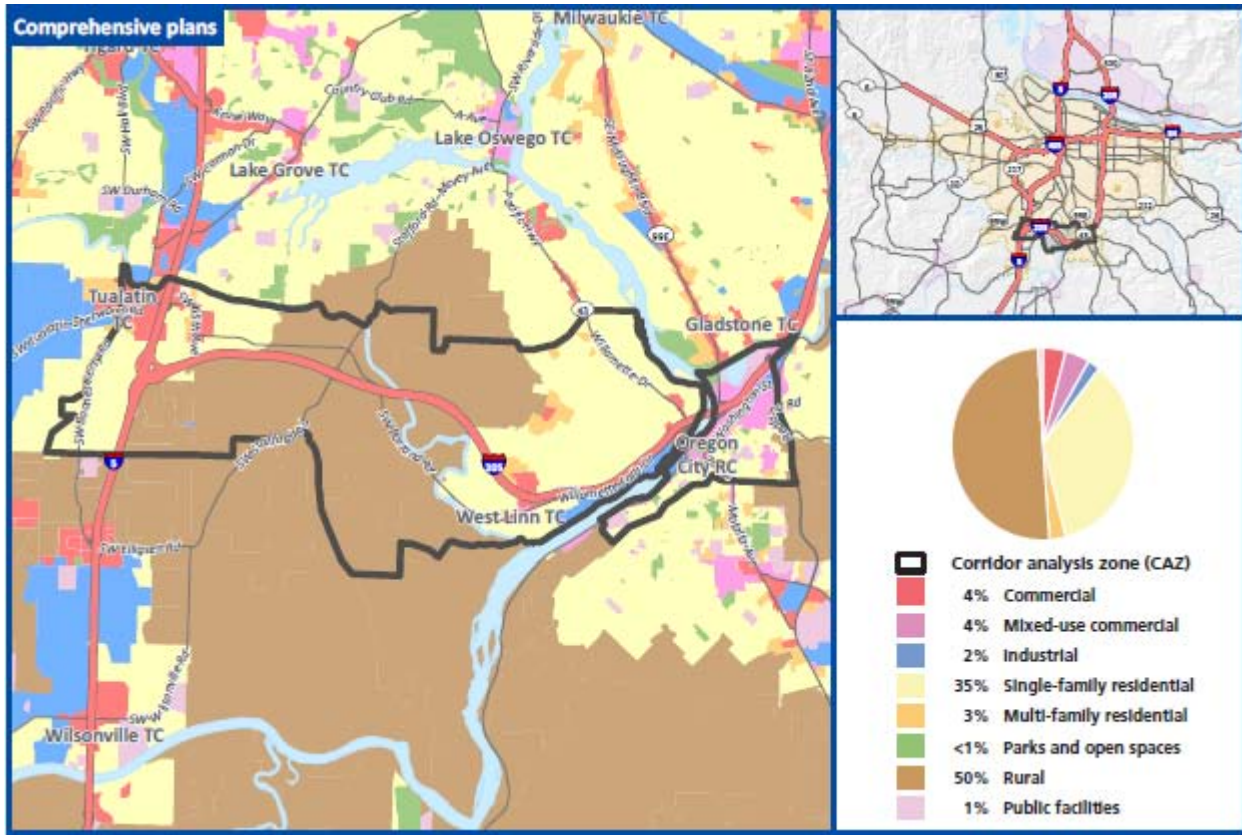


Appendix 9
Mobility Corridors Related to Clackamas County from the
2035 Regional Transportation Plan

4.2.8 Mobility Corridor #7 – Tualatin to Oregon City



Corridor function

What function(s) does the corridor serve?

2040 Access: Connects southern Metro area town centers of West Linn and Tualatin to the Oregon City Regional Center.

Freight Mobility: Serves as the West Coast Trade (from Canada to Mexico) alternative to I-5 and air freight access to Portland International Airport.

Statewide Travel: Serves as an extension of the southern gateway to the region, provides statewide access to Portland International Airport, and Mt. Hood, and connects to the Willamette Greenway Trail corridor.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	41,869	101,764	3,097,402	3.3%	143.1%	57.9%
Households	15,284	31,797	1,208,686	2.6%	108.0%	57.6%
Employment	18,691	31,601	1,799,152	1.8%	69.1%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
	<ul style="list-style-type: none"> Lower Tualatin River Greenway Trail 		<ul style="list-style-type: none"> I-205 	<ul style="list-style-type: none"> Borland Rd Willamette Falls Dr. 	<ul style="list-style-type: none"> N/A

Regional 2040 land uses

Regional Centers	Town Centers	Employment Areas	Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Oregon City 	<ul style="list-style-type: none"> Tualatin Gladstone West Linn 			

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Address the lack of 30 minute of better service on surrounding arterial with the exception of a circulator through West Linn TC and along Willamette Falls Dr. Address the lack of 15 minute of better peak transit service on the surrounding arterial streets. Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy). Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy). <ul style="list-style-type: none"> Oregon City RC lacks HCT connection. Direct, safe, comfortable, bike and pedestrian connections to all transit stops; Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. Potential bus connection from Oregon City RC to WES station in Tualatin. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. HCT Plan identified a potential HCT line between Washington Square RC and Clackamas Town Center via I-205 as a “next phase” regional priority corridor. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology. Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If

Regional Needs		Corridor Strategies
		<p>sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need.</p> <ul style="list-style-type: none"> Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. Ek Rd., SW 65th Ave, Stafford Rd., Borland Rd. and Willamette Rd. lack shoulders and are unsafe for bikes. 	<ul style="list-style-type: none"> Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. Use practical design to provide wider shoulders for bikes during pavement projects, particularly on Ek Rd., SW 65th Ave, Stafford Rd., Borland Rd. and Willamette Rd. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails	<ul style="list-style-type: none"> Address the need for a Willamette, Tualatin and Clackamas River crossings. Direct connections between trails and on-street bicycle and pedestrian facilities. 	<ul style="list-style-type: none"> Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways¹⁴	<ul style="list-style-type: none"> 3 interchanges starting just west of 	<ul style="list-style-type: none"> Over \$300,000,000 in unfunded

¹⁴ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

Regional Needs		Corridor Strategies
	<p>the Willamette River (OR 43), east of the river (OR 99E), and OR 213 are spaced less than one-mile apart.</p> <p>The following do not meet the performance threshold in Table 2.4: 2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> I-205 from Stafford Rd. to OR 213. I-205 is 4 lanes from I-5 until the OR 99E interchange, when it becomes 6 lanes. 	<p>projects identified to address congestion and capacity issues on I-205 between Stafford Rd. and Oregon City.</p> <ul style="list-style-type: none"> Develop alternative mobility standards for this corridor. Explore tolling and peak pricing for I-205 and necessary legislative actions. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials¹⁵	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Address lack of east/west connectivity north and south of I-205. There is also a gap in north/south connections between I-205 and SW Stafford Rd., S. Salamo Rd., and Willamette Dr. Potential need for an additional Willamette River crossing, an I-205 overcrossing west of 10th St. to relieve through trips on 10th St. in West Linn and for more Clackamas River crossings. One potential location is near the OR 213 and I-205 interchange. <p>The following do not meet the performance threshold in Table 2.4. 2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> Borland Rd. from I-5 to Stafford Rd. Borland Rd. is 2 lanes with a few stretches with left turn lanes. Rosemont Rd. has some traffic issues. Nyberg St. and Borland Rd. east of I-5 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At Grade Heavy Rail Crossings		<ul style="list-style-type: none"> Local TSPs evaluate at grade heavy rail crossings for deficiencies and solutions. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Bridges	<ul style="list-style-type: none"> The Oregon City West Linn Arch Bridge located on OR 43 is weight-restricted and a need to keep transit on this bridge. 	<ul style="list-style-type: none"> Planned construction project for West Linn Arch Bridge. Implement Regional Transportation Functional Plan and Urban Growth Management

¹⁵ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

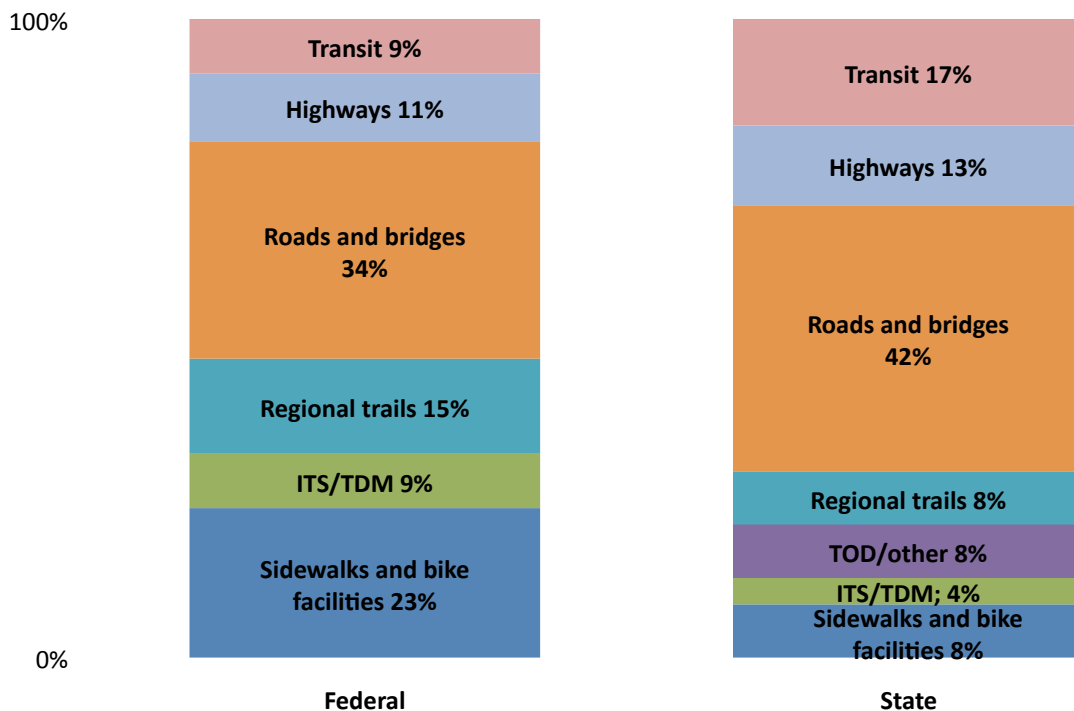
Regional Needs		Corridor Strategies
		Functional Plan.
Safety	<ul style="list-style-type: none"> I-205 from Tualatin to Oregon City ranks on the ODOT SPIS list as Category 4 and 5 (Scale 1-5, 5 being highest priority). Auxiliary lanes on the Abernethy Bridge are a safety problem. Lack of bicycle facilities throughout corridor. Unsafe merge length on NB I-205 on-ramp from OR43. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Truck climbing lane project on I-205 SB. Reduce weaving between OR213 and OR99E interchanges for I-205SB. Improve I-205NB on-ramp merge from OR 43.
Regional Freight	<p>(Does not meet the performance threshold in Table 2.4)</p> <ul style="list-style-type: none"> 2005 and 2035 midday one-hour volumes exceed capacity on the Abernethy Bridge. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #7 has 47 projects totaling more than \$500 million. Roads and bridges projects account for 34% of all of projects and 48% of the total corridor project costs (\$273 million). The State RTP adds 24 more projects and an additional \$1 billion. Transit capital accounts for 17% of the projects and 28% of the additional costs (\$300 million). This includes upgrades to WES service accessible in Tualatin, I-205 BRT and other bus improvements in the corridor. The state system consists of an additional 42% of roads and bridges projects and 34% of the additional costs (\$370 million). For both the Federal and State systems investments total \$1.6 billion.

Projects by mode for federal and state systems



RTP projects by cost and mode

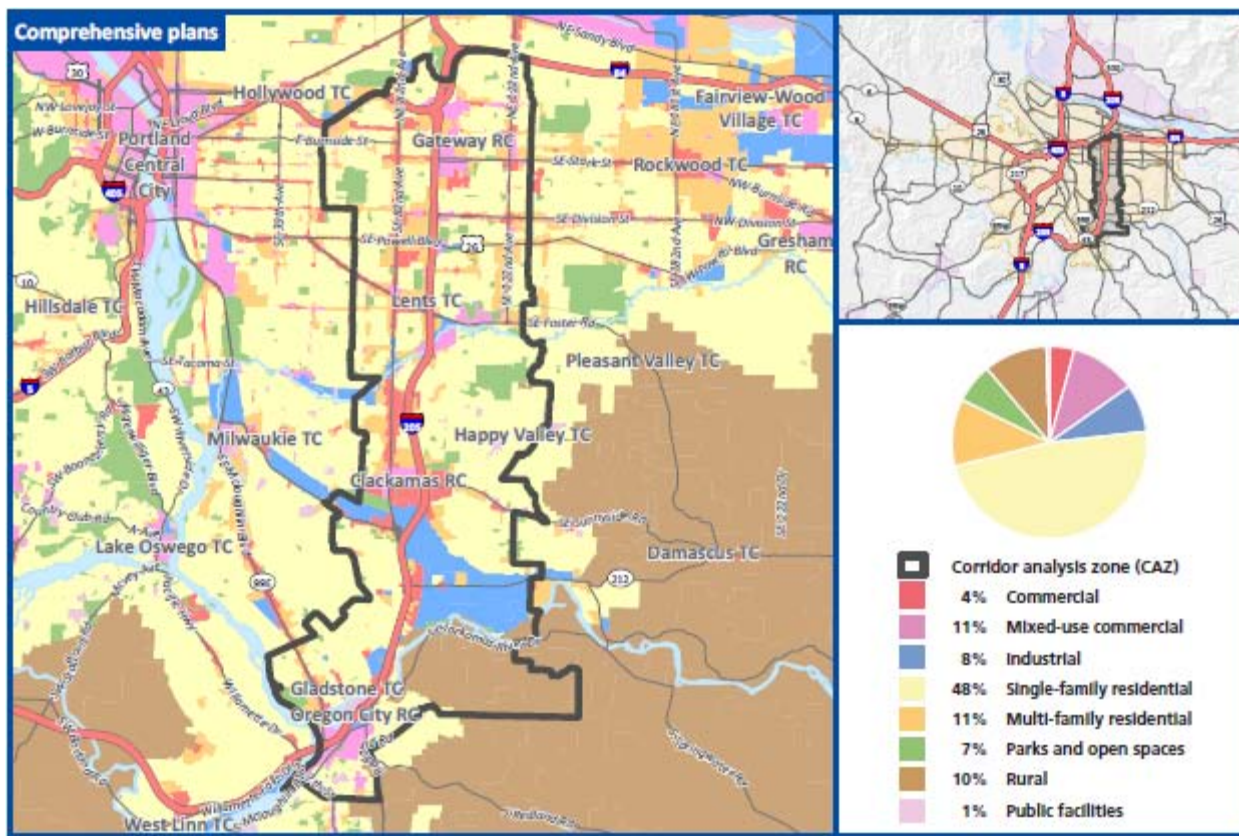
Mode	% of MC #7		% of MC #7	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Sidewalks and bike facilities	\$139,300,000	24%	\$12,846,598	1%
Freight	\$0	0%	\$0	0%
ITS/TDM	\$6,578,000	1%	\$0	0%
TOD/other	\$0	0%	\$11,000,000	1%
Regional trails	\$19,200,000	3%	\$7,000,000	1%
Roads and bridges	\$273,544,000	48%	\$372,151,423	34%
Highways	\$95,700,000	17%	\$390,000,000	36%
Transit	\$40,000,000	7%	\$301,000,000	28%
TOTAL	\$574,322,000	100%	\$1,093,998,021	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> System and demand management along mobility corridor and parallel facilities for all modes of travel. Practical design solutions for bike and pedestrian connections to transit.
Medium Term	<ul style="list-style-type: none"> Complete gaps in the arterial network.

