWAY & PEDESTRIAN CAPITAL IMPROVEMENT PLAN	12
FISH PASSAGE CULVERT CAPITAL IMPROVEMENT PLAN	20
WILLAMETTE RIVER BRIDGES CAPITAL IMPROVEMENT PLAN	25
FY 2010-2014 TRANSPORTATION CAPITAL IMPROVEMENT PROGRAM	30

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	CAPITAL IMPROVEMENT PLAN SUMMARY	3
2	CRITERIA FOR ROAD PROJECT EVALUATION	8
3	ROADWAYS PROJECT RANKING REPORT	9-10
4	CRITERIA FOR BICYCLE AND PEDESTRIAN PROJECT EVALUATION	13
5	BICYCLE CIP PROJECT RANKING REPORT	15-16
6	PEDESTRIAN CIP RANKING REPORT	17
7	CRITERIA FOR CULVERT REPLACEMENT	22
8	FISH PASSAGE CULVERT PROJECT RANKING REPORT	23
9	CRITERIA FOR BRIDGE CONSTRUCTION	26
10	CRITERIA FOR BRIDGE CORROSION CONTROL	27
11	WILLAMETTE RIVER BRIDGES PROJECT RANKING REPORT	28
12	FY 2014-2018 TRANSPORTATION CAPITAL IMPROVEMENT PROGRAM	31

Multnomah County Transportation Capital Improvement Plan and Program Fiscal Years 2014-2018

Introduction

The Multnomah County Land Use and Transportation Program has undertaken a capital improvement planning process consistent with guidelines established in the County Comprehensive Framework Plan: Trafficways Policy #32. The Capital Improvement Plan and Program (CIPP) establishes a list of priority transportation improvements deemed necessary to enhance and maintain the County transportation system at acceptable levels, identifies anticipated transportation revenues and other potential funding, and matches these revenues to targeted investments in the transportation system.

A goal of the Comprehensive Framework Plan is to:

Promote and enhance a balanced transportation system that encourages a thriving economy, increases public safety, allows for efficient transportation movement, and protects livable communities through the best possible use of available funds.

Background

The County's network of roads and bridges lies outside the cities of Gresham and Portland, with the exception of the six (6) Willamette River Bridges within Portland. Projects that accommodate all modes of transportation, motor vehicle, pedestrian and bicycle, and fish passage culvert improvements are considered in the CIPP.

The relative jurisdictional authority of the County and the cities within its boundaries has evolved significantly since the 1980s. In 1985, all roads and streets within the incorporated boundaries of the City of Portland were transferred to the City. Multnomah County, by Oregon law, retained responsibility for the Willamette River bridges. In 1995, Multnomah County transferred many local roads to the cities of Fairview, Gresham, and Troutdale. Multnomah County retained the regional road network outside of Portland. In December 2005, following Oregon legislative action, Multnomah County transferred jurisdiction of all County roads within the City of Gresham to the City of Gresham.

The County currently has jurisdiction over 283 miles of roads located in east and west unincorporated Multnomah County and approximately 27 miles of urban roads in the Cities of Fairview, Troutdale, and Wood Village. It also owns, maintains, and operates six (6) Willamette River bridges – Sauvie Island, Broadway, Burnside, Morrison, Hawthorne, and Sellwood.

Purpose of a Capital Improvement Plan and Program

A current CIPP helps ensure that public funds are strategically invested in transportation projects that provide the greatest public benefit and keep the County's priority projects eligible for state and federal grant programs.

Capital projects improve County transportation facilities where either substantial reconstruction or new construction is required.

Examples of capital projects include:

- Bridge or bridge component replacement
- Road reconstruction
- Extensive guardrail replacement
- Sidewalk construction
- Extensive drainage improvements
- New traffic signals and upgrades to existing traffic signals
- Intersection improvements
- Road widening and the construction of new roadways
- Bikeway construction
- Culvert replacement
- Bridge Corrosion Control

Maintenance projects, such as crack sealing, striping and signing are not funded by the Capital Improvement Program. These activities are funded through operations and maintenance budgets. There are instances where roads developed to current standards require major reconstruction. These are capital projects. The road overlay program and bridge corrosion control are also funded through the capital program.

The CIPP is a two-part document. The Capital Improvement Plan identifies and scores transportation projects needed in the next 20 years. The Capital Improvement Program assigns available revenues to high priority projects for a five-year period.

Capital Improvement Plan

The Plan (Transportation Capital Improvement Plan) is an inventory of transportation capital needs and costs. It precedes the Program (Capital Improvement Program) by rating and ranking projects by priority of need. The Plan uses criteria to evaluate and distinguish Roadway, Bicycle and Pedestrian, Fish Passage Culvert, and Willamette River Bridges priorities from the array of candidate projects.

Capital Improvement Program

The Program implements the Plan by assigning anticipated and available County transportation revenues to candidate projects. The Program is reviewed annually and updated biennially to ensure that limited resources for projects are efficiently and equitably allocated to the most critical capital needs, including where equity can be improved, as well as to leverage County funds. The Program is used by the Transportation Program in preparing its annual Transportation Program budget. Public review of the Program is provided annually through the County's budget process.

CIPP Process

The County road system is dynamic, changing in response to land use decisions and infrastructure life cycles. Consequently, the CIPP must be reconsidered and revised on a regular basis.

Several internal and external means are used to identify transportation improvement projects. The primary internal source of information is the FY 2010-2014 Capital

Improvement Plan and Program. Projects included in the 2010-2014 CIPP that have been completed or are under construction are deleted from the FY 2014-2018 CIPP list. Projects on roads no longer under the jurisdiction of the County, as well as those projects which will be annexed consistent with adopted intergovernmental agreements (e.g., Pleasant Valley Plan District) have been deleted. Other sources of projects include:

- Public recommendations,
- Recommendations from the Multnomah County Bicycle and Pedestrian Citizen Advisory Committee,
- Projects identified through adopted Transportation System Plans in the cities of Fairview, Troutdale and Wood Village
- Projects from the Regional Transportation Plan
- Input from County Maintenance and Engineering staff
- Safety audit reports
- County planning and data management tools, including the County Pavement Management Program, Functional Classification of Trafficways, and the Master Road List
- Projects from the County's Bicycle Master Plan,
- Projects from the County's Pedestrian Master Plan
- Projects from the Fish Passage Culvert Program

These sources identify segments, intersections, and structures on the County transportation system that are hazardous or congested, substandard, incomplete, or in need of reconstruction. The Willamette River Bridges 20-Year Capital Improvement Needs report provides the basis for identifying the needs and projects on the six (6) Willamette River bridges.

In addition to these project sources, the 2014-2018 CIPP list has been updated to reflect the completion of the East Metro Connections Plan (EMCP). The plan, completed in June 2012 identified transportation and other investments that advance economic and community development. Working with the cities of Gresham, Fairview, Troutdale, Wood Village and Multnomah County, the East Metro Connections Plan relied on coordination across jurisdictional boundaries to advocate for results that ensure prosperity of the East Metro area. The final recommendation and action plan identified the needs, transportation mode, function and scope and general location of solutions needed for the area between the adoption of the plan in 2012 and the year 2035. The 2014-2018 CIPP reflects the projects identified in the EMCP.

The capital project needs identified in this Plan total over \$1.188 billion for approximately 193 candidate projects.

Table 1 summarized the capital needs by facility type.

Table 1 Multnomah County Transportation Capital Improvement Plan Summary	
Arterials	\$ 175,147,387
Collectors	\$ 113,548,154

Bridges (non-WRB)	\$ 20,849,000
Signals	\$ 20,576,722
Street Design	\$ 1,950,548
Roadways subtotal	\$ 332,071,811
Bicycle Facilities	\$ 238,647,550
Pedestrian Facilities	\$ 12,539,128
Fish Passage Culverts	\$ 25,391,900
Willamette River Bridges	\$ 549,496,801
Total	\$1,188,147,190

Transportation staff conducted public outreach for the proposed CIPP through a variety of different venues. Staff attended a public open house held on Sauvie Island. Transportation capital program information and proposed CIPP have been available for review and comment on the County's website. Additionally, information was also made available on the city websites of Fairview, Troutdale, and Wood Village. The cities of Fairview, Troutdale, and Wood Village have reviewed the CIPP, and it was presented to the East Multnomah County Transportation Committee (EMCTC) at their March 2013 meeting.

Capital Project Funding

Capital programming is intended to budget funds over a five-year period to bring portions of each element of the transportation system up to standard. Future year revenues are estimated and allocated to the highest priority capital projects until estimated revenue is fully allocated.

Multnomah County receives its transportation revenue from three (3) primary sources – Federal revenues, the State Highway Fund (state gas tax, vehicle registration fees, and truck weight/mile tax), and a 3-cent County gas tax. Federal sources include the Surface Transportation Program (STP) and Highway and Bridge Program (HBP). The County has chosen to dedicate the STP funds to the rural roads within the County in order to ensure equity in geographic allocation. HBP funds are used solely for the Willamette River Bridge Program for both capital and large maintenance projects.

The County receives State revenues based on the number of vehicles registered in the County. Through revenue sharing agreements, a portion of these funds are given to Portland, Gresham, Troutdale, and Fairview for capital and maintenance projects. The Portland agreement also dedicates annual funding for the operation, maintenance, and capital program for the Willamette River bridges. The County uses the remainder of these funds primarily for maintenance and leveraging outside sources of revenues. As obligated by State law, a minimum of one percent of State Highway revenues are spent on planning, building, and maintaining bicycle facilities and sidewalks on County transportation facilities. In practice, the County spends more than one percent of State Highway revenues on bicycle and pedestrian facilities. Revenues dedicated for the bicycle and pedestrian system are generally used to fund bicycle and pedestrian projects that are unlikely to be associated with a road or bridge capital project. County road and bridge capital projects generally incorporate bicycle and pedestrian elements into the project design, and Roadway and Willamette River Bridges maintenance programs assume the cost of maintaining the bicycle and pedestrian facilities.

Like all public transportation agencies relying on gas tax revenue, Multnomah County is experiencing a dramatic reduction in its ability to maintain its current system of roads and bridges or to invest in replacement or expansion projects. Prior to the 2009 State legislative adoption of the Jobs and Transportation Act, the last state gas tax increase was in 1993. Since that time, the number of vehicle miles traveled in the region has risen by 19 percent, but gas tax revenues only increased by 3 percent. Vehicles have become more fuel efficient, but travelers are no less dependent on a good transportation system.