Strategy	
(5 – 10 years)	<ul style="list-style-type: none"> • Complete corridor refinement plan for MC #7, #8 and #9. • Develop tolling and congestion pricing methodologies for I-205. • Develop plan and implement SEP to connect Oregon City RC with HCT. • Identify funding solutions for alternative mode options.
Long-term (10 – 25 years)	<ul style="list-style-type: none"> • Construct HCT connection to Oregon City RC.
Unfunded Projects	
<ul style="list-style-type: none"> • I-205 widening, Stafford to Willamette, \$77,600,000 • Abernethy Bridge widening, \$106,400,000 • I-205 climbing lanes, \$56,800,000 • I-205 South aux lane improvements, \$74,600,000 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> • Continue work on identifying resources to complete corridor refinement plan. • Conduct corridor refinement plan. • Update Atlas of mobility corridors. • Continue developing a data collection and performance monitoring system. • Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> • Initiate actions related to the HCT System Expansion Policy. • Address connectivity needs in local TSPs. • Incorporate strategies from the Regional TSMO plan into local TSPs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.9 Mobility Corridor #8 – Oregon City to Gateway



Corridor function

What function(s) does the corridor serve?

2040 Access: Connects the Oregon City, Clackamas and Gateway regional centers and serves as the main access to the Clackamas Industrial Area and the South Metro waste transfer station.

Freight Mobility: Serves as the West Coast Trade (from Canada to Mexico) alternative to I-5, air freight access to Portland International Airport and provides Class I mainline freight rail access.

Statewide Travel: Serves as an extension of the southern gateway to the region, provides statewide access to Portland International Airport and provides statewide Amtrak service.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	144,231	190,334	3,097,402	6.1%	32.0%	57.9%
Households	55,824	87,166	1,208,686	7.2%	56.1%	57.6%
Employment	77,846	133,823	1,799,152	7.4%	71.9%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
<ul style="list-style-type: none"> Green Line MAX 	<ul style="list-style-type: none"> I-205 Trail 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> I-205 	<ul style="list-style-type: none"> 82nd Ave. 122nd Ave. 92nd Ave/Schumacher McLoughlin Blvd. 	<ul style="list-style-type: none"> Union Pacific <ul style="list-style-type: none"> Valley Sub mainline

Regional 2040 land uses

Regional Centers	Town Centers	Intermodal Facilities	Employment/Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Gateway Clackamas Oregon City 	<ul style="list-style-type: none"> Lents Gladstone 	<ul style="list-style-type: none"> Portland International Airport 	<ul style="list-style-type: none"> Clackamas Johnson Creek 	<ul style="list-style-type: none"> Metro Transfer Station

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Address park and ride capacity constraints: Gateway @ 99% of capacity Address potential transit center capacity issues: Oregon City Transit Center Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy). <ul style="list-style-type: none"> Inadequate bus connection between Green Line MAX and Oregon City RC Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy). <ul style="list-style-type: none"> Address lack of HCT connection to Oregon City RC. Direct, safe, comfortable, bike and pedestrian connections to all transit stops; Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. The HCT plan identified Clackamas Town Center to Oregon City RC (via I-205 or McLoughlin) as a “next phase” regional priority corridor, use the HCT SEP process to identify which corridor to further refine. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to

Regional Needs		Corridor Strategies
		<p>focus attention and for replicable analysis methodology.</p> <ul style="list-style-type: none"> Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need. Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
<p>Bike and Pedestrian</p>	<ul style="list-style-type: none"> Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. Insufficient pedestrian crossings between signalized intersections of OR99E. Difficult connectivity over I-205 for bikes and pedestrians. 	<ul style="list-style-type: none"> Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. Over \$20,000,000 in multimodal improvements to 82nd Ave. identified in RTP (projects 10014, 10291, 10018). \$48,000,000 in multimodal improvements to McLoughlin Boulevard through Oak Grove, Gladstone, and Oregon City identified in RTP (projects 10118, 10145, 10146, 11186). Improve River Rd. ped and bike facilities. Create more frequent pedestrian crossings.

Regional Needs		Corridor Strategies
		<ul style="list-style-type: none"> Identify locations for bike boulevards between OR99E and I-205. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails		<ul style="list-style-type: none"> Connect Trolley Trail to Oregon City Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways¹⁶	<ul style="list-style-type: none"> All of the I-205 interchanges are spaced less than two-miles apart, with a handful at less than one-mile, which does not meet the ODOT 2 mile spacing standard. <p>The following do not meet the performance threshold in Table 2.4:</p> <ul style="list-style-type: none"> 2005 and the 2035 NB PM 2-hour peak volumes exceed capacity on I-205 from Gateway RC to Oregon City RC in both directions. 	<ul style="list-style-type: none"> Unfunded I-205 interchange improvement projects at OR 212, Johnson Creek, Powell/Division, and OR 213 totaling over \$125,000,000 Unfunded widening, auxiliary lane, and braided ramp projects totaling over \$300,000,000. \$170,000,000 in operational improvements to I-205 in State RTP (project 11305) may include some of the above unfunded projects. Develop alternative mobility standards for this corridor. Explore tolling and peak pricing for I-205 and necessary legislative actions. Turn lanes on southbound OR 99E to I-205 ramp interchange area. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials¹⁷	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Need for better north-south connectivity east of 122nd Ave. Gaps emerge south of Clackamas RC. Gaps east of I-205 from Oregon City to Gateway. Potential need for additional Willamette and Clackamas River crossings. 	<ul style="list-style-type: none"> Evaluate gaps east of I-205 from Oregon City to Gateway. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail	<ul style="list-style-type: none"> The following at-grade heavy rail crossings exist in this corridor: <ul style="list-style-type: none"> SE Linwood Ave./SE Harmony Rd. 	<ul style="list-style-type: none"> Local TSP evaluate at grade heavy rail crossings for deficiencies and solutions.

¹⁶ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

¹⁷ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

Regional Needs		Corridor Strategies
	<ul style="list-style-type: none"> • SE Lawnfield Rd. • SE 37th Ave. • SE Oak St. • SE Harrison St. • SE Clackamas Rd. • Edgewater Rd. • Forsythe Rd. • 17th St. • 16th St. • 10th St. 	<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Bridges	<ul style="list-style-type: none"> • Ensure actual and perceived bicycle and pedestrian safety is addressed on regional bridges. • OR99E bridge over Clackamas River nearing end of service life. 	<ul style="list-style-type: none"> • Incorporate project into TSP to help identify project for OR99E bridge into RTP. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Safety	<ul style="list-style-type: none"> • I-205 ranks on the ODOT SPIS list as Category 4 (Scale 1-5, 5 being highest priority). Multiple locations rank above the 90th percentile. • 82nd Ave. ranks as Category 5 with multiple intersections in the 95th percentile (Division, Powell, Holgate, Foster, and Sandy). • 122nd Ave. has multiple intersections in the 95th percentile (Halsey, Glisan, Stark, Division, and Powell). 	<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Develop and implement design standards for OR99E that focus on and enhance pedestrian safety.
Regional Freight		<ul style="list-style-type: none"> • Plan for OR224 and nearby arterials that serve Clackamas and Milwaukie industrial areas to recognize freight mobility needs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

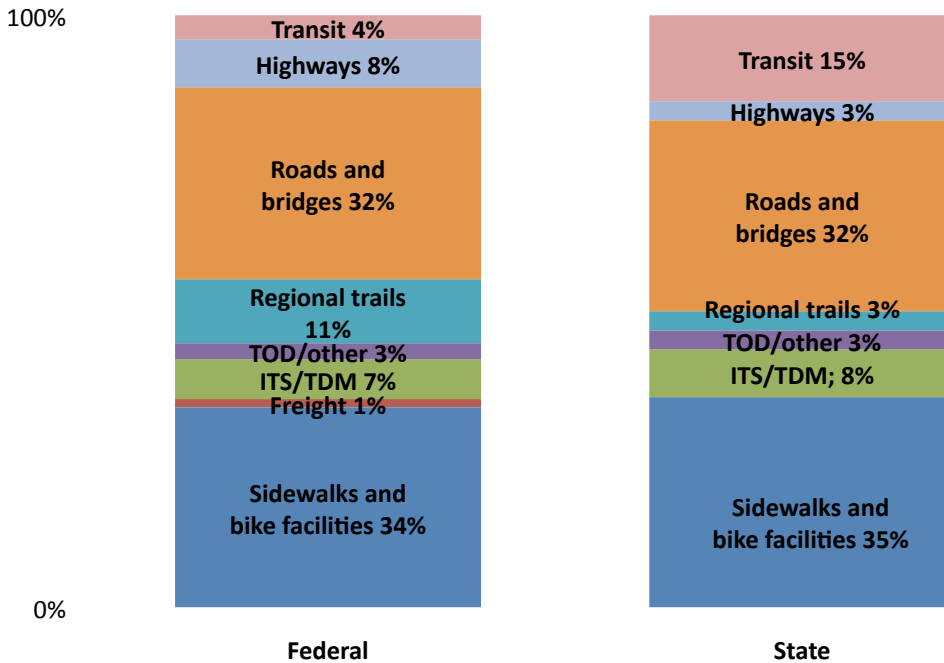
2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #8 has 74 projects totaling almost \$1 billion. Sidewalk and bike projects account for 34% of the federal projects and 23% (\$225 million) of the total corridor project costs. Roads and bridges projects account for 32% of all of projects and 31% of the total corridor project costs (\$300 million). Highway projects comprise only 8% of federal projects, but account for 39% (\$388 million) of the total corridor project costs, including improvements to I-205 for the Sunrise project. The State RTP adds 62 more projects and an additional \$707 million. Sidewalk and bike projects account for 35% of the state projects and 19% (\$130 million) of the total corridor project

costs. Roads and bridges projects account for 32% of all of projects and 17% of the total corridor project costs (\$123 million). Transit capital accounts for 15% of the projects and 22% of the additional costs (\$154 million). Transit projects include maintenance and operations facilities and other bus improvements in the corridor. For both the Federal and State systems investments total \$1.7 billion.

Projects by mode for federal and state systems



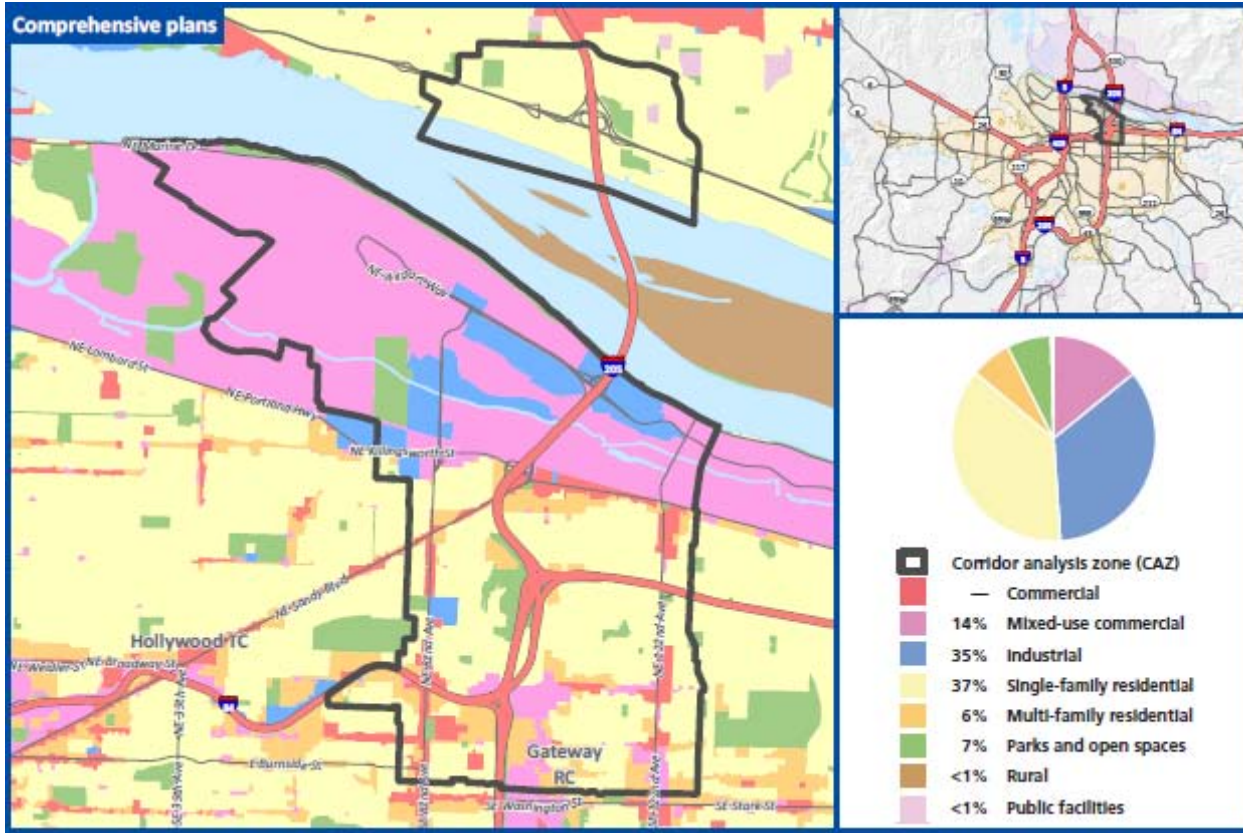
RTP projects by cost and mode

Mode	% of MC #8		% of MC #8	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Sidewalks and bike facilities	\$225,783,568	23%	\$132,435,967	19%
Freight	\$25,650,000	3%	\$0	0%
ITS/TDM	\$11,465,703	1%	\$1,675,000	0%
TOD/other	\$5,511,000	1%	\$11,000,000	2%
Regional trails	\$16,194,000	2%	\$7,000,000	1%
Roads and bridges	\$307,332,540	31%	\$123,315,046	17%
Highways	\$388,000,000	39%	\$280,000,000	40%
Transit	\$18,637,609	2%	\$153,224,000	22%
TOTAL	\$998,574,420	100%	\$708,650,013	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> • System and demand management along mobility corridor and parallel facilities for all modes of travel. • Address arterial connectivity and crossings. • Practical design solutions for bikes/peds for safety and to connect to transit.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> • Complete gaps in the arterial network. • Complete corridor refinement plan for MC #7, #8 and #9. • Develop tolling and congestion pricing methodologies for I-205. • Develop plan and implement SEP to connect Oregon City RC with HCT.
Long-term (10 – 25 years)	<ul style="list-style-type: none"> • Identify funding solutions for alternative mode options, including HCT to Oregon City.
Unfunded Projects	
<ul style="list-style-type: none"> • I-205 Powell/Division interchanges, \$17,700,000 • I-205/OR 213 interchange, \$200,900,000 • I-205/OR 212 interchange, \$21,300,000 • I-205 widening, OR 212 to I-84, \$63,400,000 • I-205 aux lanes, Gladstone to OR 212, \$18,500,000 • OR 213 Ped and Bike access to transit, \$5,000,000 • 82nd Ave Street Improvements, \$5,400,000 • Streetscape and ped/bike access to transit projects on 82nd, \$6,000,000. • I-205/Johnson Creek interchange improvements, \$9,800,000 • I-205 SB flyover to OR 213, \$49,100,000 • I-205 East Portland aux lane improvements, \$49,900,000 • I-205 north aux lane improvements, \$46,000,000 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> • Continue work on identifying resources to complete corridor refinement plan. • Conduct corridor refinement plan. • Update Atlas of mobility corridors. • Continue developing a data collection and performance monitoring system. • Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> • Initiate actions related to the HCT System Expansion Policy. • Address connectivity needs in local TSPs. • Incorporate strategies from the Regional TSMO plan into local TSPs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.10 Mobility Corridor #9 – Gateway to Clark County