Since 1993, inflation has increased by more than 50 percent. While fuel prices fluctuate dramatically, the gas tax is flat and has no index to inflation. As a consequence, the County's purchasing power has diminished with inflation. The County's core responsibility to provide a safe environment for the traveling public has been seriously compromised by diminished buying power.

The County has a history of investing heavily in capital preservation. However, over the past few years, funds for road overlays and upkeep have dwindled, and the backlog of deferred maintenance, particularly for roads, is growing at an alarming rate.

In 2009, Oregon passed the Job and Transportation Act (HB 2001) which included an increase in the statewide vehicle registration fee and gas tax and a local option for increased revenues for the Sellwood Bridge replacement. These increased revenues to the

state, cities, and counties helped address deferred maintenance and make capital investments. In addition, it allowed counties in the Portland metro area the option to levy a local vehicle registration fee to fund the Sellwood Bridge replacement. In October 2009, the Multnomah County Board of Commissioners adopted a \$19 annual vehicle registration fee as part of the Sellwood Bridge financial strategy.

Current projections of County revenues from both the state and county transportation funds indicate an improved but limited ability to sustain investments in road and bridge preservation and maintenance and in a limited capital program. County priorities for its transportation revenues are capital debt payments, the road preservation/overlay program, bridge preservation/maintenance, annual allotments for emergency response and safety, and new bridge and road capital projects.

Priorities for capital projects are established through evaluation processes for each of the following facility categories: Road and non-Willamette River Bridges, Bicycle, Pedestrian, Fish Passage Culverts, and Willamette River Bridges. Unique sets of criteria for each facility category are used to evaluate and score projects. County staff uses objective criteria to evaluate and give priority to the array of potential projects. Specific evaluation criteria are discussed under each of the following facility category's capital plan summaries. Of note are recent equity and health criteria added as part of the 2012 update of the Bicycle and Pedestrian criteria. Similar criteria were added to the project criteria for road projects as part of the 2014-2018 CIPP.

Multnomah County Roadways FY 2014-2018 Capital Improvement Plan

The Roadways Capital Improvement Plan establishes a ranked list of road and road-related capital projects necessary to enhance and maintain the County road system at acceptable levels. The County's road projects are evaluated using criteria that address the following:

- Safety
- Multi-modal benefits
- Support of regional 2040 land uses and transportation goals
- Completing gaps in travel corridors
- Demonstrating local community support
- Potential to leverage non-County funding
- Equity
- Health

These criteria are based in part on project selection criteria used by Metro for funding regional projects. The addition of the equity and health criteria reflects inclusion and consideration of these two priorities for both regional and state funding. This aligns Multnomah County urban projects with Metro 2040 Growth Management objectives while still meeting Multnomah County criteria and objectives.

Each potential project is evaluated and scored using the Road Capital Projects Ranking Criteria shown on the following Table 2. Roadway projects are sub-categorized as Arterials, Collectors, (non-Willamette River) Bridges, Signals/Intersections, and Street Design Concept on Table 3. Using the scoring tool, priorities are established for each Road sub-category.

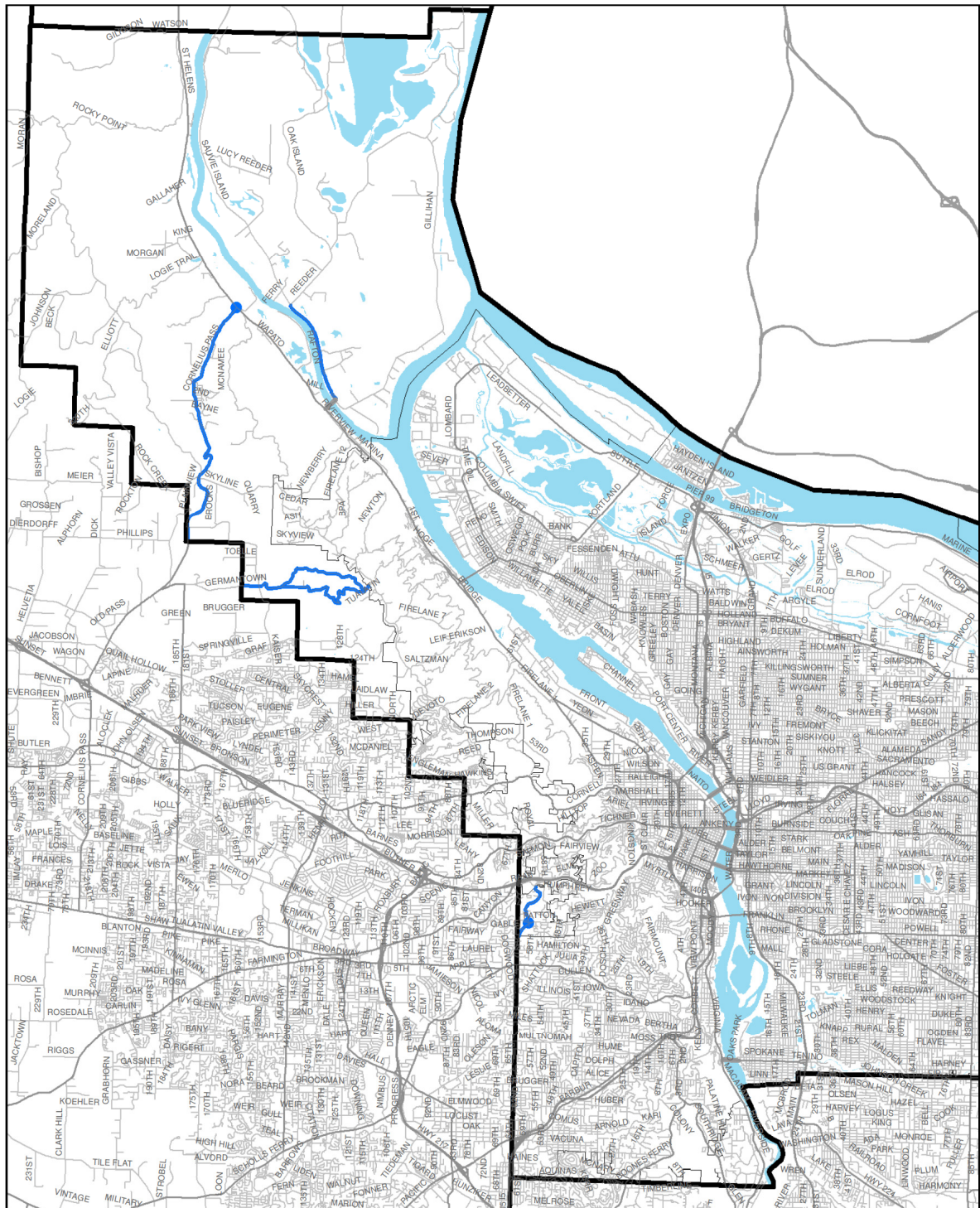
Table 2
Criteria for Road Project Evaluation

Criteria	Criteria Explanation	Points
Safety	Project solves a safety problem once complete. Is there a crash history along the project site? Projects that will mitigate a hazard in locations. Does the project remove conflicts and/or provides safety mitigation for any potential vehicular conflicts? •	Crash history: High – 9, Med – 5, Low – 0 Solves problem: High – 9, Med – 5, Low – 0
Multi-modal benefit	Project adds bike and pedestrian facilities where none exist. Project improves on existing bike and pedestrian facilities built to minimum standards. Project in an identified transit corridor.	20 8 8
2040 Focus Areas (land use)	Project is located in or directly serving a regional center or town center. Project is located in or directly serves an industrial center or employment core. Project serves an activity center (MHCC, Blue Lake Park, Legacy Hospital, K-12 school).	5 5 5
Non-county funding secured	Project secured 50 – 100% of funding from non-county source. Project secured less than 50% from a non-county source.	10 5
Project Support	Project is included in a local plan (transportation system plan, corridor plan, refinement plan, etc.). Project has received citizen support (letters, phone calls, hearings, etc.). Project a local jurisdiction priority.	5 5 5
Completion of corridor	The project complete a gap in a corridor (i.e. is the roadway on either end of segment constructed to county standards.	High-8 Med- 4 Low- 0
Equity	Does the project serve traditionally underserved (minority, low income, limited English speaking, youth, elderly, disabled) communities?	0-5 points
Health	Does this project increase the potential for increased physical activity during every day trips? Does the project help reduce impacts, such as noise, land use conflicts, emissions, etc. Does the project help reduce air toxics or particulate matter? Does the project include multimodal elements (access to transit stops or encourages use of different modes of transportation)? Does the project reduce Vehicle Miles Travelled (VMT)?	 0-5 points
Total points possible		104

TABLE 3: Roadways Project Ranking Report

Project #	Project Name	Project Description	Score	Project Cost (\$)	On Bike CIP
ARTERIAL CATEGORY					
Urban					
88	NE 238th Drive: Halsey St to Glisan St	Implement East Metro Connections Plan (EMCP): 3 lanes with multimodal	99	9,000,000	Y
107	Halsey St: 238th Dr.-Historic Columbia River Hwy	Widen Halsey St to 3 lane minor arterial with center turn lane/median, sidewalk and bicycle lanes, consistent with Halsey Street Conceptual Design Plan	89	10,807,290	Y
716	Sandy Blvd: Gresham/Fairview City Limits -- 230th Ave	Reconstruct Sandy Blvd to minor arterial standards with bike lanes, sidewalks and drainage improvements, utilizing recommendations from TGM grant.	82	21,404,633	N
57	Stark St: 257th Ave.--Troutdale Rd	Reconstruct Stark St. to minor arterial standards by widening the existing 2 lanes to provide for 4 traffic lanes, a continuous left-turn lane, bike lanes, sidewalks, and intersection improvements.	79	11,100,000	Y
110	Glisan St: 202nd Ave.-Fairview Parkway	Reconstruct northside of Glisan Street to provide multimodal connection between Gresham-Fairview Trail and Salish Ponds Natural Area. Include bike lanes, sidewalks, two travel lanes in each direction per EMCP, and on-street parking. Design green-street treatment for drainage improvements, including Fairview Creek culvert replacement. South side of Glisan St is in Gresham, north is City of Fairview.	76	11,774,421	Y
TBD	238th/242nd/Hogan (I-84 - Powell)	238th/242nd/Hogan (I-84 - Powell): System Management EMCP	59		
TBD	System management: Fairview Pkwy/Glisan/223rd/Eastman (I-84 - Powell)	System management: Fairview Pkwy/Glisan/223rd/Eastman (I-84 - Powell)	54		
101	Scholls Ferry Road: Humphrey Blvd - County Line	Improve Scholls Ferry based on the Scholls Ferry Concept Plan including bicycle and pedestrian facilities.	54	TBD	N
202	Stark St: Troutdale Rd--Hampton Ave	Reconstruct road to arterial standards with 1 travel lanes in each direction, center turn lane/median, sidewalks and bicycle lanes.	42	3,276,450	Y
Rural					
103a	Cornelius Pass Rd: MP 3.0--MP 3.5	Realign and widen Cornelius Pass Road to provide southbound passing lane.	48	35,135,976	N
389	Cornelius Pass Rd: US 30--MP 2	Reconstruct Cornelius Pass Road including passing lane, safety, shoulder and drainage improvements.	42	54,159,714	Y
103	Cornelius Pass Rd: MP 2--MP 3	Widen Cornelius Pass Rd, including new box culvert and passing lane.	38	21,893,536	N
				Arterial Total	156,658,484
COLLECTOR CATEGORY					
Urban					
129	Arata Rd: 223rd Ave- Wood Village Blvd	Construct to 3 lane collector standards with center turn lane/median, sidewalks, bicycle lanes.	96	4,468,201	Y
710	Wood Village Blvd: Arata Rd--Halsey St	Construct extension of Wood Village Blvd as a major collector with 2 travel lanes, center lane/median, sidewalks, bicycle lanes.	78	3,294,764	Y
135	223rd Ave: Halsey St--Sandy Blvd	Reconstruct 223rd Ave to major collector standards with 2 travel lanes, center turn lane/median, sidewalks and bicycle lanes. Requires reconstruction of RR bridge under another project.	76	4,596,717	Y
143	223rd Ave: Sandy Blvd--Marine Dr	Improve 223rd Ave to major collector standards including 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes. Project is a standalone project, though a possible culvert replacement for fish passage could add \$120,000 to cost. Requires replacement of RR bridge not included in this proposal.	70	7,106,182	Y
150	Troutdale Rd: Stark St--northerly 1700'	Reconstruct to major collector standards with 2 travel lanes, center turn lane/median, sidewalks, bicycle lanes. Requires new fish culvert at Beaver Creek.	69	8,556,929	Y
745	Marine Drive Reconstruction	Reconstruct Marine Drive between Interlachen Ln. and the frontage roads in Troutdale.	59	36,764,139	
134	Troutdale Rd: Strebin St--Stark St	Improve to collector standards with 2 traffic lanes, center lane, bike lanes and sidewalks, intersection and drainage improvements.	54	8,446,060	Y
165	Troutdale Rd: 19th St--Cherry Park Rd	Widen to major collector standards with 2 travel lanes, center turn lane/median, sidewalks and bicycle lanes	52	875,155	Y
TBD	Safety corridor: Cherry Park/257th (Cherry Park - Division)	Safety corridor: Cherry Park/257th (Cherry Park - Division)	51		
151	Historic Columbia River Hwy: 244th Ave--Halsey St	Reconstruct to minor arterial standards with 2 travel lanes, center turn lane/median, bicycle 25 lanes and sidewalk. Reconstruction of railroad bridge is not included in this project.	45	16,371,224	Y

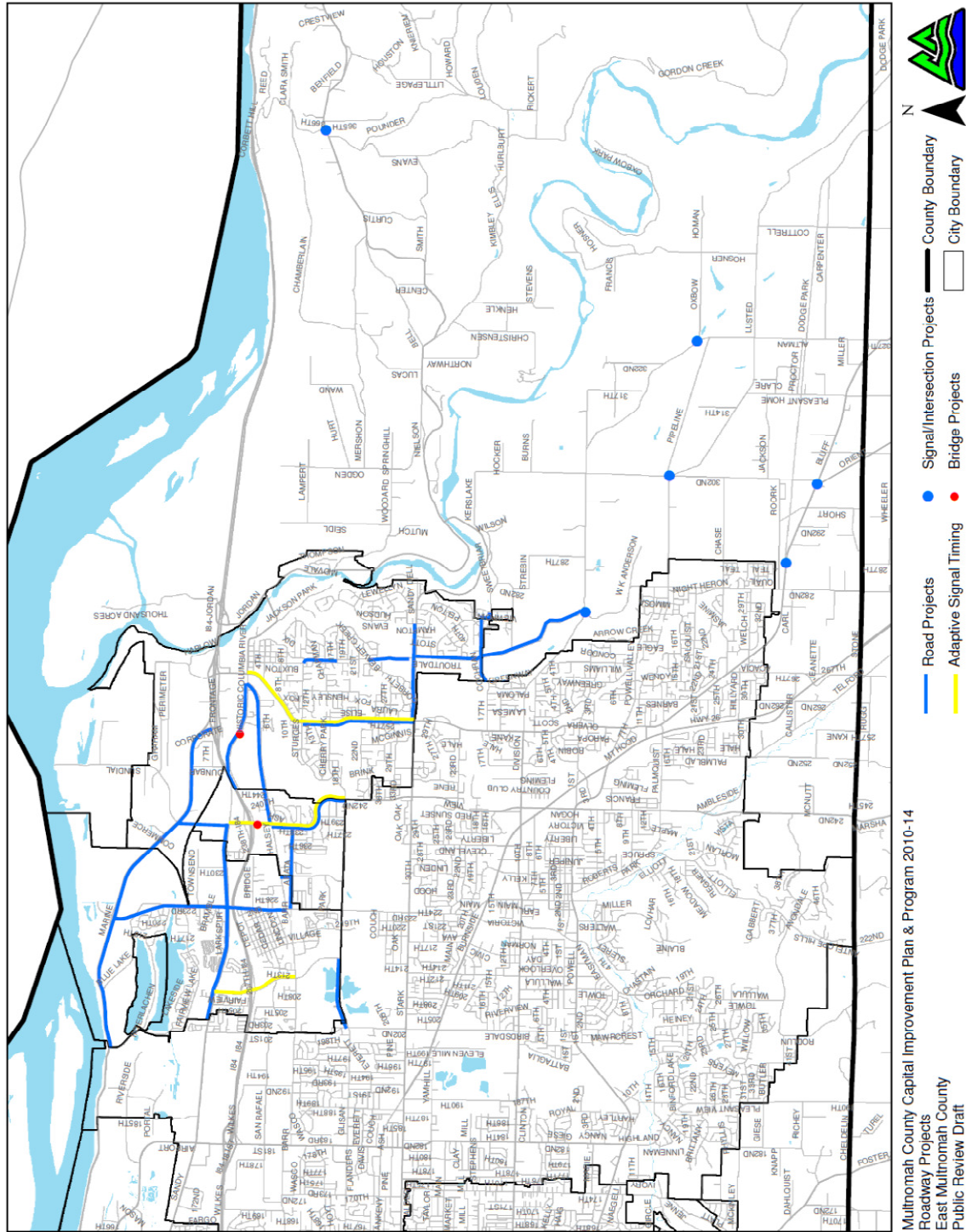
Project #	Project Name	Project Description	Score	Project Cost (\$)	On Bike CIP
Rural					
145	Cochran Dr: Troutdale Rd--western 2175'	Reconstruct to major collector standards: 2 travel lanes, center lane/median, sidewalks, bike lanes, and culvert replacement	45	7,442,765	Y
TBD	Troutdale Rd.: Stark St.-Division Dr.	Reconstruct with 2 travel lanes; construct center turn lane/median, sidewalks, bicycle lanes between Stark and Strebin. Reconstruct Troutdale Rd/Division Dr. intersection including new fish culverts.	44	8,297,000	Y
159	Sauvie Island Rd: Bridge--Reeder Rd	Reconstruct road to rural collector standards with 2 travel lanes. Requires working on dike.	43	8,275,636	Y
TBD	Construct new road north of I-84, Exit 16	Conduct design options alternatives (DOA) study for new connection between Sandy Blvd and Marine Dr. Construct new connector linking industrial sites with I-84.	38	13,000,000	N
149	Sweetbriar Rd: Troutdale Rd--E City Limit	Widen to neighborhood collector standards with 2 travel lanes, sidewalk and bikelanes	31	2,740,748	Y
726	Germanatown Rd/Old Germanatown Rd	Widen Germanatown Rd to create left turn pocket and improve sight distance.	14	780,835	N
Collector Total				131,016,355	
BRIDGE CATEGORY (NON-WILLAMETTE RIVER BRIDGES)					
197	223rd Ave North RR Undercrossing	Reconstruct railroad bridge on 223rd Ave, 2000' north of I-84 to provide wider travel lanes, sidewalks and bicycle lanes.	45	11,534,500	
199	Historic Columbia River Hwy RR Overcrossing: Half mile east of 244th Avenue	Reconstruct railroad bridge to accommodate wider travel lanes, sidewalks and bike lanes.	38	9,314,500	
Bridge Category Total				20,849,000	
SIGNAL/INTERSECTION CATEGORY					
Urban					
TBD	257th/Kane Dr.: Arterial Corridor Management (ACM) w/ Adaptive Signal Timing	Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection and routinely update signal timings. Provide real-time and forecasted traveler information.	63	2,800,000	N
TBD	238th/242nd Ave/Hogan Dr.: ACM with Adaptive Signal Timing	Includes the ACM project with signal systems that automatically adapt to current arterial that automatically adapt to current arterial roadway conditions.	57	3,600,000	N
TBD	Fairview Parkway, Arterial Corridor Management (ACM)	Install upgraded traffic signal controllers, establish communications to the central traffic signal system, provide arterial detection and routinely update signal timings. Provide real-time and forecasted traveler information on arterial roadways.	42	850,000	N
744	Scholls Ferry Rd/Patton Rd	Improve safety and reduce delay at intersection. Improvements will include ADA curb ramps, signals with permissive/protective phasing	41	450,000	
Rural					
193	Cornelius Pass Rd/US 30	Widen pavement to allow for north bound left turn lane, right turn lane and bicycle lanes.	42	1,642,529	Y
706	Orient Dr/Bluff Rd	Widen Orient Dr to create eastbound left turn lane to Bluff Rd, realign Bluff and Teton to create perpendicular intersection.	20	685,247	N
703	Orient Dr/Dodge Park Blvd	Widen Orient Dr to create eastbound left turn lane.	17	373,616	N
147	Corbett Hill Rd: Historic Col. River Hwy	Improve intersection alignment by making stops at right angle.	15	3,770,920	N
707	Oxbow Dr/Altman Rd	Widen Oxbow Dr to create westbound left turn lane to Altman Rd, realign intersection to a 5 perpendicular intersection.	15	790,693	N
704	302nd Ave/Lusted Rd	Realign Lusted Rd and Pipeline Rd to create perpendicular intersection @ 302nd, add left turn lane to each leg of intersection.	10	5,613,717	N
186	Division Dr/Troutdale Rd (Included in Collector project above)	Realign intersection, eliminating NE leg, producing a 4-way intersection. Replace 3 existing culverts identified as fish barriers.	5		N
Signal/Intersection Total				20,576,722	
STREET DESIGN CONCEPT TOTAL					
208	257th Ave Street Trees	Street Trees	24	919,552	N
207	257th Ave Utility Undergrounding	Underground Utilities	18	1,030,996	N
Street Design Concept Total				1,950,548	
ALL ROADWAY CATEGORIES TOTAL				331,051,109	



Multnomah County Capital Improvement Plan & Program 2010-14
 Roadway Projects
 West Multnomah County
 Public Review Draft

— Road Projects
 • Signal/Intersection Projects
 — County Boundary
 — City Boundary





Multnomah County Bikeway and Pedestrian Program FY 2014-2018 Capital Improvement Plan

The Multnomah County Land Use and Transportation Program has a long-term program to develop and maintain a balanced transportation system that includes sidewalks and bike lanes on urban arterials and collectors, and shoulder bike and pedestrianways on rural roads. Policies for bicycle and pedestrian facilities are established in the Multnomah County Comprehensive Framework Plan. The Land Use and Transportation Program spends more than the one percent minimum of its State Highway revenue on bikeway or pedestrian projects. These expenditures comply with ORS 366.514, which mandates expenditures of a minimum of one percent of State Highway revenues on bicycle and pedestrian facilities.