Corridor function

What function(s) does the corridor serve?
2040 Access: Connects Gateway Regional Center to Clark County, provides primary access to the Columbia South Shore industrial area and Portland International Airport.
Freight Mobility: Serves as the West Coast Trade (from Canada to Mexico) alternative to I-5, provides air freight access to Portland International Airport and serves as the primary access to the Columbia South Shore industrial area.
Statewide Travel: Serves as one of two northern gateways to the region, provides statewide access to Portland International Airport and serves interstate bicycle travel.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	46,621	50,782	3,097,402	1.6%	8.9%	57.9%
Households	18,913	23,477	1,208,686	1.9%	24.1%	57.6%
Employment	43,613	62,504	1,799,152	3.5%	43.3%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
	<ul style="list-style-type: none"> I-205 Trail 	<ul style="list-style-type: none"> Glenn Jackson Bridge 	<ul style="list-style-type: none"> I-205 	<ul style="list-style-type: none"> 82nd Ave. 122nd Ave. 	<ul style="list-style-type: none"> Union Pacific <ul style="list-style-type: none"> Graham mainline Kenton mainline

Regional 2040 land uses

Regional Centers	Town Centers	Intermodal Facilities	Employment/ Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Gateway 		<ul style="list-style-type: none"> Portland International Airport 	<ul style="list-style-type: none"> Columbia Corridor 	

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy); Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy); Direct, safe, comfortable, bike and pedestrian connections to all transit stops; Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. HCT Plan identified a potential HCT line Gateway to Salmon Creek as a next phase regional priority corridor. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology. Identify essential destinations greater than one mile from transit

Regional Needs		Corridor Strategies
		<p>stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need.</p> <ul style="list-style-type: none"> Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. 	<ul style="list-style-type: none"> Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails	<ul style="list-style-type: none"> Improve north/south trail connectivity. Direct connections between trails and on-street bicycle and pedestrian facilities. 	<ul style="list-style-type: none"> Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways¹⁸	<ul style="list-style-type: none"> All of the I-205 interchanges are less than two-miles apart and do not meet the ODOT two-mile interchange spacing standard, but most are at least 1 mile apart. <ol style="list-style-type: none"> Killingsworth Ave. and Airport 	<ul style="list-style-type: none"> Airport Way Interchange NB on-ramp improvement in FC project list (10865). Several unfunded braided ramp and auxiliary lane projects, totaling

¹⁸ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

Regional Needs	Corridor Strategies	
	<p>Way interchanges are less than 1 mile apart.</p> <ul style="list-style-type: none"> Address a gap (lack of throughway crossing) to the west of I-205 where NE Fremont Street could cross I-205. <p>The following do not meet the performance threshold in Table 2.4:</p> <p>2005 and the 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> I-84 eastbound from NE 82nd Ave. to I-205, in both directions south of Washington St. on I-205, and northbound from NE Airport Way through the CRC. <p>2035 NB PM 2-Hour Peak volumes exceed capacity on:</p> <ul style="list-style-type: none"> I-205 between the I-84 interchange and NE Sandy Blvd. (northbound) I-205 south of Washington St. (southbound) I-205 north of NE Airport Way through the CRC northbound In the AM Peak, there is congestion on the I-205 Glenn Jackson Bridge and in the Columbia Blvd. area. Currently, there is congestion on the mainline between Airport Way and Killingsworth St. southbound. 	<p>\$73,200,000, have been identified in this section of I-205 to address performance deficiencies.</p> <ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials¹⁹	<ul style="list-style-type: none"> Lack of connectivity across theNorth Willamette River 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At- Grade Heavy Rail	<p>The following list describes the heavy rail crossings within this mobility corridor:</p> <ul style="list-style-type: none"> Columbia Blvd. east of 87th Ave. NE 105th Ave. north of Sandy Blvd. NE 109th Ave. north of Sandy Blvd. ○ NE 112th Ave. north of Sandy Blvd. 	<ul style="list-style-type: none"> Local TSPsevaluate at grade heavy rail crossings for deficiencies and solutions. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Bridges	<ul style="list-style-type: none"> The following bridges within this mobility corridor have height or weight restrictions: <ul style="list-style-type: none"> ○ NE 102nd Ave. crossing I-205 These two roads never cross 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

¹⁹ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

Regional Needs		Corridor Strategies
	<p>(Surface Maintenance Only) – Clearance: 15'-00"</p> <ul style="list-style-type: none"> ○ NE Glisan St. crossing Mt. Hood RR right-of-way at 90th (9000 NE Glisan St.) – Wt. Limits: 50,000 lbs. (single unit); 80,000 lbs. (combination unit) (combination unit) 	
Safety	<ul style="list-style-type: none"> • I-205 between I-84 and NE Columbia Blvd. ranks on the ODOT SPIS list as Category 5 (Scale 1-5, 5 being highest priority). • The I-205/I-84 interchange and the I-205/Columbia Blvd interchange rank in the 95th percentile as SPIS intersections. 	<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Freight	<p>The following do not meet the performance thresholds in Table 2.4:</p> <ul style="list-style-type: none"> • 2005 midday 1-hour volumes exceed capacity on I-84 (eastbound) between NE 20th Ave. and NE 60th Ave. and the interchange from I-84 east to I-205 south, just north of Gateway transit • 2035 NB midday 1-hour volumes exceed capacity on the main freight roadway routes (I-205 and I-84): • I-205 northbound between the interchange with I-84 and NE Beech St. • I-84 eastbound and westbound at the interchange with I-205 • I-205 southbound at the intersection with Columbia Blvd • I-205 northbound and southbound between NE Airport Way and NE Marine Drive 	<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

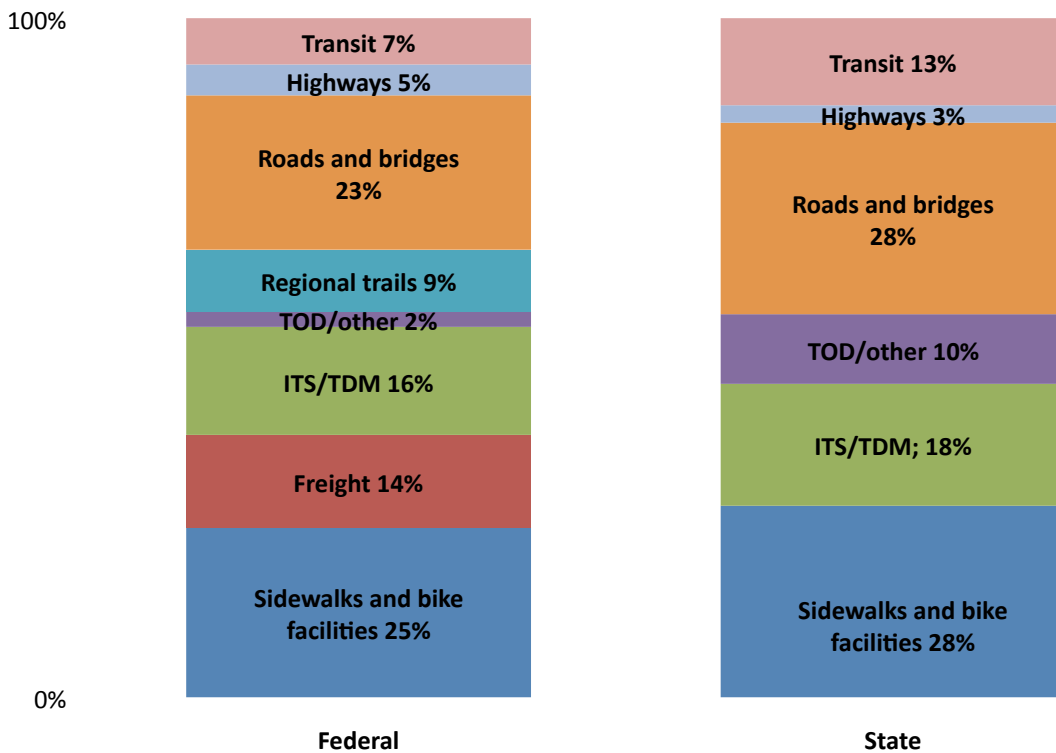
2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #9 has 44 projects totaling \$468 million. Freight projects account for 14% of all of projects yet 40% of the total corridor project costs (\$185 million). Sidewalk and bike projects account for 25% of the federal projects and 29% (\$130 million) of the total corridor project costs. The State RTP adds 39 more projects and an additional \$388 million. Highway projects comprise 3% of state projects yet account for 44% (\$170 million) of the total corridor project costs, including operational improvements to I-205. Transit capital accounts for 13% of the projects and 24% of the additional costs (\$92 million). Transit projects include maintenance and operations

facilities and other bus improvements in the corridor. Both the Federal and State systems investments total about \$856 million.

Projects by mode for federal and state systems



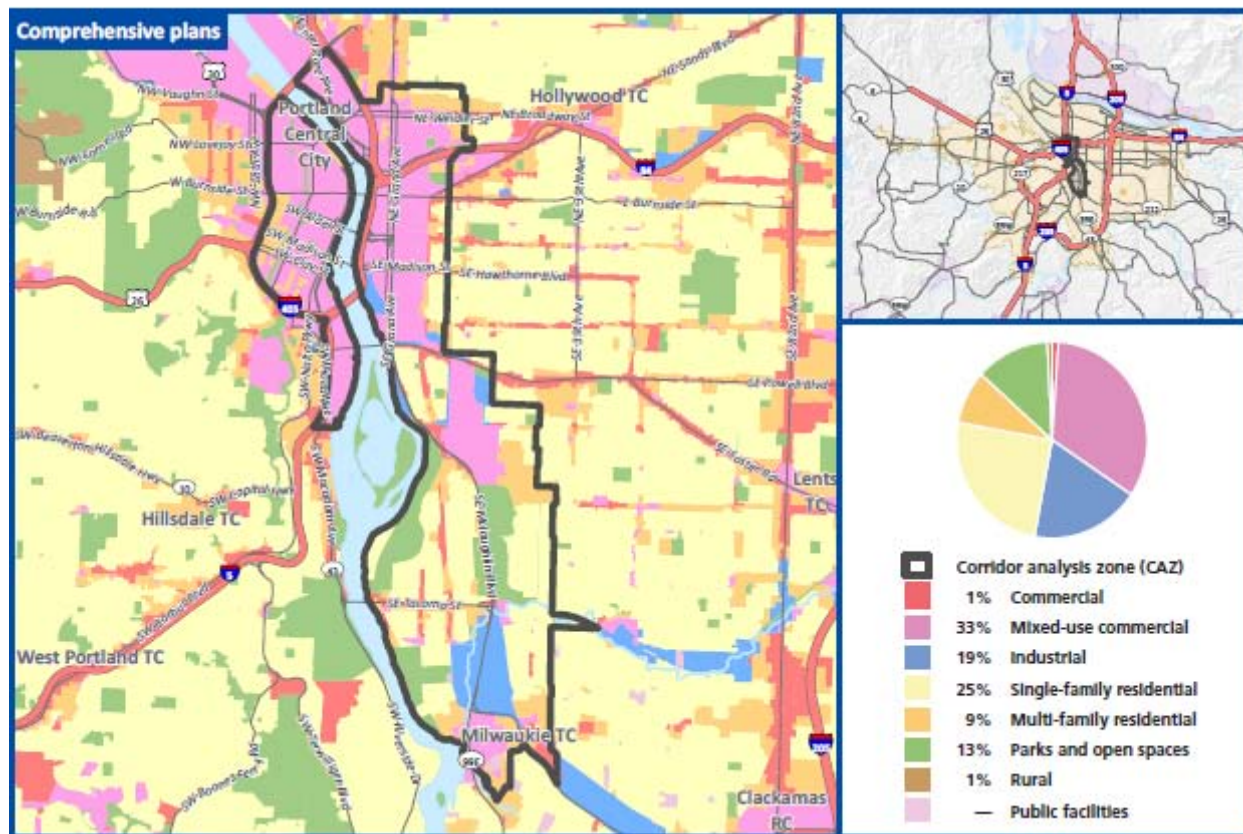
Projects by mode for federal and state systems

Mode	Federal System Cost by Mode	% of MC #9 Total Project Cost	State System Cost by Mode	% of MC #9 Total Project Cost
Sidewalks and bike facilities	\$133,574,403	29%	\$33,441,269	9%
Freight	\$185,727,900	40%	\$0	0%
ITS/TDM	\$8,243,954	2%	\$3,021,880	1%
TOD/other	\$1,511,000	0%	\$14,000,000	4%
Regional trails	\$11,914,835	3%	\$0	0%
Roads and bridges	\$74,608,065	16%	\$75,542,617	19%
Highways	\$23,500,000	5%	\$170,000,000	44%
Transit	\$28,968,309	6%	\$92,224,000	24%
TOTAL	\$468,048,466	100%	\$388,229,766	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> • System and demand management along mobility corridor and parallel facilities for all modes of travel. • Address arterial connectivity and crossings.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> • Conduct corridor refinement plan
Long-term (10 – 25 years)	<ul style="list-style-type: none"> • Interchange improvements.
Unfunded Projects	
<ul style="list-style-type: none"> • I-205/Airport Way SB on-ramp, \$11,800,000 • I-205 auxiliary lanes/braids, Airport Way to Columbia, \$27,200,000 • I-205 auxiliary lanes, Airport Way to Glisan, \$46,000,000 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> • Conduct corridor refinement plan. • Update Atlas of mobility corridors. • Continue developing a data collection and performance monitoring system. • Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> • Initiate actions related to the HCT System Expansion Policy. • Address connectivity needs in local TSPs. • Incorporate strategies from the Regional TSMO plan into local TSPs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.11 Mobility Corridor #10 – Portland Central City to Milwaukie