If a roadway project includes a planned bikeway or sidewalk, the bike and pedestrian facilities are constructed as part of the roadway project. Bicycle and pedestrian priorities that will not be constructed by a roadway project or other program in the near future are programmed through the Bikeway and Pedestrianway capital plans. Examples are sidewalks gaps, separated bike paths in the road right-of-way, cyclist activated traffic signals, major shoulder construction, and bridge modifications. Bikeways or pedestrianways that can be created by striping roads and signage (such as designating bicycle lanes or routes) are funded through the maintenance budget.

In selecting Bicycle and Pedestrian system projects, the County uses a careful process of addressing critical needs and maximizing funding opportunities. Candidate projects are evaluated by category, bicycle or pedestrian, using objective criteria. Information used in evaluating a project addresses the following factors:

- Safety
- Completing gaps or compliments other system projects
- Cost effectiveness
- Proximity to school and other public destinations
- Lack of road project to address the need
- Equity
- Health

Each potential project is evaluated and scored using the ranking criteria shown in the following Table 4. Using this scoring tool, priorities are established for bicycle system and pedestrian system investments, in Tables 5 and 6.

Table 4
Criteria for Bicycle and Pedestrian Project Evaluation

Criteria	Criteria Explanation	Point Range
Safety Improvement	Project solves a safety problem once complete. Is there a crash history along the project site? Projects that will mitigate a hazard in locations. Does the project remove conflicts and/or provides safety mitigation for any potential vehicular conflicts?	<i>Crash history:</i> High – 9, Med – 5, Low – 0 <i>Solves problem:</i> High – 9, Med – 5, Low – 0
Cost Effectiveness	What is the cost/benefit of proposed project? Projects that provide the most new infrastructure for the least cost will receive the highest scores.	High – 12 Med – 6 Low – 0
Project Utility	Project serves a need/be well used once it is complete. Project improves access to priority destinations mixed use centers, large employment areas, schools, and essential services. Projects located in high or potentially high pedestrian/bicycle traffic areas will receive top scores. Projects that are located in high transit use areas or that improve access to transit will receive higher scores.	High – 15 Med – 8 Low – 0
Closes Gap in System	Project completes a gap in the systems; compliments adjacent facilities (stormwater management); significantly improves an existing facility that is well-used. Projects that significantly help to complete a pedestrian or bicycle corridor will receive top scores.	<i>Completes gap:</i> High – 8, Med – 4, Low – 0 <i>Compliments other facilities:</i> 0 – 4 <i>Improves existing facilities:</i> 0 – 4
Compliment Recent or Future Project	Project compliments or enhances a recently completed or near-term future project (including leveraging). Project that have benefit to phases of completed or future projects. Projects located in close proximity to other recent or planned bicycle or pedestrian enhancements will receive top scores.	High – 8 Med – 4 Low – 0
Proximity to Schools	School is adjacent to the project area. Project must be directly adjacent to a school to receive the points.	Yes – 5 No – 0
No Other Project	Will another project address all or some of the problem? Projects will receive all 5 points if no other projects planned for the area will address bicycle or pedestrian concerns.	0 to 5 points
Feasibility	Factors exist within or outside the scope of the project that make it impractical. Projects receive negative points if concerns about right-of-way, topography, or construction timing make them impractical.	<i>ROW/Topography issues:</i> -3 – 0 <i>Construction timing issues:</i> -3 – 0
Equity	Does the project improve access to priority destinations mixed use centers, large employment areas, schools, and essential services for Environmental Justice/underserved communities? Does the project serve traditionally underserved (minority, low income, limited English speaking, youth, elderly, disabled) communities?	0-6 points
Health	Does the project help reduce impacts, such as noise, land use conflicts, emissions, etc. Does the project help reduce air toxics or particulate matter? Does the project include multimodal elements (access to transit stops or encourages use of different modes of transportation)? Does the project reduce Vehicle Miles Travelled (VMT)? Does the project provide access to “essential services” (parks, trails, centers, recreation, etc) within a 1 mile walk or bike ride?	0-6 points
Bonus	Points will be awarded for alternate sources of money (-2, +2), project readiness (-2, +2) and community support (-5, +5).	-9 - +9
Total points possible		100

Table 5: Bicycle CIP Ranking Report

Project Name	Description	2010-2014 CIPP Project Cost	Score	Included in Roadway Project?	Urban or Rural
NE 238th bike facilities (EMCP)	Bike Lanes	TBD	77	Y	Urban
Stark St: SE 257th to Troutdale Rd - Bike Lanes		\$710,127	75	Y	Urban
N.E. 223 rd Avenue: Bridge St to Halsey St	Bike Lanes	\$632,211	75	Y	Urban
N.E. Glisan St: 203 rd Ave - 207 th Ave	Bike Lanes	\$483,958	71	Y	Urban
Halsey St.: 238th to 244th	Bike Lanes	\$571,000	71	TBD	Urban
Buxton Rd: HCRH –Cherry Park Rd	Bike Lanes	\$53,530	68	N	Urban
N.E. 223rd Ave.: Blue Lake –Sandy Blvd	Shoulder Bikeway	\$912,497	65	Y	Urban
Skyline Blvd: McNamee –Cornelius Pass	Shoulder Bikeway	\$2,629,164	57	N	Rural
Skyline Blvd: Cornelius Pass – Rocky Point	Shoulder Bikeway	\$15,153,851	56	N	Rural
Troutdale Rd: Stark St – Strebin Rd	Bike Lanes	\$2,001,749	55	Y	Urban
Troutdale Rd: Chapman – Stark St	Bike Lanes	\$1,220,139	53	Partially	Urban
Blue Lake Rd: 223 rd Ave—Interlachen Lane	Bike Lanes	\$455,781	53	N	Urban
S.W. Shattuck Rd: Patton Rd—Windsor Ct	Shared Bikeway	\$245,423	52	N	Urban
Hewitt Blvd: Humphrey - 5200' W of Patton	Shared Bikeway	\$324,863	51	N	Urban
N.E. 223 rd Ave: Marine Dr – 1086' N of Marine Dr	Bike Lanes	\$386,182	50	Y	Urban
N.E. 223 rd Ave: Marine Dr - Blue Lake Rd	Bike Lanes	\$434,995	49	Y	Urban
Scholls Ferry Rd: Humphrey - Co. Line	Bike Lanes	\$3,057,655	49	Y	Urban
Dodge Park Blvd: 302 nd - County Line	Shoulder Bikeway	\$7,592,686	48	N	Rural
302 nd Ave: Division - Bluff	Shoulder Bikeway	\$3,878,852	46	N	Rural
Orient Dr: Welch Rd – Dodge Park Blvd	Shoulder Bikeway	\$1,523,441	45	N	Rural
Patton Rd: Scholls Ferry - 708' east of SW 48 th Ave	Shared Bikeway	\$818,730	45	N	Urban
Troutdale Road: Chapman to Cherry Park	Bike Lanes	TBD	44	Y	Urban
Sauvie Island Rd: Gillihan Rd – Reeder Rd	Bike Path	\$2,114,214	43	N	Rural
Larch Mt Rd: HCRH—End of Road	Shoulder Bikeway	\$26,341,706	43	N	Rural
Knieriem Rd: Littlepage Rd – HCRH	Shoulder Bikeway	\$3,122,720	41	N	Rural
Humphrey Blvd: Patton – Hewitt	Shared Bikeway	\$218,206	41	N	Urban
Sauvie Island: Reeder - Ferry Rd	Shoulder Bikeway	\$535,851	40	Y	Rural
Springville Rd: Skyline Blvd—County Line	Shoulder Bikeway	\$4,258,950	39	N	Rural