Corridor function

What function(s) does the corridor serve?	
2040 Access:	Connects the Central City to Clackamas regional center and provides regional access to the Milwaukie and Clackamas industrial areas, Brooklyn Yard intermodal facility and Clackamas Community College (Harmony).
Freight Mobility:	Provides access to a rail intermodal facility at Brooklyn Yard and serves as a Class I Union Pacific main line corridor.
Statewide Travel:	Provides a regional connection to Eastern Oregon via OR 212/224 and US 26 and serves as the Amtrak corridor to points south of the metropolitan region.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	52,960	132,444	3,097,402	4.3%	150.1%	57.9%
Households	31,072	67,664	1,208,686	5.6%	117.8%	57.6%
Employment	169,422	250,866	1,799,152	13.9%	48.1%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Freight Rail
	<ul style="list-style-type: none"> Springwater Trail 	<ul style="list-style-type: none"> Sellwood Bridge Ross Island Bridge 	<ul style="list-style-type: none"> OR 99E 	<ul style="list-style-type: none"> SE 17th Ave./Milwaukie Ave. Holgate Ave. 	<ul style="list-style-type: none"> Union Pacific <ul style="list-style-type: none"> Brooklyn Sub mainline

Regional 2040 land uses

Regional Centers	Town Centers	Intermodal Facilities	Employment/Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Portland Central City 	<ul style="list-style-type: none"> Milwaukie 	<ul style="list-style-type: none"> Union Station 	<ul style="list-style-type: none"> Central Eastside Johnson Creek Northwest Brooklyn Yards 	<ul style="list-style-type: none"> Convention Center Rose Quarter South Waterfront

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Increase 15 minute or better transit service along OR 224 Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy). Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy). Direct, safe, comfortable, bike and pedestrian connections to all transit stops. Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. Long-Range HCT Plan Identifies a potential HCT line between Portland Central City and Gresham (in general vicinity of Powell Blvd.) It is listed as a “Near-term” investment priority. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology. Identify essential destinations greater

Regional Needs		Corridor Strategies
		<p>than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need.</p> <ul style="list-style-type: none"> • Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> • Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. 	<ul style="list-style-type: none"> • Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. • Active Transportation project in RTP to improve safety and access for pedestrians and cyclists (11198). • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

Regional Needs		Corridor Strategies
Regional Trails	<ul style="list-style-type: none"> Address a gap in the Springwater Trail in the Sellwood neighborhood. Direct connections between trails and on-street bicycle and pedestrian facilities. 	<ul style="list-style-type: none"> Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways²⁰	<p>The following do not meet the performance threshold in Table 2.4:</p> <p>2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> OR 99E OR 224/Harrison St. intersection 	<ul style="list-style-type: none"> Unfunded projects identified to increase capacity and improve access management between Ross Island Bridge and I-205 along 99E/OR 224 corridor, \$280,000,000. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials²¹	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Address gap south of Holgate between 99E and 52nd Ave. Address a need for another south Willamette River crossing. <p><u>Arterial Deficiencies</u></p> <p>The following do not meet the performance threshold in Table 2.4:</p> <p>2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> Powell Blvd., Ross Island Bridge, Sellwood Bridge, Tacoma St., pieces of Holgate Blvd., 52nd Ave, and Johnson Creek Blvd. 	<ul style="list-style-type: none"> Address TSMO needs in this corridor. Improve access to neighborhoods, rather than just the throughway facility. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail	<ul style="list-style-type: none"> SE Milwaukie SE Clinton SE 12th SE 8th/Division SE 17th SE Harrison 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Local TSPsevaluate at grade heavy rail crossings for deficiencies and solutions.
Regional Bridges	<ul style="list-style-type: none"> Sellwood Bridge has weight restrictions and a low sufficiency rating which currently limits transit service in this corridor. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Implement Sellwood Bridge Study recommendations.

²⁰ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

²¹ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

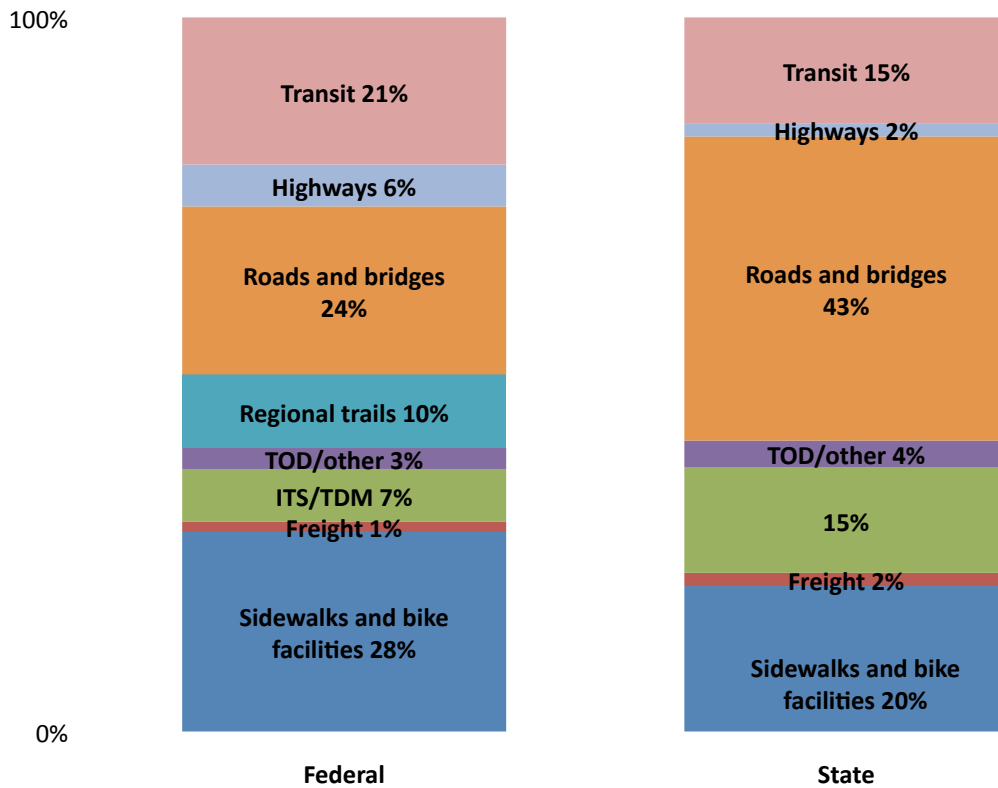
Regional Needs		Corridor Strategies
Safety	<ul style="list-style-type: none"> OR 99E/Powell, OR 99E near Holgate, and 17th and Tacoma St. intersections rank on the ODOT SPIS list as Category 4 and 5(Scale 1-5, 5 being highest priority). 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Freight	<ul style="list-style-type: none"> Improve access to Brooklyn Yard. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #10 has 68 projects totaling \$2.5 billion. Transit projects account for 21% of the federal projects and 72% (\$1.8 billion) of the total corridor project costs. These projects include expanding the HCT system to Milwaukie, Portland to Lake Oswego Streetcar and additional expansion of the streetcar system in the City of Portland. Sidewalk and bike projects comprise 28% of all of projects and 6% of the total corridor project costs (\$163 million). Roads and bridges projects account for 24% of all of projects and 14% of the total corridor project costs (\$360 million). The State RTP adds 54 more projects and an additional \$2.7 billion. Transit projects account for 26% of the federal projects and 84% (\$2.2 billion) of the total corridor project costs. These projects include expanding the HCT system from Central City to Tigard and increases in bus service and facilities. Sidewalk and bike projects comprise 20% of all of projects but only 1% of the total corridor project costs (\$31 million). Roads and bridges projects account for 43% of all of projects and 8% of the total corridor project costs (\$177 million). For both the Federal and State systems investments total \$4.8 billion.

Projects by mode for federal and state systems



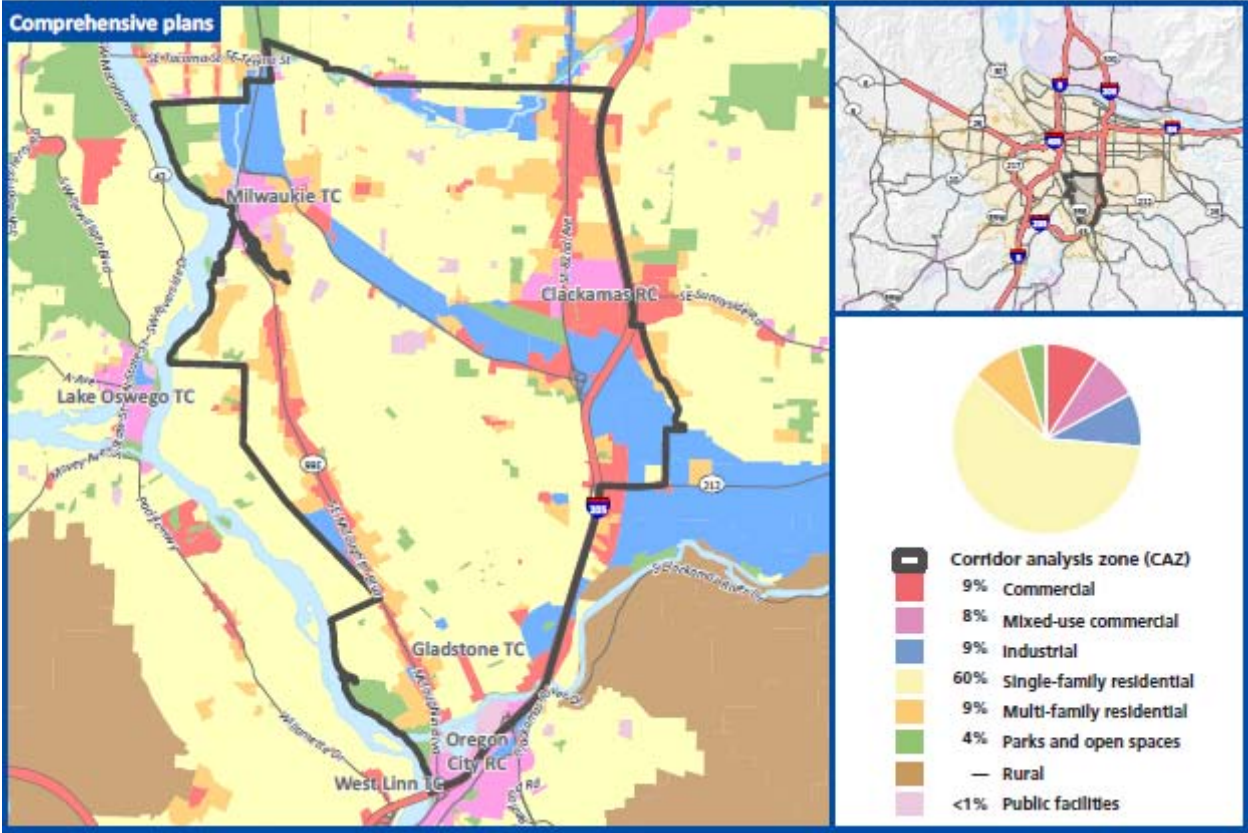
RTP projects by cost and mode

Mode	% of MC #10		% of MC #10	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Sidewalks and bike facilities	\$163,840,442	6%	\$31,524,681	1%
Freight	\$30,000,000	1%	\$280,600	0%
ITS/TDM	\$11,351,794	0%	\$3,919,800	0%
TOD/other	\$5,511,000	0%	\$11,000,000	0%
Regional trails	\$10,956,411	0%	\$0	0%
Roads and bridges	\$361,390,003	14%	\$177,491,019	8%
Highways	\$121,703,209	5%	\$220,000,000	10%
Transit	\$1,847,727,000	72%	\$1,827,056,000	80%
TOTAL	\$2,552,479,859	100%	\$2,271,272,100	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> • System and demand management along mobility corridor and parallel facilities for all modes of travel. • Address arterial connectivity and crossings. • Continue work on Milwaukie HCT.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> • Complete gaps in the arterial network.
Long-term (10 – 25 years)	
Unfunded Projects	
<ul style="list-style-type: none"> • Ross Island Bridge East Approach, \$2,900,000 • SE McLoughlin Bikeway, \$700,000 • OR 99E Improvements from Powell to OR 224, \$241,600,000 • OR 99E Bike Improvements, Kellogg Cr. To Clackamas R., \$4,000,000 • OR 99E Widening, Harold to Tacoma, \$38,800,000 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> • Continued work on Milwaukie HCT. • Update Atlas of mobility corridors. • Continue developing a data collection and performance monitoring system. • Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> • Initiate actions related to the HCT System Expansion Policy. • Address connectivity needs in local TSPs. • Incorporate strategies from the Regional TSMO plan into local TSPs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update..

4.2.12 Mobility Corridor #11– Milwaukie to Clackamas



Corridor function

What function(s) does the corridor serve?
2040 Access: Connects the Central City to Clackamas regional center and provides regional access to the Milwaukie and Clackamas industrial areas, Brooklyn Yard intermodal facility and Clackamas Community College (Harmony).
Freight Mobility: Provides access to a rail intermodal facility at Brooklyn Yard and serves as a Class I Union Pacific main line corridor.
Statewide Travel: Provides a regional connection to Eastern Oregon via OR 212/224 and US 26 and serves as the Amtrak corridor to points south of the metropolitan region.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	84,246	94,497	3,097,402	3.1%	12.2%	57.9%
Households	34,127	42,475	1,208,686	3.5%	24.5%	57.6%
Employment	46,362	72,915	1,799,152	4.1%	57.3%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
	<ul style="list-style-type: none"> Springwater Trail 	<ul style="list-style-type: none"> Sellwood Bridge Ross Island Bridge 	<ul style="list-style-type: none"> OR 99E 	<ul style="list-style-type: none"> 82nd Ave. 122nd Ave. 92nd Ave/ Schumacher McLoughlin Blvd. 	<ul style="list-style-type: none"> Union Pacific <ul style="list-style-type: none"> Brooklyn sub mainline Valley sub mainline

Regional 2040 land uses

Regional Centers	Town Centers	Intermodal Facilities	Employment/Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Portland Central City 	<ul style="list-style-type: none"> Milwaukie 	<ul style="list-style-type: none"> Union Station 	<ul style="list-style-type: none"> Central Eastside Johnson Creek Northwest Brooklyn Yards 	<ul style="list-style-type: none"> Lloyd District Convention Center Rose Quarter South Waterfront

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Add 15 minute of better transit along OR 224 and SE Harmony Rd. Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy). Connect all 2040 Regional Centers with high capacity transit (Oregon City RC is not served by HCT.) Direct, safe, comfortable, bike and pedestrian connections to all transit stops; Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. The HCT plan identified Milwaukie to Oregon City RC (via I-205 or McLoughlin Blvd) as a “next phase” regional priority corridor. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis

Regional Needs		Corridor Strategies
		<p>project for recommended places to focus attention and for replicable analysis methodology.</p> <ul style="list-style-type: none"> Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need. Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. 	<ul style="list-style-type: none"> Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails	<ul style="list-style-type: none"> Direct connections between trails and on-street bicycle and pedestrian facilities. Address a bike parkway connecting Milwaukie TC to Clackamas RC parallel to OR 224. 	<ul style="list-style-type: none"> Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. Implement Regional Transportation Functional Plan and Urban Growth Management

Regional Needs		Corridor Strategies
Throughways²²	<ul style="list-style-type: none"> OR 224 is a statewide highway and it has several signalized intersections between OR 99E and Lake Road. The intersections are spaced less than a mile apart. <p>The following do not meet the performance threshold in Table 2.4: 2005 and the 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> OR 224 at the OR 99E intersection and approaches to I-205. 	<p>Functional Plan.</p> <ul style="list-style-type: none"> FC Project 10106 addresses access issues to increase vehicle throughput on OR 224. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials²³	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Address gaps between SE Oatfield Rd. and SE Webster Rd south of OR 224 and between SE McLoughlin Blvd. and SE Linwood Ave south of Johnson Creek Blvd. <p>The following do not meet the performance threshold in Table 2.4: 2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> Parts of SE Lake Rd. and Harmony Rd. Address congestion in downtown Milwaukie at the intersections along OR 224. There is a need for better connectivity across the community and better access to downtown. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail	<ul style="list-style-type: none"> There is a heavy rail crossing of a main freight railroad line at the intersection of SE Lake Rd./SE Linwood Ave./Harmony Rd. There are two heavy rail crossings of both a main and branch freight railroad line on Harrison St. both west and east of the Harrison St./OR 224 Intersection: <ul style="list-style-type: none"> Harrison Oak 37th Harmony Lawnfield 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Local TSPsevaluate at grade heavy rail crossings for deficiencies and solutions.

²² Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

²³ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

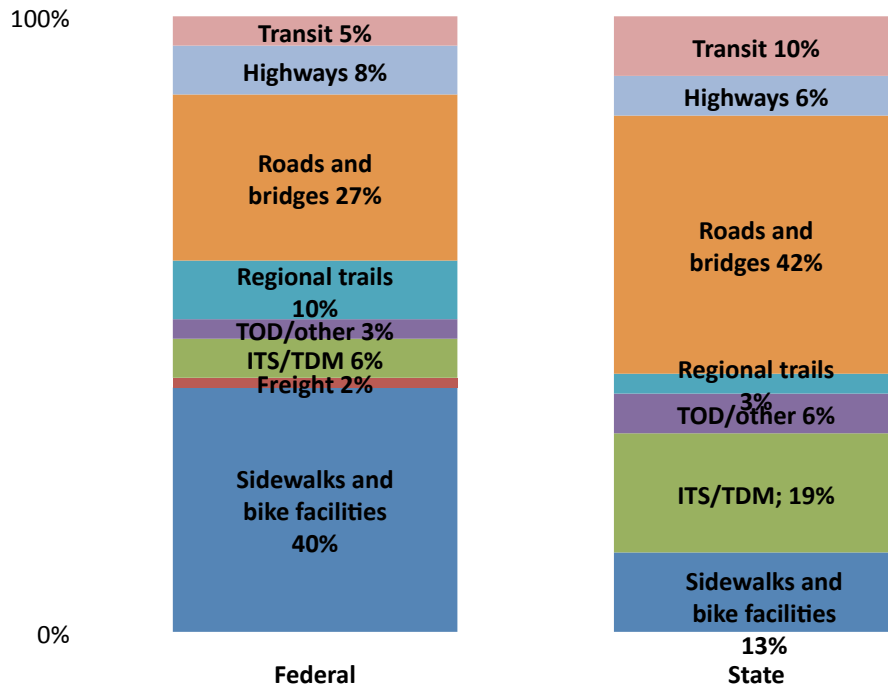
Regional Needs		Corridor Strategies
Regional Bridges		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Safety	<ul style="list-style-type: none"> OR 224 intersections rank on the ODOT SPIS list as Category 4 and 5(Scale 1-5, 5 being highest priority). 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Freight	<ul style="list-style-type: none"> OR 224 in both 2005 and 2035 NB in the midday 1-hour: OR 99E intersection and as it approaches I-205. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #11 has 63 projects totaling more than \$1.9 billion. Transit projects account for 5% of the federal projects and 58% (\$1.1 billion) of the total corridor project costs. This includes expanding the HCT system from Central City to Milwaukie. Sidewalk and bike projects comprise 40% of all of projects and 7% of the total corridor project costs (\$147 million). Roads and bridges projects account for 27% of all of projects and 13% of the total corridor project costs (\$262 million). The State RTP adds 31 more projects and an additional \$960 million. Highway projects account for 6% of all of projects yet 60% of the total corridor project costs (\$280 million) for improvements to the I205/OR 213 Interchange and the Sunrise project. For both the Federal and State systems investments total \$2.4 billion.

Projects by mode for federal and state systems



RTP projects by cost and mode

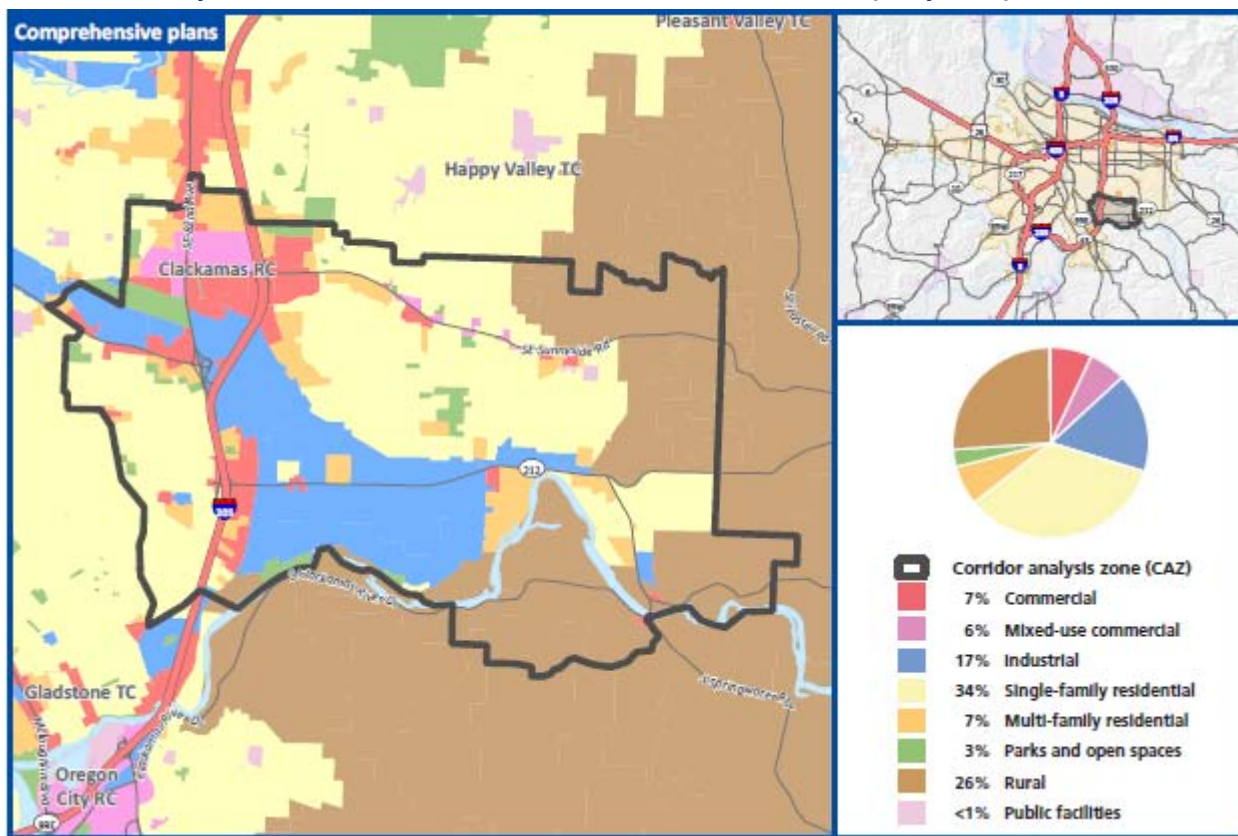
Mode	% of MC #11		% of MC #11	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Sidewalks and bike facilities	\$146,814,193	7%	\$19,964,842	4%
Freight	\$25,650,000	1%	\$0	0%
ITS/TDM	\$10,950,000	1%	\$49,061,295	10%
TOD/other	\$5,511,000	0%	\$11,000,000	2%
Regional trails	\$10,620,000	1%	\$5,000,000	1%
Roads and bridges	\$262,148,295	13%	\$68,758,253	15%
Highways	\$375,000,000	19%	\$280,000,000	59%
Transit	\$1,154,627,000	58%	\$40,000,000	8%
TOTAL	\$1,991,320,488	100%	\$473,784,390	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> System and demand management along mobility corridor and parallel facilities for all modes of travel. Address arterial connectivity and crossings. Continue work on Milwaukie HCT.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> Complete gaps in the arterial network.
Long-term	

(10 – 25 years)	
Unfunded Projects	
<ul style="list-style-type: none"> • Milwaukie to Clackamas RC Corridor Study, \$1,400,000 • Projects identified to increase capacity and improve access management between Ross Island Bridge and I-205 along 99E/OR 224 corridor, \$280,000,000. 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> • Update Atlas of mobility corridors. • Continue developing a data collection and performance monitoring system. • Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> • Initiate actions related to the HCT System Expansion Policy. • Address connectivity needs in local TSPs. • Incorporate strategies from the Regional TSMO plan into local TSPs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.13 Mobility Corridor #12 – Clackamas to Rock Creek Junction (Hwy. 224)



Corridor function

What function(s) does the corridor serve?
2040 Access: Connects the Clackamas regional center and industrial areas to Eastern Oregon via OR 212/224 and US 26.
Freight Mobility: Connects the Clackamas industrial area distribution center to the interstate system and to Eastern Oregon via OR 212/224 and US 26.
Statewide Travel: Provides access to the metropolitan region from Eastern Oregon via OR 212/224 and US 26.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	40,808	65,900	3,097,402	2.1%	61.5%	57.9%
Households	15,530	25,008	1,208,686	2.1%	61.0%	57.6%
Employment	33,551	63,305	1,799,152	3.5%	88.7%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
	<ul style="list-style-type: none"> Clackamas Bluffs Trail 		<ul style="list-style-type: none"> OR 212/224 	<ul style="list-style-type: none"> Sunnyside Rd. 	<ul style="list-style-type: none"> Union Pacific <ul style="list-style-type: none"> Valley sub mainline

Regional 2040 land uses

Regional Centers	Town Centers	Employment Areas	Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Clackamas 	<ul style="list-style-type: none"> Damascus 		<ul style="list-style-type: none"> Clackamas Ind. District 	<ul style="list-style-type: none">

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Address lack of transit service within this mobility corridor. Increase regional transit service along Sunnyside Rd./Harmony Rd. Add 15 minute or better transit service along OR 212/224 and SE Sunnyside Rd. Need to connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy); Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy); Direct, safe, comfortable, bike and pedestrian connections to all transit stops; Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. The HCT study ranked Clackamas Transit Center to Damascus as a regional vision corridor. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology. Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists,

Regional Needs		Corridor Strategies
		<p>add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need.</p> <ul style="list-style-type: none"> Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized for all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. 	<ul style="list-style-type: none"> Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails	<ul style="list-style-type: none"> Direct connections between trails and on-street bicycle and pedestrian facilities. 	<ul style="list-style-type: none"> Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways²⁴	<ul style="list-style-type: none"> OR 212/224 is a statewide highway and it has several signalized intersections all spaced less than a mile apart. <p>The following do not meet the performance</p>	<ul style="list-style-type: none"> Right of way acquisition, preliminary engineering, and environmental of Sunrise facility between I-205 and Rock Creek Junction. \$320,000,000 in FC project list (10869, 10890,

²⁴ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

Regional Needs		Corridor Strategies
	<p>threshold in Table 2.4: 2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> OR 212/224 except as it approaches SE 142nd Ave and SE 152nd Ave in the eastbound direction. Sunrise/I-205/Sunnyside Rd. area. 	<p>10894), \$110,000,000 in State RTP (11301).</p> <ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials²⁵	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Address the gap on 122nd Ave. just north of OR 224. Address lack of north/south connectivity between SE Sunnyside Rd. and Hwy. 212/224 and east/west connectivity between SE 82nd Dr. and SE 122nd Ave. <p>The following do not meet the performance threshold in Table 2.4: 2005 and 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> Parts of SE Sunnyside Rd. as it approaches SE 132nd Ave and SE 142nd Ave do not meet the performance thresholds in 2005 PM 2-hour peak. In the 2035 NB PM 2-hour peak, SE Sunnyside Rd does not meet the performance thresholds throughout in the eastbound direction. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail	<ul style="list-style-type: none"> There is an at-grade heavy rail crossing at Lawnfield Rd. near I-205. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Local TSPsevaluate at grade heavy rail crossings for deficiencies and solutions.
Regional Bridges		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Safety	<ul style="list-style-type: none"> OR 224 intersections rank on the ODOT SPIS list as Category 4 and 5 (Scale 1-5, 5 being highest priority). 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Freight	<p>The following do not meet the performance threshold in Table 2.4.</p> <ul style="list-style-type: none"> 2035 NB PM 2-hour volumes exceed 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth

²⁵ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

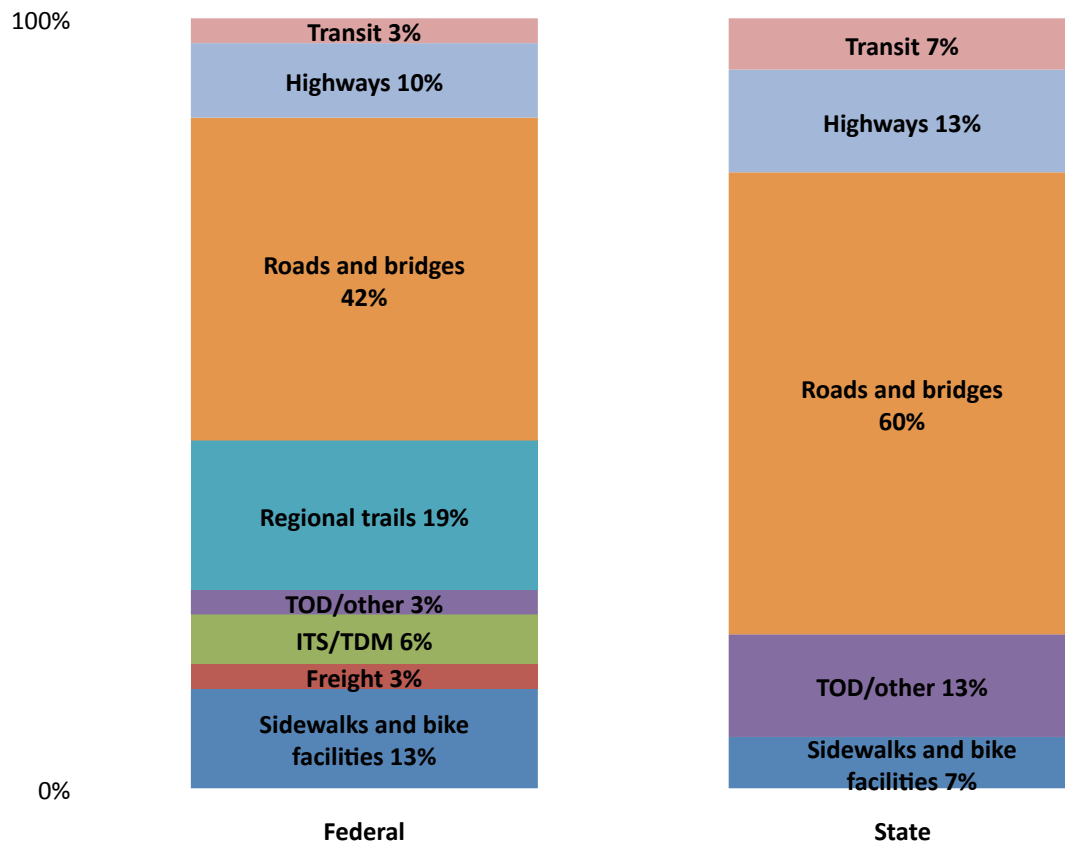
Regional Needs		Corridor Strategies
	capacity on OR 212/224 and SE 142 nd Ave and SE 152 nd Ave in the eastbound direction.	Management Functional Plan.

2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #12 has 31 projects totaling \$678 million. Roads and bridges projects account for 42% of all of projects and 30% of the total corridor project costs (\$205 million). Highway projects comprise only 10% of federal projects, but account for 47% (\$320 million) of the total corridor project costs, including the Sunrise project. The State RTP adds 15 more projects and an additional \$429 million. Highway projects comprise only 13% of state projects, but account for 65% (\$280 million) including additional Sunrise projects. Both the Federal and State systems investments total about \$1.1 billion.

Projects by mode for federal and state systems



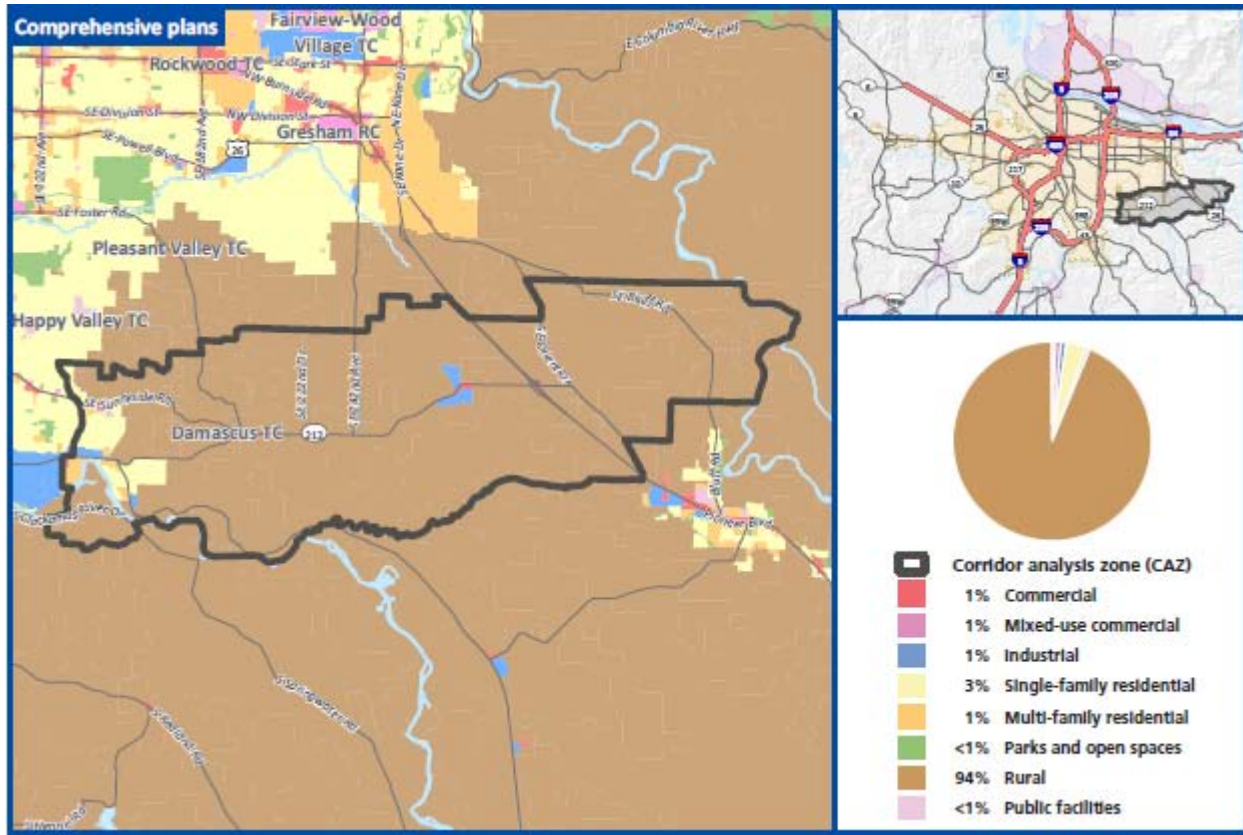
RTP projects by cost and mode

Mode	Federal System Cost by Mode	% of MC #9 Total Project Cost	State System Cost by Mode	% of MC #9 Total Project Cost
Sidewalks and bike facilities	\$94,775,000	14%	\$6,846,598	2%
Freight	\$25,650,000	4%	\$0	0%
ITS/TDM	\$6,500,000	1%	\$0	0%
TOD/other	\$4,000,000	1%	\$11,000,000	3%
Regional trails	\$21,440,000	3%	\$0	0%
Roads and bridges	\$205,027,149	30%	\$101,578,517	24%
Highways	\$320,000,000	47%	\$280,000,000	65%
Transit	\$1,000,000	0%	\$30,000,000	7%
TOTAL	\$678,392,149	100%	\$429,425,115	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> System and demand management along mobility corridor and parallel facilities for all modes of travel. Address arterial connectivity and crossings. Complete Sunrise study.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> Complete gaps in the arterial network. Interchange improvements and improvements consistent with Sunrise study
Long-term (10 – 25 years)	
Unfunded Projects	
<ul style="list-style-type: none"> Sunrise Phase 1 construction, \$392,000,000 Sunrise Phase 2 construction, \$247,900,000 OR 212/224 Improvements, \$7,000,000 Additional westbound lane on OR 212 between 102nd and I-205 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> Update Atlas of mobility corridors. Continue developing a data collection and performance monitoring system. Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> Initiate actions related to the HCT System Expansion Policy. Address connectivity needs in local TSPs. Incorporate strategies from the Regional TSMO plan into local TSPs. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.14 Mobility Corridor #13 – Rock Creek Junction (OR 224) to US 26



Corridor function

What function(s) does the corridor serve?	
2040 Access:	Connects the Clackamas regional center and industrial areas to Eastern Oregon via OR 212/224 and US 26.
Freight Mobility:	Connects the Clackamas industrial area distribution center to the interstate system and to Eastern Oregon via OR 212/224 and US 26.
Statewide Travel:	Provides access to the metropolitan region from Eastern Oregon via OR 212/224 and US 26.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	23,616	116,508	3,097,402	3.8%	393.3%	57.9%
Households	8,195	38,324	1,208,686	3.2%	367.7%	57.6%
Employment	5,722	22,453	1,799,152	1.2%	292.4%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
			<ul style="list-style-type: none"> OR 212 	<ul style="list-style-type: none"> Sunnyside Rd. 	

Regional 2040 land uses

Regional Centers	Town Centers	Employment Areas	Industrial Areas	Other Key Destinations
	<ul style="list-style-type: none"> Damascus Happy Valley 		<ul style="list-style-type: none"> Clackamas 	<ul style="list-style-type: none"> Boring Sandy

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> Address lack of transit service within this mobility corridor. Improve regional transit service on Sunnyside Rd. into Damascus TC and OR 212. Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy). Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy). Direct, safe, comfortable, bike and pedestrian connections to all transit stops. Connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. The HCT plan ranked Clackamas TC to Damascus TC as a “regional vision” corridor. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology. Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement.

Regional Needs		Corridor Strategies
		<p>Also consider developing private shuttle services to serve this need.</p> <ul style="list-style-type: none"> Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. 	<ul style="list-style-type: none"> Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails	<ul style="list-style-type: none"> Need for east/west trail. Direct connections between trails and on-street bicycle and pedestrian facilities. 	<ul style="list-style-type: none"> Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways²⁶	<p>The following do not meet the performance threshold in Table 2.4:</p> <p>2035 NB PM 2-hour peak volumes exceed capacity on OR 212</p> <ul style="list-style-type: none"> OR 212 is primarily 2 lanes from Damascus to US 26. 	<ul style="list-style-type: none"> Sunrise Parkway EIS in State RTP (10114), \$6,000,000. OR 224 widening from Rock Creek Junction to Carver Bridge, FC project 10078. OR 212 widening and boulevard improvements through Damascus, FC RTP project 10138. Improvements to OR 212 intersections to meet future traffic needs, FC project 10073. OR 212 truck climbing lanes east of Rock Creek Junction, unfunded. Implement Regional Transportation

²⁶ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

Regional Needs		Corridor Strategies
		Functional Plan and Urban Growth Management Functional Plan.
Arterials²⁷	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Address north/south and east/west gaps between 142nd Ave and 172nd Ave., 172nd Ave and SE Foster Rd., SE Foster Rd. and SE 242nd Ave., and 242nd Ave. and US 26. <p><u>Arterial Deficiencies</u></p> <ul style="list-style-type: none"> Sunnyside Rd. does not meet the performance thresholds in Table 2.4. 2035 NB PM 2-hour peak volumes exceed capacity in the eastbound direction. 	<ul style="list-style-type: none"> Address need for additional Clackamas River crossings. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Bridges		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Safety	<ul style="list-style-type: none"> Stretches of OR 212 rank on the ODOT SPIS list as Category 3 and 4 (Scale 1-5, 5 being highest priority). Address safety problems on SE Tong Rd. There is a need for safety improvements to the Springwater Bridge in Carver. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Freight		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

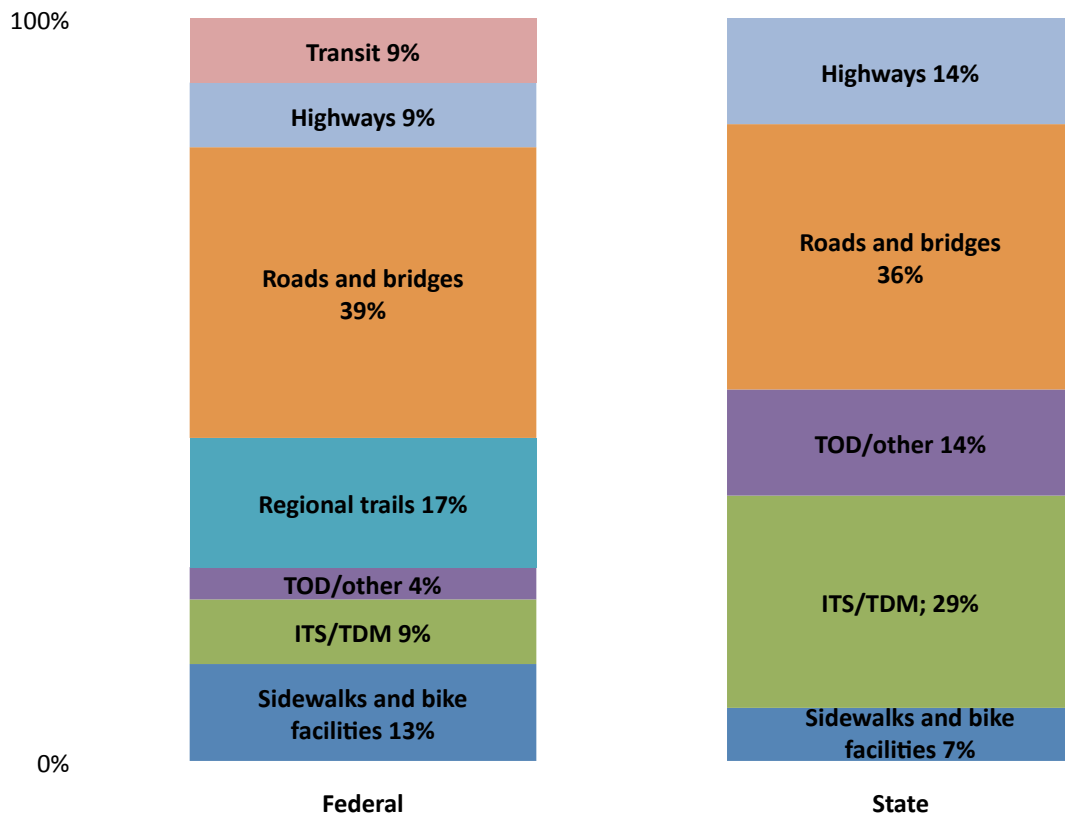
2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #13 has 23 projects totaling \$660 million. Roads and bridges projects account for 39% of all of projects but over half (54%) of the total corridor project costs (\$327 million). Highway projects comprise only 9% of federal projects, but account for 28% (\$170 million) of the total corridor project costs, including the Sunrise project. The State RTP adds 14 more projects and an additional \$223 million. Highway projects comprise only 14% of state projects, but account for 52% (\$116 million) including additional Sunrise projects. Both the Federal and State systems investments total \$827million.