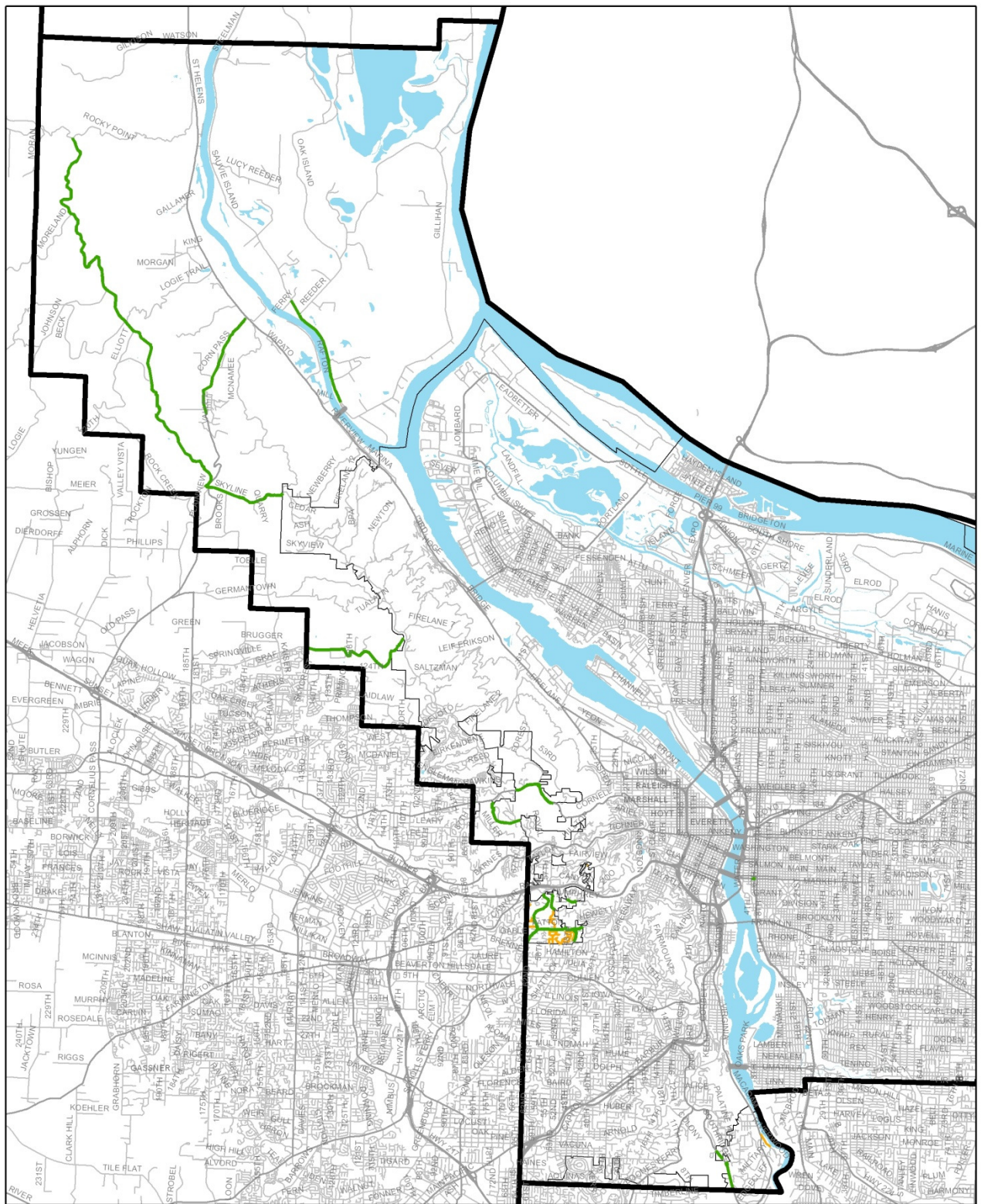
Oxbow Park Rd: Oxbow Dr - Road End	Shoulder Bikeway	\$1,834,695	39	N	Rural
Oxbow Dr: Division Dr - Hosner Rd	Shoulder Bikeway	\$5,393,681	39	N	Rural
Hurlburt Rd: HCRH – Littlepage Rd	Shoulder Bikeway	\$4,344,240	38	N	Rural
Oxbow Dr: Hosner Terrace –Oxbow Park Rd SE	Shoulder Bikeway	\$1,259,838	38	N	Rural
Cornelius Pass Rd.: (old) St. Helens Rd—MP 2	Shoulder Bikeway	\$3,684,602	35	Y	Rural
Evan Rd: Hurlburt Rd - HCRH	Shoulder Bikeway	\$4,463,908	35	N	Rural
Woodard Rd: HCRH – Ogden Rd	Shoulder Bikeway	\$2,338,065	35	N	Urban/Rural
Skyline Blvd: Cornell Rd—Greenleaf - Shared Bikeway	Bike Lanes	\$792,224	34	N	Urban
S.E. Division Dr: UGB – Troutdale Rd	Bike Lanes	\$945,518	34	N	Rural
Terwilliger Blvd: Northgate Rd –County line		\$1,412,358	34	N	Urban
Troutdale Rd: Strebin Rd - 282 Ave	Bike Lanes	\$3,292,979	33	N	Rural
Terwilliger Blvd: Powers Ct—Coronado St	Shoulder Bikeway	\$356,904	33	N	Urban
Cornell Rd: County line—COP jurisdiction line	Shoulder Bikeway	\$75,758	33	N	Urban
Cornell Rd: City limits – NW 53 rd Dr	Shoulder Bikeway	\$1,605,682	33	N	Urban
Mershon Rd: Ogden - HCRH	Shoulder Bikeway	\$4,009,646	32	N	Rural
S.E. Division Dr: Troutdale – Oxbow Parkway	Bike Lanes	\$3,371,407	31	N	Rural
Ogden Rd: Mershon – Woodard	Shoulder Bikeway	\$463,789	30	N	Rural

Total

\$119,323,775

Table 6: Pedestrian CIP Ranking Report

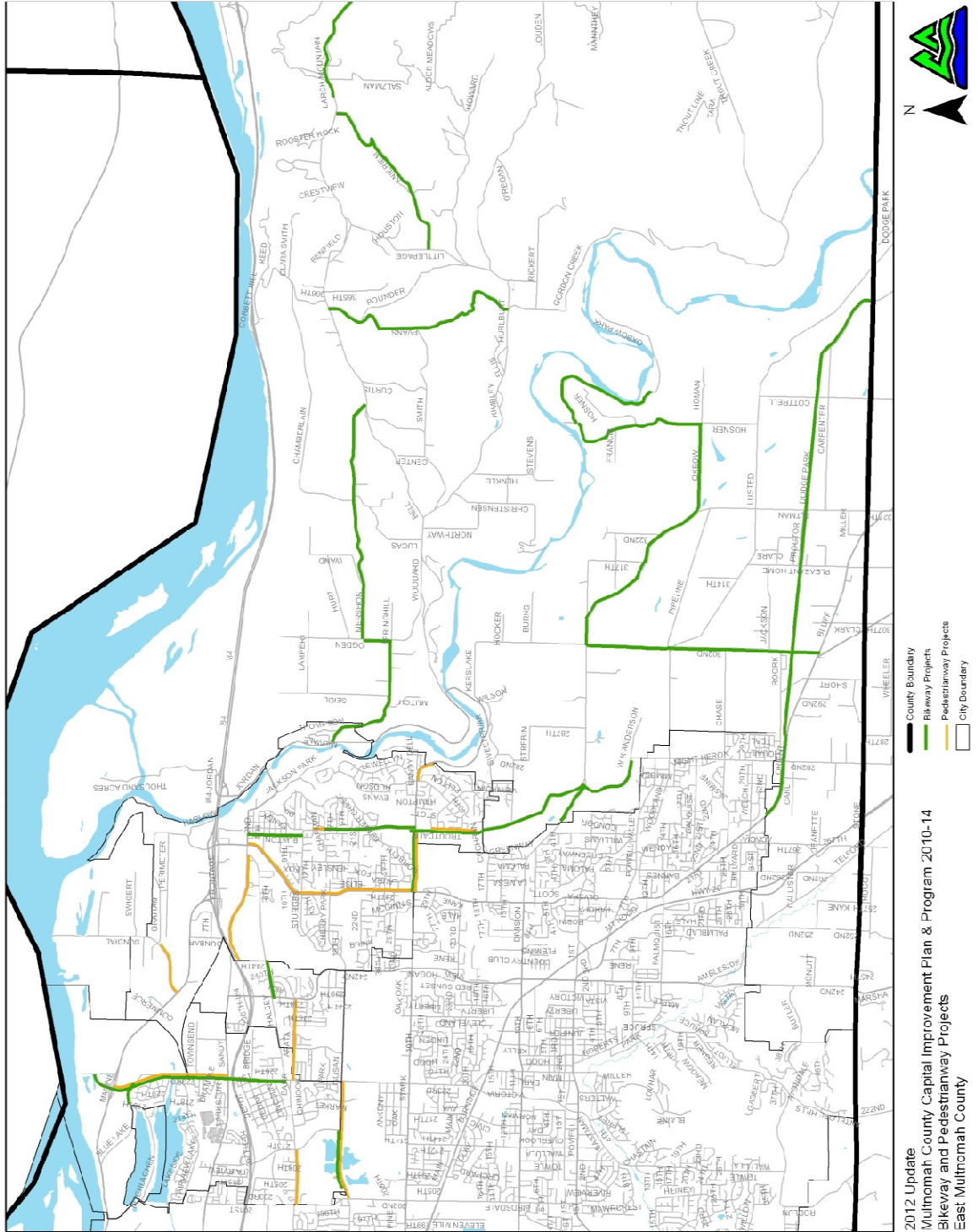
Project Name	2010-2014 CIPP Project Cost	Sidewalk Width (feet)	Score	Included in Roadway Capital Project	Urban or Rural
Arata Road: 223 rd Ave—238 th Ave	\$1,188,512	6	80	Y	Urban
Stark St: 257 th Ave—Troutdale; northside	\$660,006	7	75	Y	Urban
223 rd Ave: Sandy Blvd – Marine Dr	\$1,132,179	6	73	Y	Urban
Glisan St: 204th Ave – 223rd; north side	\$522,691	7	72	Partially	Urban
257th Ave: Sidewalk Improvements (widen per Streetscape Plan)	\$1,307,685	9	66	N	Urban
Troutdale Road: Beaver Creek Ln- Stark St	TBD		64	Y	Urban
Hawthorne Br. Southeast ramp sidewalk	\$80,284		64	N	Urban
Troutdale Rd: Beaver Creek Ln –Chapman Ave	\$44,484	7	63	N	Urban
Historic Columbia Highway: 244 th Ave –Halsey St	\$902,598	6	63	Y	Urban
Troutdale Rd: SE 40 th St-Sweetbriar Road	\$320,608	7	63	Y	Urban
Wood Village extension - multi use path (EMCP, 99129)	TBD		59	Y	Urban
257th Ave: Pedestrian Crossings (Columbia Vista, 26th St.)	\$100,000		59	N	Urban
257th Ave: Pedestrian Lighting	\$208,280		54	N	Urban
Sundial Rd: Marine Drive – Graham Cl	\$517,877	7	46	Y	Urban
48 th Pl: Windsor Ct—Downsview Ct	\$288,408	5	43	N	Urban
64 th Pl: Bucharest Ct – Dead End	\$129,729	5	44	N	Urban
Bucharest Ct: Dead End – County Line	\$122,573	5	43	N	Urban
52 nd Pl: Thomas St – Downsview Ct	\$483,083	5	43	N	Urban
50 th Ave: Windsor Ct—Downsview Ct	\$483,083	5	43	N	Urban
Windsor Ct: SW 52 nd Pl –Shattuck Rd	\$392,955	5	40	N	Urban
Thomas St: SW 52 nd Pl – SW 54 th Pl	\$254,159	5	40	N	Urban
Downview Ct.: 52 nd Pl—48 th Pl	\$223,516	5	40	N	Urban
54 th Pl: Thomas St – Dead End	\$106,350	5	39	N	Urban
Riverwood Rd: Riverside Dr—Military Rd	\$261,369	5	38	N	Urban
Downsview Ct: 57 th Ave –55 th Dr	\$216,306	5	38	N	Urban
Westdale Dr: 57 th Ave –Dead End	\$255,873	5	38	N	Urban
Windsor Ct: 54 th Pl—Dead End	\$248,752	5	38	N	Urban
Scholls Ferry Ct: Scholls Ferry Road – Dead End	\$261,165	5	35	N	Urban
Sweetbriar Ct: 64 th Pl –Scholls Ferry Rd	\$138,776	5	35	N	Urban
Fairview Blvd: Knights Blvd – Kingston Ave	\$52,916	5	33	N	Urban
55 th Dr: County Limit – Patton Rd	\$493,898	5	26	N	Urban
55 th Ave: Patton Rd – 55 th Dr	\$194,675	5	25	N	Urban
55 th Dr: 55 th Ave – Dead end	\$511,924	5	25	N	Urban
57 th Ave: County Limits—Windsor Ct	\$151,414	5	25	N	Urban
57 th Ave: Westdale Dr—Patton Rd	\$189,268	5	25	N	Urban
Grover Ct: Dead End –55 th Dr	\$93,732	5	25	N	Urban
Woods Ct: 55 th Dr – Dead End	\$156,822	5	25	N	Urban
Total	\$12,539,128				



2012 Update
Multnomah County Capital Improvement Plan & Program 2010-14
Bikeway and Pedestrianway Projects
West Multnomah County

— Bikeway Projects County Boundary
— Pedestrianway Projects City Boundary





Multnomah County Fish Passage Culvert Program FY 2014-2018 Capital Improvement Plan

The Endangered Species Act requires all responsible parties to correct problems that hinder listed fish species from traveling freely within their natural habitat. Multnomah County, with the Oregon Department of Fish and Wildlife (ODF&W), has identified 48 of the county's 1400 culverts that need improvement for fish passage. Characteristics of typical culvert failure for fish passage include outfall heights that are too high for the fish to jump, flat concrete box culvert bottoms that make the flows too shallow, or water flows that are too fast.

The County's Stream Passage Design

The County wants to forward solutions that minimize restrictions on streams by designing stream passage concepts. Current fish passage engineering calculations determine what the proper size, shape, baffles, and gradient of a culvert need to be to pass fish according to seasonal hydrology. Innovative stream passage designs do not restrict the stream and its natural hydrology; rather, it accommodates the natural course of the waterway. The bottomless structure is usually 2 to 4 times wider than the normal local stream width. Design materials include prefabricated concrete or arched corrugated steel which bridge the stream. With the larger and higher openings, natural light can enter, making it more suitable for fish navigation. The larger openings accommodate stream banks allowing passage for wildlife and an enhancement for natural riparian development. If the stream changes its course in the future and takes a meandering path, the new wide berth structure will sustain it. By duplicating these solutions within the County's culvert improvement program, savings will be generated in design and construction cost. Implementing long-life stream passage structures will diminish maintenance costs. The reduction of normal culvert maintenance activities and in-stream work will aid fish habitat.

Watershed Basins and Funding Needs

The County will need to partner with other public agencies and private entities to address the liability identified by the culvert inventory. Potential community and financial partners include the Governor's Fish Recovery Plan working with the Oregon Watershed Enhancement Board, ODF&W, other Oregon State agencies, Congressional Representatives, National Oceanic and Atmospheric Administration, Army Corps of Engineers, Metro, private groups, and local watershed councils.

Fish culvert improvements need to be addressed in the context of their respective watershed basins. The fish passage culverts under Multnomah County's jurisdiction are located in the following seven (7) sub-basins:

- Tualatin Watershed - a sub-basin of the Willamette River
- Tributaries of the Willamette River - a sub-basin of the Columbia River
- Johnson Creek Watershed - a sub-basin of the Willamette River
- Fairview Creek Watershed - a sub-basin of the Columbia Slough
- Beavercreek Watershed - a sub-basin of the Sandy River
- Sandy River Watershed (excluding the Beavercreek Watershed) - a sub-basin of the Columbia River
- Tributaries of the Columbia River

Criteria: The County developed a system to score projects for the 48 County culverts identified as needing improvement for fish passage. The scoring system considers five factors:

- Environmental Evaluation (see next paragraph)
- Fish Species Recovery
- Construction Cost
- Maintenance Schedule
- Overall Project Impact

Each potential culvert project is evaluated and scored using ranking criteria for each of the five factors, as shown in Table 7. The Final Score is determined by multiplying the Environmental Evaluation score by the Fish Species Recovery, Construction Cost, Maintenance Schedule, and Overall Project Impact factors, as shown in Table 8. Using this scoring tool, priorities are established for fish passage improvements.

Table 7
Criteria for Culvert Replacement

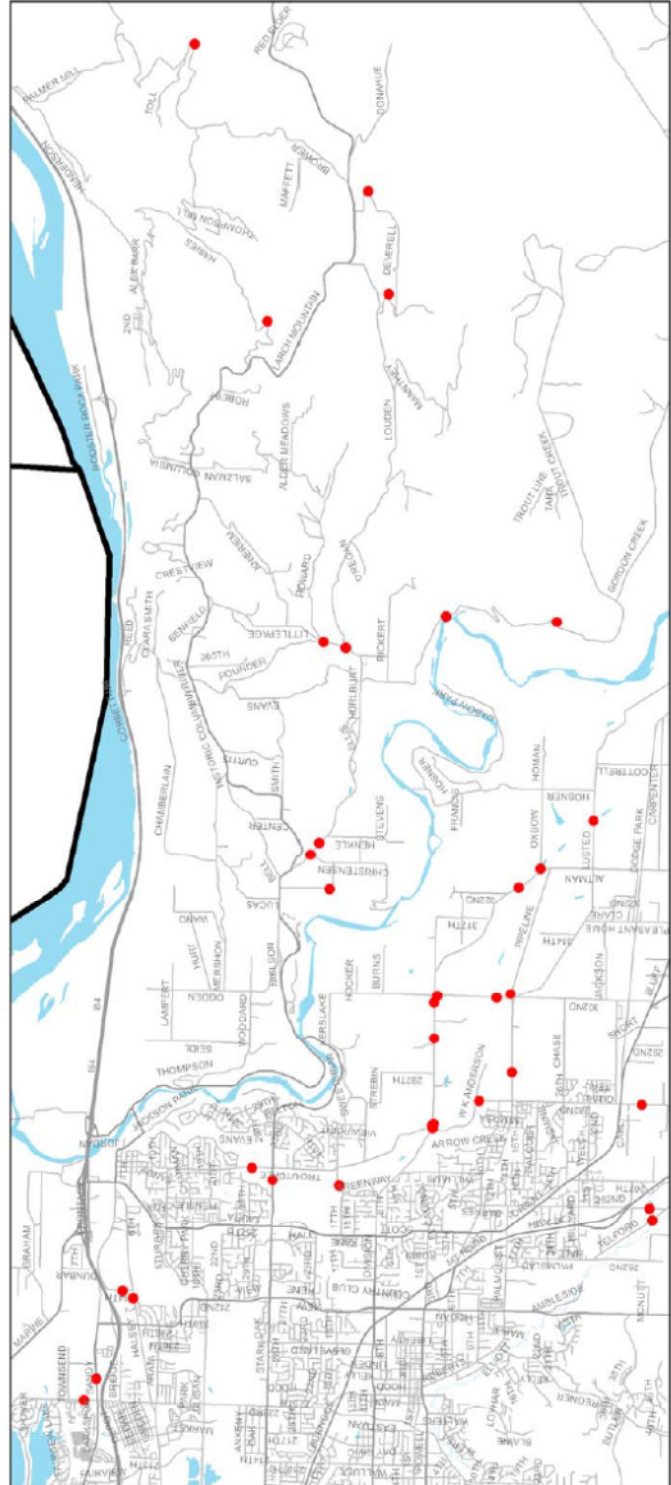
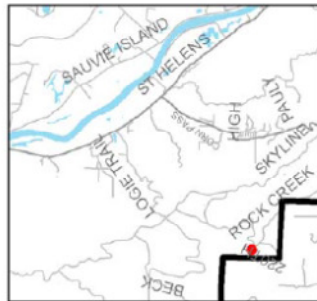
Criteria	Criteria Explanation	Point Range
Environmental Evaluation	Assesses: Stream's riparian vegetation Stream shade cover Quality of buffer zone Known fish species present Streambed characteristics Quality of stream flow rates Stream temperature Bank erosion and slope stability	3 – 15 2 – 10 3 – 15 0 – 15 3 – 15 0 – 5 0 – 10 3 - 15
Fish Species Recovery (factor in %)	Length of upstream recovered (distance to next barrier) Acreage of upstream watershed recovered Downstream barriers	0 – 25% 0 – 25% 0 – 50%
Construction Cost (factor in %)	\$0 \$1 – 5,000 \$5,001 – 75,000 \$75,001 – 1,000,000 Over \$1,000,000 +	100% 95% 85% 66%
Maintenance Schedule (factor in %)	Culvert needs to be replaced within 3 years Culvert does not need to be replaced within 10 years	100% 75%
Overall Project Impact (factor in %)	High positive impact Medium positive impact Low overall impact	100% 75% 50%