Projects by mode for federal and state systems

²⁷ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)



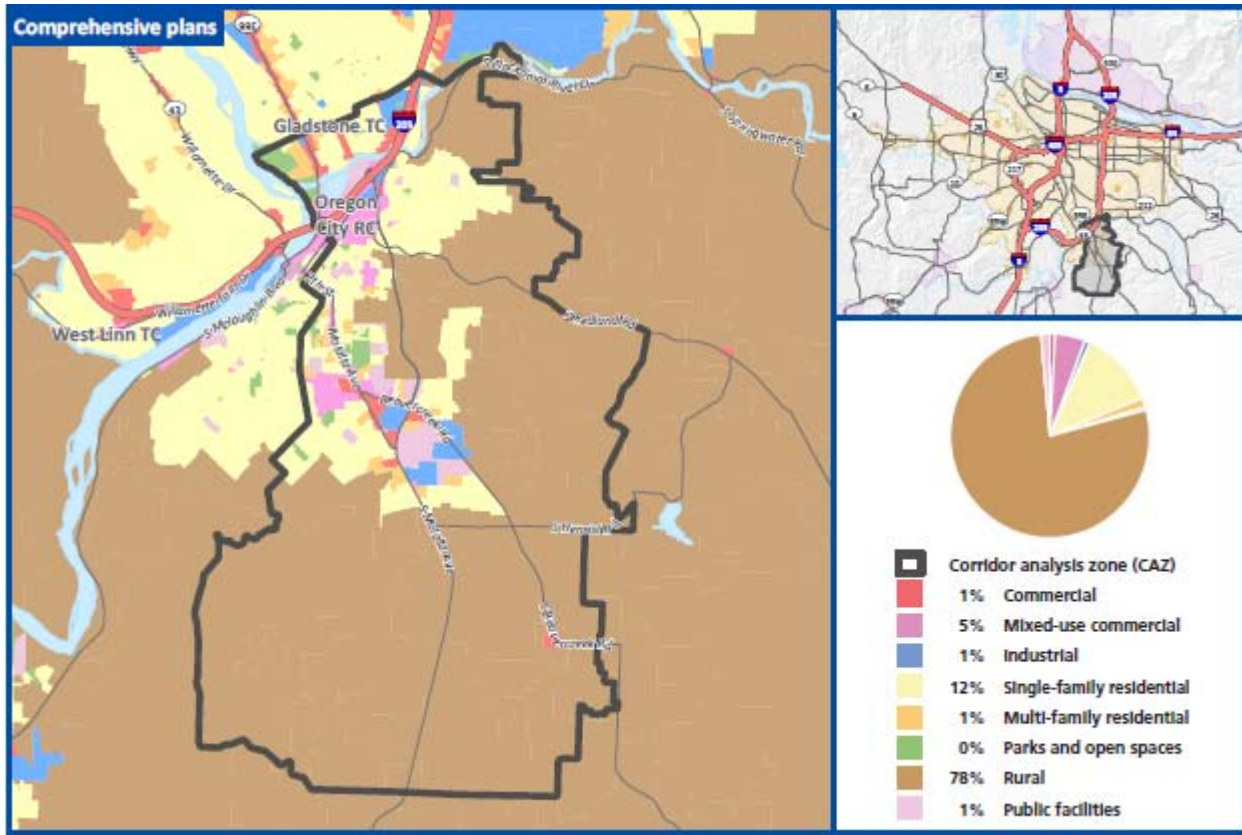
RTP projects by cost and mode

Mode	% of MC #9		% of MC #9	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Sidewalks and bike facilities	\$81,940,000	14%	\$6,846,598	3%
Freight	\$0	0%	\$0	0%
ITS/TDM	\$6,500,000	1%	\$1,675,000	1%
TOD/other	\$1,511,000	0%	\$11,000,000	5%
Regional trails	\$14,070,000	2%	\$0	0%
Roads and bridges	\$327,357,149	54%	\$88,423,854	39%
Highways	\$170,000,000	28%	\$116,000,000	52%
Transit	\$2,000,000	0%	\$0	0%
TOTAL	\$603,378,149	100%	\$223,945,452	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> System and demand management along mobility corridor and parallel facilities for all modes of travel. Address arterial connectivity and crossings. Complete Sunrise study.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> Complete gaps in the arterial network. Interchange improvements and improvements consistent with Sunrise study.
Long-term (10 – 25 years)	
Unfunded Projects	
<ul style="list-style-type: none"> Sunrise Parkway ROW, \$150,000,000 Sunrise Parkway construction, \$600,000,000 OR 212 truck climbing lanes, \$1,800,000 Sunrise Parkway Preliminary Engineering and Environmental, \$60,000,000 Sunrise Parkway Refinement Plan, \$6,000,000 OR 224 Corridor Plan, \$1,200,000 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> Update Atlas of mobility corridors. Continue developing a data collection and performance monitoring system. Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> Initiate actions related to the HCT System Expansion Policy. Address connectivity needs in local TSPs. Incorporate strategies from the Regional TSMO plan into local TSPs. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.15 Mobility Corridor #14 – Oregon City to Willamette Valley



Corridor function

What function(s) does the corridor serve?
2040 Access: Serves as southern access to the Oregon City regional center and provides access to Clackamas Community College (Beavercreek Campus).
Freight Mobility: Provides freight access from surrounding agricultural areas and Beavercreek Industrial Area to I-205.
Statewide Travel: Serves as a secondary southern gateway to the region and connects agricultural areas in the Northern Willamette Valley to I-205.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	39,115	75,742	3,097,402	2.4%	93.6%	57.9%
Households	14,376	29,128	1,208,686	2.4%	102.6%	57.6%
Employment	16,116	30,881	1,799,152	1.7%	91.6%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
	<ul style="list-style-type: none"> Oregon City Loop Trail 		<ul style="list-style-type: none"> OR 213 	<ul style="list-style-type: none"> Molalla Ave. 	<ul style="list-style-type: none"> Union Pacific <ul style="list-style-type: none"> Valley sub mainline

Regional 2040 land uses

Regional Centers	Town Centers	Intermodal Facilities	Employment/Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> Oregon City 	<ul style="list-style-type: none"> Gladstone 			<ul style="list-style-type: none"> Beavercreek Metro Transfer Station

Needs and Strategies

Regional Needs		Corridor Strategies
Transit	<ul style="list-style-type: none"> Address transit service deficiencies on Abernethy Rd. and Redland Rd. Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy); <ul style="list-style-type: none"> Holcomb Blvd. has limited bus service; equity issues for public housing to be addressed. Need to connect Park Place UGB expansion concept plan area with transit. Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy); Direct, safe, comfortable, bike and pedestrian connections to all transit stops; Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. Provide bicycle parking and options for bike sharing at all HCT stations. 	<ul style="list-style-type: none"> Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. Analyze transit stops in relation to bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology. Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will

Regional Needs		Corridor Strategies
		<p>implement. Also consider developing private shuttle services to serve this need.</p> <ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. • Strategies for transit connections will be evaluated as part of the Park Place concept plan areas annexation to Oregon City.
Bike and Pedestrian	<ul style="list-style-type: none"> • Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. • Need for pedestrian and bike safety and access improvements on OR 99E south of UPRR tunnel. 	<ul style="list-style-type: none"> • Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas. • Use practical design to add shoulder width pavement for bike access. • Bike/ped facilities on Beaver Creek Rd. between OR213 and Oregon City limits. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Trails	<ul style="list-style-type: none"> • Direct connections between trails and on-street bicycle and pedestrian facilities. • Oregon City Loop, Beaver Lake, and Newell Canyon system trails incomplete. 	<ul style="list-style-type: none"> • Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. • Projects to be developed and constructed for trails identified in regional trails plan and RTP. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways	<ul style="list-style-type: none"> • OR 213 is a district highway from the OR 213/I-205 interchange and it has several signalized intersections. • Both the Washington St./Clackamas River Dr. and Redland Rd. intersections are spaced less than a half-mile apart. 	<ul style="list-style-type: none"> • Improvements to OR 213 in the area of the I-205 interchange in FC projects 11180, 10141. • OR 213 widening projects from Redland road south to UGB in State RTP, projects 10119 and 10140.

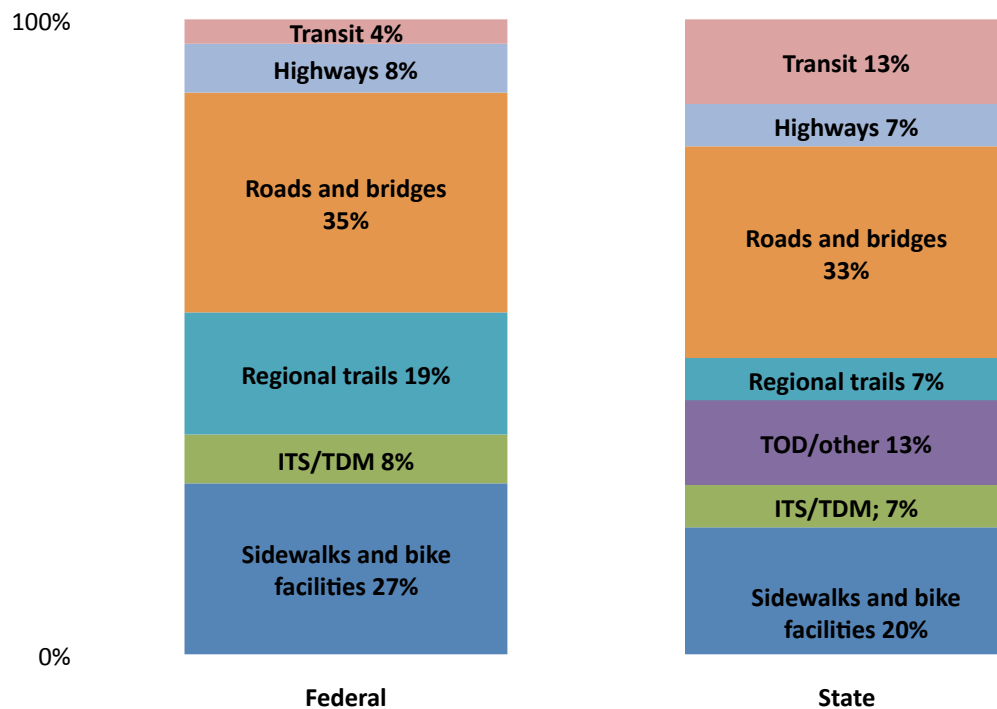
Regional Needs		Corridor Strategies
	<ul style="list-style-type: none"> There is less than one-mile spacing between the Beaver Creek Rd. and Molalla Ave. intersections. <p>The following do not meet the performance threshold in Table 2.4:</p> <ul style="list-style-type: none"> In the 2005 PM 2-hour peak volumes exceed capacity on OR 213 southbound from I-205 interchange to the Redland Rd. intersections. In the 2035 NB PM 2-hour peak volumes exceed capacity on OR 210 northbound and southbound from the I-205 interchange down to S. Henrici Rd. Need for OR 213 crossings for bike/pedestrian connectivity. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials	<p><u>Arterial Gaps</u></p> <ul style="list-style-type: none"> Address a gap in east/west connectivity between south of Warner Parrot Rd. between S. End Rd., Leland Rd., and Molalla Ave. Address gaps in east-west connectivity between Division St. and Holly Lane <p>The following do not meet the performance thresholds in Table 2.4:</p> <ul style="list-style-type: none"> In the 2035 NB PM 2-hour volumes exceed capacity on Mollala Ave, southbound near the Beaver Creek Rd. intersection and the OR 213 intersections. 	<ul style="list-style-type: none"> Meyers Rd. from OR 213 to High School Lane (not in RTP). Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Bridges		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Safety	<ul style="list-style-type: none"> OR 213 ranks on the ODOT SPIS list as Category 4 (Scale 1-5, 5 being highest priority) through Oregon City RC, becoming Category 3 south of the City. Two locations rank above the 85th percentile and as Category 5 at the Beaver Creek Rd. and Molalla Ave. intersections, although recent safety upgrades have improved these areas. 	<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Regional Freight		<ul style="list-style-type: none"> Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.

2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, MC #14 has 26 projects totaling \$281 million. Roads and bridges projects account for 35% of all of projects and 38% of the total corridor project costs (\$106 million). Sidewalk and bike projects comprise 27% of all of projects and 35% of the total corridor project costs (\$100 million). The State RTP adds 15 more projects and an additional \$329 million. Highway projects account for 7% of all of projects and 52% of the total corridor project costs (\$170 million) for operational improvements to I-205. Roads and bridges projects account for 33% of all of projects and 28% of the total corridor project costs (\$92 million). For both the Federal and State systems investments total just over \$610 million.

Projects by mode for federal and state systems



RTP projects by cost and mode

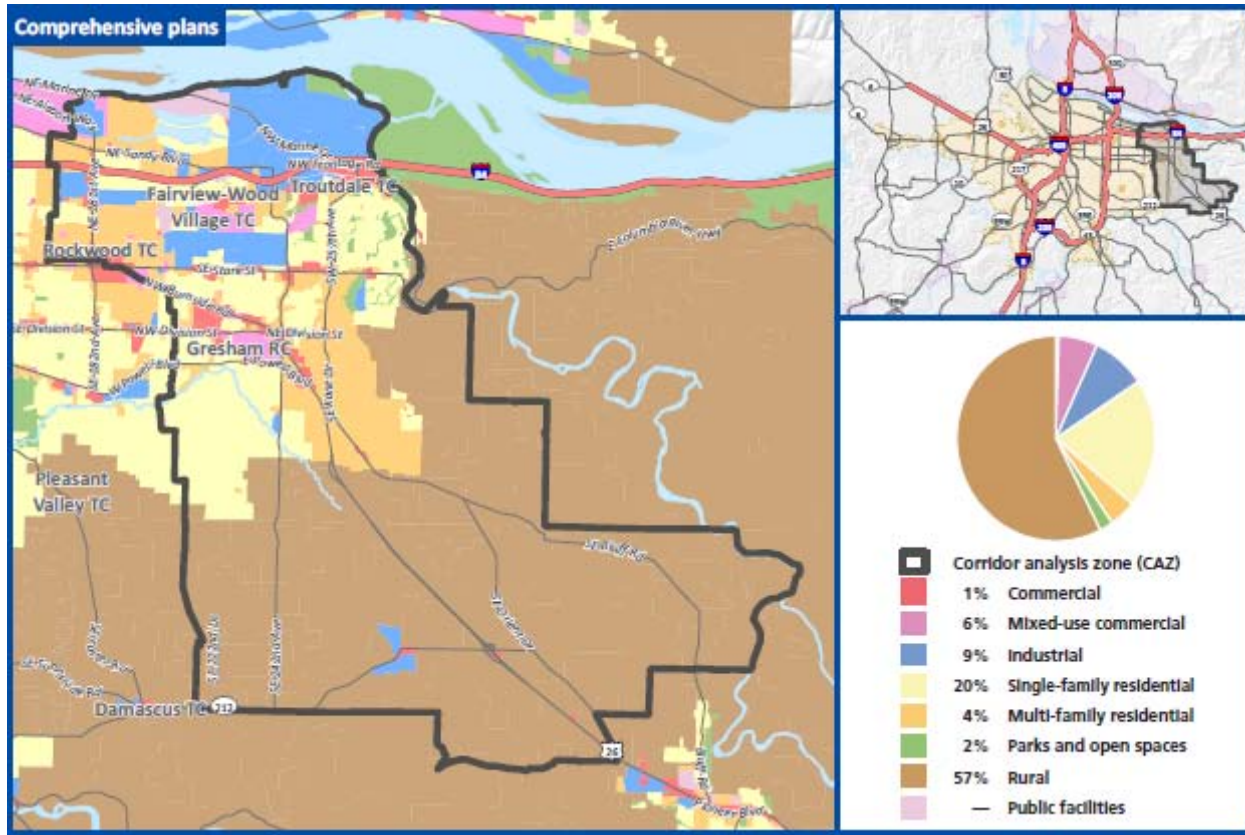
Mode	% of MC #14		% of MC #14	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Sidewalks and bike facilities	\$99,700,000	35%	\$20,846,598	6%
Freight	\$0	0%	\$0	0%
ITS/TDM	\$6,500,000	2%	\$0	0%