TABLE 8: Fish Passage Culvert Project Ranking Report					
Culvert Number	Basin / Creek	Stream MP	Road Name / Road Milepost	Project Cost	Total Score
404-01	SR Beaver	2.4	Stark St, SE - MP: 1.129	\$1,668,744	36
450-12	SR Beav.Trib	0.6	Division Dr, SE - MP: 0.881	\$502,016	32
450-17	SR Beaver	3.2	Division Dr, SE - MP: 2.109	\$154,038	31
466-02	SR Beav.Trib	1.4	Lusted Rd, SE - MP: 0.285	\$431,032	30
493-01	SR Beav.Trib	0.5	282nd Av, SE - MP: 0.031	\$987,013	28
450-15	SR Beaver	3.2	Division Dr, SE - MP: 1.763	\$233,624	27
506-10	SR Buck	4.0	Gordon Creek Rd, SE - MP: 1.271	\$2,952,394	25
493-05	JC N. Fork	0.8	282nd Av, SE - MP: 1.593	\$462,114	24
143-18	TR Rock	5.7	Rock Creek Rd, NW - MP: 2.473	\$38,509	21
447-07	JC N. Fork	0.1	Telford Rd, SE - MP: 0.682	\$354,287	21
445-01	JC N. Fork	2.0	262nd Av, SE - MP: 0.156	\$354,287	14
458-01	SR Beaver	3.3	Cochrane Rd, SE - MP: 0.044	\$1,283,649	13
411-09	SR Beaver	6.1	302nd Av, SE - MP: 2.066	\$96,274	13
489-12	SR Beaver	2.0	Troutdale Rd, SE - MP: 2.476	\$1,668,744	12
452-18	SR Beaver	0.0	Oxbow Dr, SE - MP: 1.228	\$96,274	11
452-22	SR Beaver	7.6	Oxbow Dr, SE - MP: 1.513	\$96,274	10
466-13	SR Beaver	8.3	Lusted Rd, SE - MP: 3.015	\$96,274	9
489-06	SR Beaver	4.6	Troutdale Rd, SE - MP: 0.615	\$2,224,565	8
450-13	SR Beaver	4.6	Division Dr, SE - MP: 0.94	\$1,155,285	6
<i>Anadromous ESA Listings: Highest Priority</i>				\$ 14,855,397	
323-02	FC Fairview	1.1	223rd Av, SE/NE - MP: 2.303	\$154,038	57
411-07	SR Beav.Trib	1.0	302nd Av, SE - MP: 1.492	\$154,038	54
503-08	SR Unknown	0.9	Littlepage Rd, SE - MP: 0.421	\$354,287	53
318-01	FC Fairview	2.1	Sandy Bl, NE - MP: 0.97	\$770,190	49
533-16	CR Young	1.6	Brower Rd, NE - MP: 2.838	\$354,287	49
505-11	SR Pounder	1.3	Pounder Rd, SE - MP: 0.018	\$354,287	48
291-02	WR Balch	1.0	Thompson Rd, NW - MP: 0.22	\$231,057	41
506-24	SR Trout	10.4	Gordon Creek Rd, SE - MP: 2.73	\$231,057	40
468-01	SR Beav.Trib	1.5	Pipeline Rd, SE - MP: 0.1	\$462,114	38
580-15	CR Latourell	2.6	Haines Rd, E - MP: 0.801	\$231,057	36
537-06	SR Smith	0.2	Christensen Rd, SE - MP: 0.745	\$354,287	32
275-04	WR Balch	0.2	Cornell Rd, NW - MP: 1.434	\$231,057	32
534-02	SR Buck	3.0	Deverell Rd, SE - MP: 1.879	\$354,287	27
410-02	CR Arata	0.5	Halsey St, NE - MP: 0.236	\$154,038	20
534-11	SR Buck	1.0	Deverell Rd, SE - MP: 0.248	\$354,287	17
535-01	SR Smith	0.3	Northway Rd, SE - MP: 0.262	\$354,287	16
520-03	SR Smith	1.9	Hurlburt Rd, SE - MP: 0.38	\$231,057	15
439-01	CR Arata	0.2	244th Av, NE - MP: 0.098	\$154,038	5
<i>Non-Anadromous ESA Listings</i>				\$ 1,601,995	
Total Fish Passage Culvert Program Cost				\$20,339,147	

Basin Legend: CR = Columbia River, FC = Fairview Creek, JC = Johnson Creek, SR = Sandy River,
TR = Tualatin River, WR = Willamette River

NOTE: The construction costs were generated by adjusting the costs included 2005-2009 Capital Improvement Plan for inflation using a factor of 1.28.

Multnomah County Capital Improvement Plan & Program 2010-14
 Fish Passage Culvert Projects
 Multnomah County
 PUBLIC REVIEW DRAFT



Willamette River Bridges Capital Improvement Plan

This section of the plan addresses the capital needs of the six (6) Willamette River Bridges: Sellwood, Hawthorne, Morrison, Burnside, Broadway, and Sauvie Island. With the exception of the Sauvie Island Bridge, these bridges are located in the City of Portland and provide regional connections between the east and west sides of the metropolitan area.

Willamette River Bridges: Capital projects, which can include replacement, rehabilitation, and preservation for Willamette River bridges, are evaluated using a rating system that relies heavily on component evaluation criteria. The components consider:

- National-standard bridge sufficiency rating
- Corrosion rating
- Bridge historical significance
- Ability to leverage non-County funds
- Project type
- Time-lines

Each potential bridge construction project is evaluated and scored using the ranking system shown in Table 9, and bridge corrosion control projects are scored with the criteria shown in Tables 10 and 11. Using these scoring tools, priorities are established for bridge capital and preservation projects.

It is anticipated that the Willamette River Bridges Capital Improvement Plan will be reviewed in FY2014-2015, therefore this section will be deferred to lineup with the FY 2015 review and will not be addressed as part of the 2014-2018 CIPP Update. With the review occurring in FY2014, update of this section will occur as part of the biennial update of the CIP in FY 2015. This section is unchanged from the 2012 Update of the CIP. When the review of the WRB is complete this section will be updated.

Table 9
Criteria for Bridge Construction

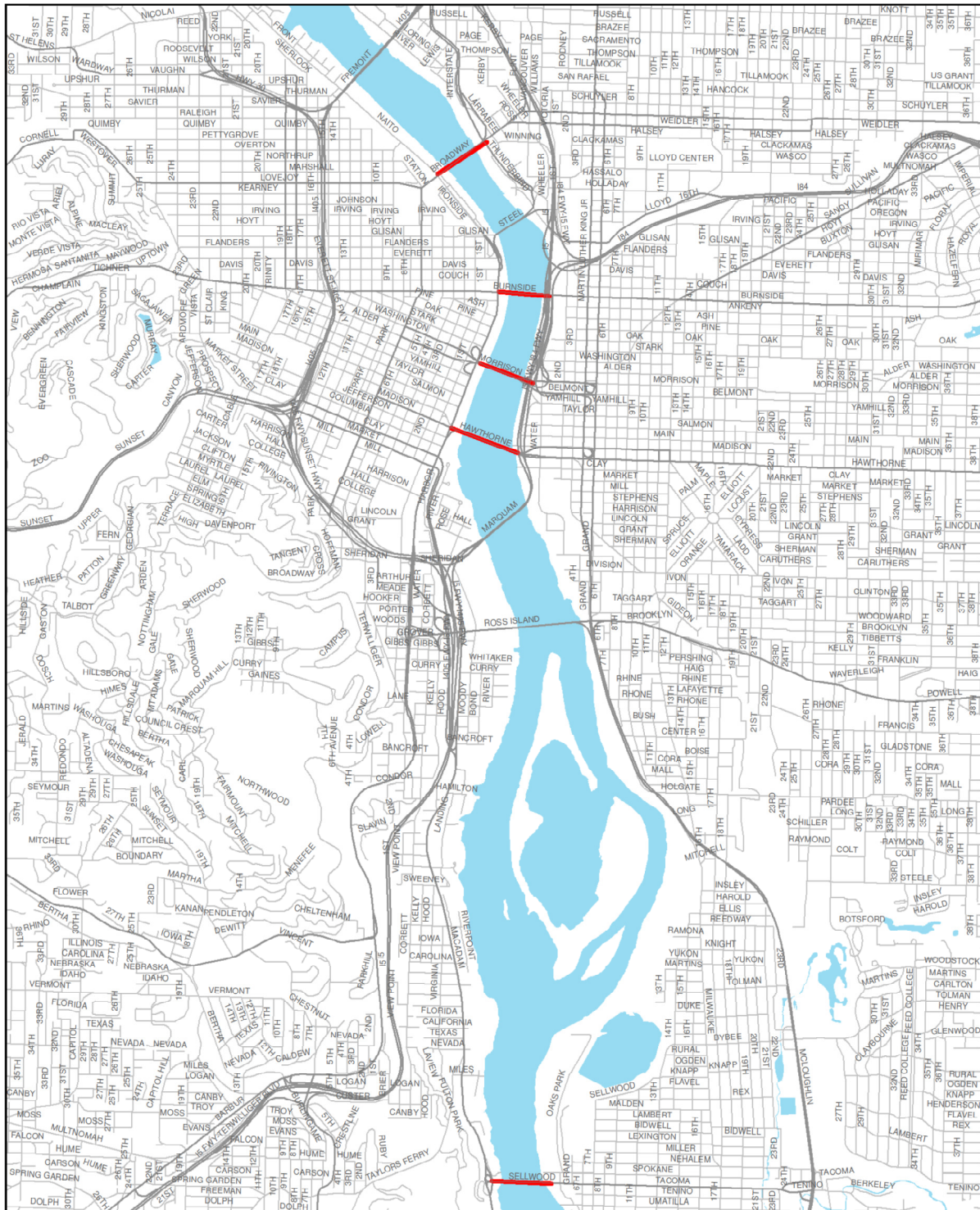
Criteria	Criteria Explanation	Point Range
Bridge Sufficiency Rating	ODOT Sufficiency Rating ¹ 0 – 25 26 – 50 51 – 80 81 - 100	20 points 10 points 5 points 0 points
Bridge Historical Significance	Ranked on National and/or State Historic Register Not Ranked on National and/or State Historic Register	5 points 0 points
Non-County funding available	Secured Anticipated Not available	10 points 5 points 0 points
Bridge Component	Critical Item Structural Item Mechanical Item Electrical Item Deck Illumination Component Life Extension Traffic Control Pedestrian/Bicycle	60 points 40-50 points 40-50 points 40-50 points 40 points 40 points 35 points 20 points 20 points
Recommended Replacement/Repair Time-line	0 – 4 years 5 – 9 years 10 – 14 years 15 – 20 years	40 points 30 points 20 points 10 points
Total Possible Points		105

¹ Factors assessed include Structural Adequacy; Serviceability and Functional Obsolescence; Essential for Public Use; Special Reductions.