Mode	% of MC #14		% of MC #14	
	Federal System Cost by Mode	Total Project Cost	State System Cost by Mode	Total Project Cost
Regional trails	\$8,600,000	3%	\$5,000,000	2%
Roads and bridges	\$105,710,000	38%	\$91,627,801	28%
Highways	\$55,000,000	20%	\$170,000,000	52%
Transit	\$6,000,000	2%	\$31,000,000	9%
TOTAL	\$281,510,000	100%	\$329,474,399	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> System and demand management along mobility corridor and parallel facilities for all modes of travel. Address arterial connectivity and crossings. I-205/OR 213 Interchange. Project development for regional trails (Oregon City Loop and Newell Canyon).
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> Complete gaps in the arterial network. Project development for regional infrastructure to serve Park Place and Beaver Creek Rd. concept plan UGB expansion areas.
Long-term (10 – 25 years)	<ul style="list-style-type: none"> Construct regional trails and access in Newell Creek and Oregon City Loop
Unfunded Projects	
<ul style="list-style-type: none"> I-205/OR 213 Interchange – Grade separate at Washington St., \$15,600,000 OR 213 Redland Road interchange, \$72,400,000 OR 213 Beaver Creek Road Interchange, \$80,000,000 Additional interchange improvements on OR 213 at Washington, Redland, and Beaver Creek totaling \$168,000,000. 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> I-205/OR 213 Interchange Update Atlas of mobility corridors. Continue developing a data collection and performance monitoring system. Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> Initiate actions related to the HCT System Expansion Policy. Address connectivity needs in local TSPs. Incorporate strategies from the Regional TSMO plan into local TSPs. Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.

4.2.16 Mobility Corridor #15 – Troutdale/Wood Village/Fairview/Gresham to Damascus



Corridor function

What function(s) does the corridor serve?
2040 Access: Connects Gresham Regional Center and Springwater Industrial Area to I-84 and US 26 and provides regional access to Mount Hood Community College, Oxbow Park and Mount Hood.
Freight Mobility: Provides access from Springwater Industrial Area and surrounding agricultural areas to I-84 and US 26.
Statewide Travel: Serves as one of two gateways to the region from Central and Eastern Oregon.

Corridor characteristics

	2005	2035	2035 Regional Totals	% of Regional Total	% Change in Corridor	% Change in Region 2005- 2035
Population	109,387	183,180	3,097,402	5.9%	67.5%	57.9%
Households	40,416	70,323	1,208,686	5.8%	74.0%	57.6%
Employment	47,012	104,635	1,799,152	5.8%	122.6%	74.3%

Regional transportation facilities

HCT	Regional Trail	Regional Bridges	Throughways	Parallel Arterials	Heavy Rail
<ul style="list-style-type: none"> • Eastside MAX to Gresham 	<ul style="list-style-type: none"> • Gresham/Fairview Trail • Springwater Corridor Trail • I-84 Trail (east of Gateway RC) 	None	None	<ul style="list-style-type: none"> • 181st Ave. • 207th/223^r^d Ave. • 242nd/Hogan Rd. • 257th/Kane Rd. 	<ul style="list-style-type: none"> • Kenton line • Graham line

Regional 2040 land uses

Regional Centers	Town Centers	Employment Areas	Industrial Areas	Other Key Destinations
<ul style="list-style-type: none"> • Gresham 	<ul style="list-style-type: none"> • Fairview • Wood Village • Troutdale • Damascus 		<ul style="list-style-type: none"> • Springwater Industrial Area • Columbia Cascade River District • Columbia South Shore 	<ul style="list-style-type: none"> • Boring • Wood Village • Oxbow Park • Mt. Hood Recreational Area

Needs and Strategies

Regional Needs	Corridor Strategies
<p>Transit</p> <ul style="list-style-type: none"> • Improve HCT to serve the north/south movement of this mobility corridor. • Connect all 2040 Town Centers, Regional Centers, and the Central City with frequent transit service (consistent with RTP policy); • Address need for transit service to continue south of Gresham RC. • Add 30 minute of better transit service along 181st Ave south of Rockwood and 242nd Ave/Hogan Rd. • Connect all 2040 Regional Centers with high capacity transit (consistent with RTP policy); • Direct, safe, comfortable, bike and pedestrian connections to all transit stops; • Ensure transit connections between HCT stations and essential destinations located greater than one mile from stations. 	<ul style="list-style-type: none"> • Incentivize high to medium density, mixed-use, pedestrian oriented development in the Central City, Regional Centers, Town Centers, Main Streets, and around HCT station areas. If sufficient demand exists, additional transit service will be added to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement service. • The HCT plan ranked Troutdale to Damascus as a “regional vision” corridor. • Analyze transit stops in relation to bicycle and pedestrian network

Regional Needs		Corridor Strategies
	<ul style="list-style-type: none"> • Provide bicycle parking and options for bike sharing at all HCT stations. 	<p>and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these facilities. Refer to TriMet’s Pedestrian Network Analysis project for recommended places to focus attention and for replicable analysis methodology.</p> <ul style="list-style-type: none"> • Identify essential destinations greater than one mile from transit stops, estimate demand for local transit service that connects to HCT lines. If sufficient demand exists, add local transit investment to TriMet’s 5-year Transit Investment Plan (TIP). When finances permit, TriMet will implement. Also consider developing private shuttle services to serve this need. • Refer to the RTP Regional Transit Network map for regional bike-transit facility locations where demand is expected to be sufficient to warrant a major bike parking facility. Bikeway connections to these stations should be prioritized. For all other stations, refer to TriMet’s bike parking design guidelines. When finances permit, TriMet will implement. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Bike and Pedestrian	<ul style="list-style-type: none"> • Direct, continuous and comfortable bicycle and pedestrian pathways between essential destinations, transit stops, housing, jobs, and retail. 	<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Identify where essential destinations are in relation to transit stops, housing, jobs, and retail and prioritize pedestrian pathways between these areas.

Regional Needs		Corridor Strategies
Regional Trails	<ul style="list-style-type: none"> • Direct connections between trails and on-street bicycle and pedestrian facilities. • Address gaps in the Gresham-Fairview Trail north of Halsey and south of Burnside. • Address several gaps in trails serving east/west travel in this corridor: <ul style="list-style-type: none"> ○ The proposed Sullivan’s Gulch trail would complete the gap from 122nd Ave. to Gateway RC along I-84. ○ The existing Marine Drive trail includes multiple gaps between I-205 and Troutdale, including the 40-Mile Loop. ○ The Columbia Slough trail includes gaps within its proposed extent of I-205 to Fairview Lake. ○ The Max Path includes gaps within its proposed extent of Ruby Junction to Cleveland Station 	<ul style="list-style-type: none"> • Analyze regional trail access points in relation to on-street bicycle and pedestrian network and build direct, safe, comfortable bicycle and pedestrian facilities in areas that do not have these connections. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Throughways²⁸	<ul style="list-style-type: none"> • There is no designated throughway for this mobility corridor. 	<ul style="list-style-type: none"> • State RTP project 10383 will implement recommendations of refinement planning for this corridor. • Unfunded right-of-way preservation and construction of improvements, including a new I-84 interchange as determined by refinement planning, have been identified. Total: \$75,000,000. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
Arterials²⁹	<p><u>Arterial Deficiencies</u> The following do not meet the performance threshold in Table 2.4 2035 NB PM 2-hour peakvolumes exceed capacity on:</p> <ul style="list-style-type: none"> • 223rd Ave between Glisan St. and Stark St. • 242nd Dr. • 257th Ave at I-84 and south of Division St. • Powell Blvd. from 242nd Ave to Kane Dr. 	<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan.
At-Grade Heavy Rail		<ul style="list-style-type: none"> • Implement Regional Transportation Functional Plan and Urban Growth
Regional		

²⁸ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

²⁹ Do not meet performance thresholds defined in RTP Table 2.4 (Interim Regional Mobility Policy)

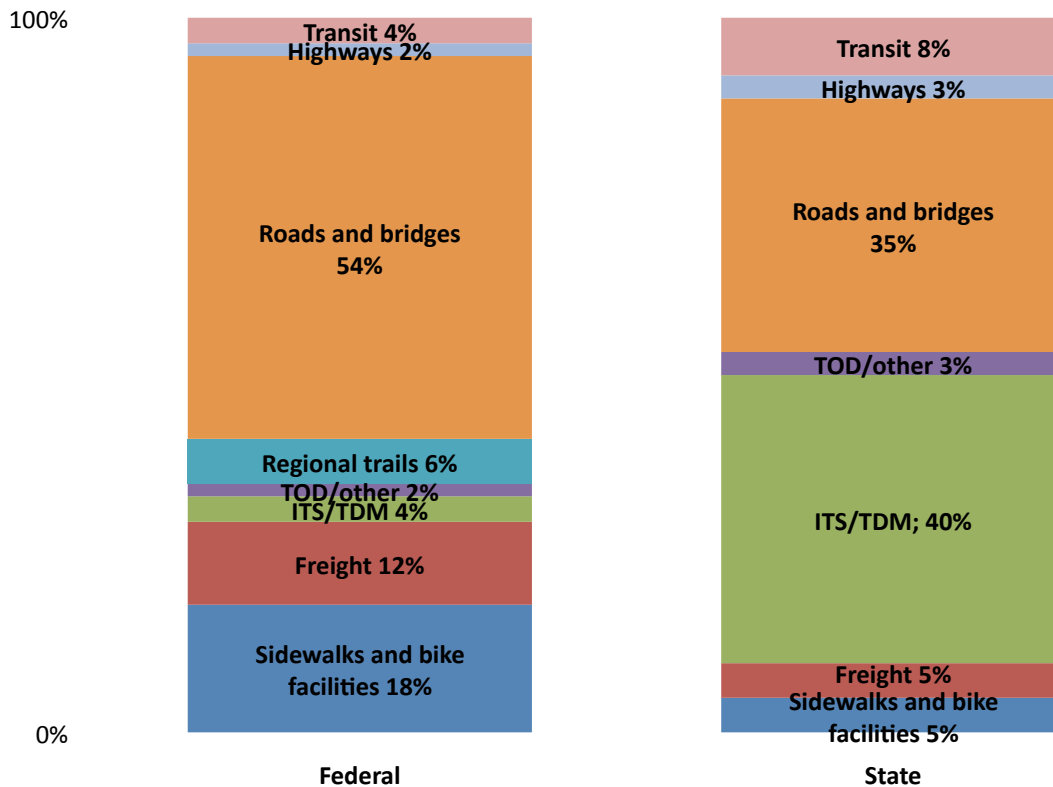
Regional Needs		Corridor Strategies
Bridges		Management Functional Plan.
Safety		
Regional Freight		

2035 RTP Investments

What are the strategies identified in the federal and state RTP?

Investment Summary: In the Federal RTP, this corridor has 112 projects totaling more than \$1billion. Roads and bridges projects account for 54% of all of federal projects and 68% (\$742million)of the total corridor project costs. The State RTP adds 62 more projects and an additional \$364 million in costs. ITS/TDM projects account for the largest percentage of additional investments (40%) at a cost of \$37 million. For both the Federal and State systems investments total roughly \$1.4 billion.

Projects by mode for federal and state systems



RTP projects by cost and mode

Mode	Federal System Cost by Mode	% of MC #15 Total Project Cost	State System Cost by Mode	% of MC #15 Total Project Cost
Sidewalks and bike facilities	\$159,552,483	15%	\$17,878,151	5%
Freight	\$94,521,155	9%	\$22,260,850	6%
ITS/TDM	\$10,950,000	1%	\$37,633,510	10%
TOD/other	\$7,511,000	1%	\$11,000,000	3%
Regional trails	\$22,806,078	2%	\$0	0%
Roads and bridges	\$742,914,393	68%	\$188,174,411	52%
Highways	\$31,500,000	3%	\$41,000,000	11%
Transit	\$18,704,873	2%	\$46,919,615	13%
TOTAL	\$1,088,459,982	100%	\$364,866,537	100%

2035 investment strategy

Strategy	
Near-Term (1 – 4 years)	<ul style="list-style-type: none"> • System and demand management along mobility corridor and parallel facilities for all modes of travel. • US 26/Springwater interchange improvements and IAMP. • Complete corridor refinement plan to provide connection(s) from I-84 to US 26. • Complete gaps and make crossing improvements in the Gresham/Fairview Trail.
Medium Term (5 – 10 years)	<ul style="list-style-type: none"> • Implement the results of the corridor refinement plan.
Long-term (10 – 25 years)	<ul style="list-style-type: none"> • Implement the results of the corridor refinement plan.
Unfunded Projects	
<ul style="list-style-type: none"> • I-84/US 26 ROW preservation, \$20,700,000 • I-84/US 26 refinement plan, \$1,400,000 • Hogan Corridor Improvements to I-84 interchange, \$43,400,000 • Construct I-84/US 26 corridor improvements, \$11,200,000 	
Regional Actions	Local Actions
<ul style="list-style-type: none"> • Conduct corridor refinement plan. • Update Atlas of mobility corridors. • Continue developing a data collection and performance monitoring system. • Work on furthering the Active Transportation Concept. 	<ul style="list-style-type: none"> • Initiate actions related to the HCT System Expansion Policy. • Address connectivity needs in local TSPs. • Incorporate strategies from the Regional TSMO plan into local TSPs. • Implement Regional Transportation Functional Plan and Urban Growth Management Functional Plan. • Provide Metro with TSMO, bike and pedestrian inventory data when updated through TSP update.