Table 10
Criteria for Bridge Corrosion Control

Criteria	Criteria Explanation	Point Range
Corrosion Damage	Severe Moderate Light None	4 points 3 points 2 points 0 points
Area Rust Breakthrough	Heavy Moderate Scattered None	4 points 3 points 2 points 0 points
Quality of Paint	Loose Dead Moderate Live	3 points 2points 1 points 0 points
Weather Exposure	Wet Moderate Dry	3 points 2 points 1 point
Visual (Public, Exposure)	High Low None	2 points 1 point 0 points
Total Possible Points		16 points

TABLE 11: Willamette River Bridges Project Ranking Report			
Bridge	Project Description	Score	Cost
Broadway	Replace Centerlocks	100	\$1,133,000
Broadway	Paint Above Deck Fixed Spans	100	\$9,000,000
Broadway	Replace Equalizers	90	\$1,618,000
Broadway	Rail Wheel Rehabilitation	65	\$5,825,000
Broadway	Emergency Drive System	60	\$1,942,000
Broadway	Seismic Ph.1 Seismic Upgrade	60	\$6,700,000
Broadway Approach Ramp	Deck and Joint Rehabilitation	90	\$2,236,000
Broadway Approach Ramp	Paint Steel Framing and Columns	90	\$7,931,000
Burnside	Paint Steel Deck Truss/Bascule - Entire Bridge	95	\$10,470,000
Burnside	Main Trunion Rehabilitation	70	\$6,473,000
Burnside	Emergency Drive System	65	\$1,942,000
Burnside	Seismic Ph.2 Seismic Upgrade	15	\$65,700,000
Hawthorne	Tower Trunion Rehabilitation	100	\$1,942,000
Hawthorne	Roadway Approach/Deck Overlay	85	\$5,777,000
Hawthorne	Paint Steel I-Beams	63	\$6,942,000
Hawthorne	Seismic Ph. 1 Seismic Upgrade	10	\$10,200,000
Morrison	Bike/Ped Facility	85	\$2,215,801
Morrison	Eastside Deck and Lift Span Grating Rehabilitation	85	\$12,816,000
Morrison	Ph. II Replace Centerlocks	85	\$1,812,000
Morrison	Gear Reducer Replacement	85	\$2,346,000
Morrison	Paint Steel Ideck Truss/Bascule	74	\$7,333,000
Morrison	Emergency Drive System	55	\$1,295,000
Morrison	Fender Replacement	55	\$1,489,000
Morrison	Seismic Ph. 1 Seismic Upgrade	5	\$16,700,000
Morrison St. Viaduct (WB)	Bearing Repair	80	\$2,913,000
Morrison St. Viaduct (WB)	Paint Steel I-Beams	54.5	\$10,154,000
Morrison Transition	Paint Steel I-Beams	78	\$14,159,000
Sellwood	Replace Structure	120	\$321,000,000
WR Bridges	Accessibility Improvements		\$2,427,000
WR Bridges	OR-OSHA Facility Compliance		\$3,770,000
WR Bridges	Inspections		\$3,236,000
TOTAL			\$549,496,801



Multnomah County Capital Improvement Plan & Program 2010-14
 Willamette River Bridge Projects
 Public Review Draft

Bridge Projects



FY 2014-2018 Transportation Capital Improvement Program

The Transportation Capital Improvement Program has been developed to implement the capital plan. Where the Capital Improvement Plan identifies and scores 20-year project needs for Multnomah County's transportation system, the Capital Improvement Program identifies anticipated revenue and schedules projects for construction for a 5-year period.

Constantly changing community needs will alter County transportation program priorities over time before all projects can be constructed. The Transportation Capital Improvement Program is reviewed by the Land Use and Transportation Program staff on an annual basis and full reviews with public input biennially. The 2014-2018 CIPP is based on the best available revenue and cost information and by clear and objective means, establishes a strategy for addressing the highest priority transportation needs for fiscal years from 2014 to 2018.

Projects with the most critical need and fewest development constraints were programmed for priority development. The total cost of projects in the Program update is \$76.4 million, excluding the Sellwood Bridge. The County's transportation capital funding capacity for these projects is projected at approximately \$61.3 million, based on projected revenues and secured external funds.

The County attempts to leverage external funds whenever possible. Partially-funded projects are those where some funds are available but are insufficient to complete the project. County staff has identified potential sources to leverage and has committed County transportation revenues for that purpose. In addition, funds are set aside to cover other expenses -- remedying safety concerns, repairs, ADA improvements, leveraging private development activities, etc.

Since the 2012 Update of the 2010-2014 CIPP, Multnomah County has received state and regional grants awards for road, bicycle and pedestrian projects, including Arata Road pedestrian and bicycle facilities, and additional state Jobs and Transportation Act funds for Cornelius Pass Road safety enhancements. These new projects and revenues were reflected in the 2012 Program Update.

The Sellwood Bridge Replacement revised cost estimate of \$268.8 million is reflected in the 2012 Update, along with current secured funding. Another change to the Willamette River Bridges program for fiscal years 2013-14 include the relocation of the west ramp of the Hawthorne Bridge.

The current CIP is based on the best available revenue and cost information and, by clear and objective means, establishes a strategy for addressing the highest priority transportation needs.

The total capital need identified in the Transportation Capital Improvement Plan for over 193 candidate projects totals more than an estimated \$1.188 billion.

MULTNOMAH COUNTY FY 2014-2018 TRANSPORTATION CAPITAL

		FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013	FY 2013
Capital Debt Service		\$288,000	\$145,782	\$309,660	\$309,660	\$309,660	\$309,660	\$309,660	\$309,660	\$309,660	\$309,660	\$309,660	\$309,660
257th Avenue/Orient Drive		\$413,000											
223rd Ave Railroad Undercrossing		\$11,700,000											
Sellwood Bridge Replacement			\$62,806,121	\$9,470,750	\$9,469,150	\$9,472,650	\$9,472,650	\$9,472,650	\$9,472,650	\$9,472,650	\$9,472,650	\$9,470,150	\$9,470,150
Capital Projects and Programs		Total Project Cost	County Funds	External Funds*	County Funds	External Funds*	County Funds	External Funds*	County Funds	External Funds*	County Funds	External Funds*	County Funds
ROADS													
Anticipated Capital Revenue			\$ 1,275,000		\$ 1,400,000		\$ 1,400,000		\$ 1,400,000		\$ 1,400,000		\$ 1,400,000
Developer Payment in Lieu Of Funds (PILQ)													
Road Projects													
Category: Road													
223rd Ave Railroad Undercrossing at I-64		\$ 11,534,500	\$ 400,000										
Wood Village Blvd Extension (PILQ)		\$ 3,294,764	\$ 10,000		\$ 50,000								
Stark Street Reconstruction - Corbett Ln. - Troutdale Rd (PILQ)		\$ 4,004,700	\$ 5,000										
Sandy Blvd. COG limits to 1800' east of Fairview Parkway (PILQ)		\$ 4,100,000	\$ 50,000										
Halsey Road Reconstruction (238th - 240th)													
Sandy Blvd. 2300th to 238th Avenue		\$ 885,675		\$ 150,000		\$ 509,000							
Sandy Blvd. 2300th to 238th Avenue		\$ 885,675		\$ 150,000		\$ 509,000							
Arata Road, WVB row Multi-modal Improvements (Regional and Annual Allotment)		\$ 4,468,201	\$ 65,000	\$ 500,000									
Category: ADA Sidewalks Infill													
Annual Allotment		\$ 25,000											
SE Troutdale Rd. SE 17 th - SE 19 th		\$ 75,000	\$ 25,000		\$ 25,000		\$ 25,000		\$ 25,000		\$ 25,000		\$ 25,000
Category: Preservation and Safety													
Cornelius Pass Road (PILQ) (JTA)		\$ 9,500,000	\$ 200,000	\$ 800,000		\$ 8,500,000							
238th Dr Safety Project (HEP)		\$ 346,000	\$ 100,000	\$ 326,000		\$ 50,000	\$ 50,000		\$ 50,000	\$ 50,000		\$ 50,000	\$ 50,000
Safety and Repair Annual Allotment			\$ 500,000		\$ 550,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Overlay Program Annual Allotment													
Category: Contingency Reserve													
Annual Allotment		\$ 200,000	\$ 200,000		\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Oxbow Park Road Repair			\$ 150,000										
Newberry Road Slide Repair													
Sirebri & Ladlaw Roads Slide Repair													
Category: Fish Passage Culverts													
Beaver Creek Culverts (MTIP)		\$ 1,200,000	\$ 50,000	\$ 300,000	\$ 50,000	\$ 800,000							
Category: Bicycle and Pedestrian													
Carry-over Funds		\$ 408,775	\$ 358,500	\$ 431,500	\$ 431,500	\$ 504,500	\$ 504,500	\$ 577,500	\$ 577,500	\$ 650,500	\$ 650,500	\$ 650,500	\$ 650,500
Anticipated Annual Revenue		\$ 74,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000	\$ 73,000
Bicycle and Pedestrian Projects													
Local Match, Annual Contingency		\$ 75,000											
WILLAMETTE RIVER BRIDGES (WRB)													
Anticipated Capital Revenue		\$ 13,100,000	\$ 7,582,185	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585	\$ 3,995,585
Carry-over Funds		\$ 1,327,414	\$ 1,004,840										
WRB Projects													
Sellwood Bridge (State JTA, TIGER)**		\$ 268,800,000	\$ 25,015,409	\$ 25,554,403	\$ 10,830,177	\$ 25,554,403	\$ 10,830,177	\$ 25,554,403	\$ 10,830,177	\$ 25,554,403	\$ 10,830,177	\$ 25,554,403	\$ 10,830,177
Sellwood Bridge (Portland contribution)			\$ 44,578,856	\$ 44,578,856		\$ 44,578,856		\$ 44,578,856		\$ 44,578,856		\$ 44,578,856	
Morrison Bridge Main Span (HBP)		\$ 10,000,000	\$ 195,130	\$ 195,130	\$ 195,130	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
Broadway Bridge - Replace Centerlocks (FTA), Fall Wheel (HBP)		\$ 10,000,000	\$ 1,346,950	\$ 1,346,950	\$ 1,346,950	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000
Burnside 72nd/Reindeer (HBP)		\$ 32,500,000	\$ 410,800	\$ 3,989,200	\$ 3,989,200	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Broadway Bridge Painting (HBP)		\$ 10,500,000	\$ 107,835	\$ 942,165	\$ 800,000	\$ 8,700,000	\$ 8,700,000	\$ 8,700,000	\$ 8,700,000	\$ 8,700,000	\$ 8,700,000	\$ 8,700,000	\$ 8,700,000
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Notes:
 * indicates external funding
 is not fully secured and is contingent on grants, authorizations, development agreements, intergovernmental agreements and/or other external actions.
 ** \$55M secured from JTA Earmark for Sellwood Bridge Replacement, \$17.7M TIGER Grant. Project completion is expected in 2016.

External Funding Programs:
 American Recovery and Reinvestment Act
 CDBG-Community Development Block Grants
 FTA-Federal Transit Administration Portland Streetcar Project
 HBP-Highway Bridge Program
 HEP-Hazard Elimination Program
 MTIP-Metropolitan Transportation Improvement Program
 PILQ-Developer Payment In Lieu Of Improvement
 TE-Transportation Enhancement
 STIP-State Transportation Improvement Program
 USCOE-US Army Corps of Engineers