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METRO

2004 Regional Transportation Plan

Technical Appendix Table of Contents

- 1.0 RTP System Development and Analysis**
 - 1.1 Illustrative, Priority and Financially Constrained Project Lists
 - 1.2 System Performance Summary Tables
 - 1.3 Principles for System Development
 - 1.4 2020 No-Build System Assumptions
 - 1.5 2020 Existing Resources System Assumptions
 - 1.6 Highway Capacity Manual Level of Service Table
 - 1.7 2020 and 2025 Population and Employment Forecast
 - 1.8 TAZ Assumptions for Parking, Transit and Connectivity Factors and Non-SOV Modal Performance
- 2.0 RTP System Planning**
 - 2.1 Bicycle Travel Demand Model Enhancement
 - 2.2 2040 Modal Targets Background
- 3.0 Area and Corridor Planning**
 - 3.1 Refinement and Corridor Planning Priorities
 - 3.2 Western Bypass Study Recommendations
 - 3.3 Areas of Special Concern
- 4.0 Compliance with Federal Transportation Planning Requirements**
 - 4.1 Findings of Compliance with TEA-21
 - 4.2 2004 RTP Air Quality Conformity Determination
 - 4.3 Financially Constrained System Revenue Assumptions
- 5.0 Compliance with State Transportation Planning Rule**
- 6.0 2000 RTP Decision Record**

Appendix 1.0

RTP System Development and Analysis



2004 RTP

Appendix 1.1

RTP Project List
August 17, 2004

2000 RTP Project list as
Amended by Metro Resolution No. 03-3380A, Ordinance No. 04-1045A

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	2020 RTP Priority System	2025 RTP Illustrative System	2025 RTP Financially Constrained System	Est. Project Cost in 2003 dollars ("*" indicates phasing in financially	RTP Program Years
1000	Deleted (under construction)									
1001	Region	TriMet	I-205 LRT Extension	Gateway RC to Clackamas TC	Construct LRT and improvements to downtown transit mall	X	X	X	\$ 475,000,000	2004-09
1002	Region	CTran	Vancouver Light Rail Loop	Expo Center to Vancouver, Washington	Construct LRT	X	X		Washington State Project	2016-25
1003	Region	TriMet	Milwaukie Light Rail Extension	Rose Quarter to Milwaukie TC	Construct LRT	X	X	X	\$ 515,000,000	2010-15
1004	Region	ODOT	I-5 South Improvements	I-5 south of central city/I-405 to Charbonneau	Implement safety and modernization improvements recommended by studies in Projects 1008 and 1096	X	X		\$ 57,750,000	2016-25
1005	Region	Multnomah Co.	Rehabilitation of Willamette River Bridges	Broadway, Burnside, Morrison, Sauvie Island Bridges	Provide for long-term rehabilitation and structural needs of bridges	X	X		\$ 93,334,395	2004-25
1006	Region	Multnomah Co.	Willamette River Bridge Preservation (Painting)	Burnside, Morrison, Sauvie Island Bridges	Provide for long-term painting preservation needs of bridges	X	X		\$ 37,338,840	2004-25
1007	Region	Multnomah Co.	Broadway and Burnside Bridge Improvements	Broadway and Burnside bridges	Broadway-painting, phase 1 seismic retrofit, sidewalk replacements and resurface bridge deck and approaches; Burnside - deck rehabilitation, mechanical improvements, painting and phase 1 seismic retrofit	X	X	X	\$ 85,239,000	2004-25
1008	Region	ODOT/Metro	I-5 South Corridor Study	Highway 217 to Wilsonville/Charbonneau	Study to define needed improvements for motor vehicle, truck and transit travel in corridor	X	X	X	\$ 1,732,500	2016-25
1009	Region	Portland	Springwater Trail Access Improvements	Sellwood Bridge to SPRR	Construct shared-use path; improve bicycle/pedestrian access	X	X	X	\$ 2,310,000	2004-09
1010	Region	Multnomah Co.	Morrison Bridge Deck Replacement	Morrison Bridge	Replace deck on lift-span and bridge approach	X	X	X	\$ 10,000,000	2004-09
1011	Region	TriMet	Transit center and park-and-ride upgrades	Transit center and park-and-ride upgrades throughout subarea	Transit center and park-and-ride upgrades	X	X		see Tri-Met total	2004-25
1012	Region	Multnomah Co.	Sellwood Bridge Replacement	Multnomah County	Implement recommendations from South Willamette Study	X	X	X	\$ 90,000,000	2004-09
1013	Region	Multnomah Co.	WRBAP Future Phase Project Implementation	Sellwood Bridge	Eastside Undercrossing; Light Pole Relocation	X	X		\$ 635,250	2016-25
1014	Deleted (Construction completed)									
1015	Central City	TriMet/Portland	Portland Street Car - Phase 3a (River Place)	PSU to Riverplace	Construct street car	X	X	X	\$ 15,350,000	2004-09
1016	Deleted (under construction)									
1017	Region	ODOT/Metro	Macadam/Highway 43 Transit/TDM Study	Portland central city to Lake Oswego	Study to define additional transit and demand management improvements in corridor	X	X		\$ 1,155,000	2004-09
1018	Region	Portland	Willamette Greenway Trail extension	St. Johns Bridge to Pier Park and connect to Smith and Bybee Lakes and to Kelly Point Park	Study feasibility of shared-use path				n/a	2016-25
1019	Central City	TriMet	Barbur Boulevard Rapid Bus	PCBD to King City	Construct improvements that enhance Rapid Bus service	X	X		see Tri-Met total	2004-09
1020	Region	Various	Red Electric Line Trail	Willamette Park to Oleson Road	Study feasibility of shared-use path	X	X	X	\$ 155,925	2004-09
1021	Deleted (constructed)									
1022	Region	Portland	I-84/Banfield Trail	Willamette River/Eastbank Esplanade to I-205 bike lanes	Study feasibility of shared-use path	X	X	X	\$ 150,000	2016-25

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1023	Region	ODOT/Metro	Banfield (I-84) Transit/TSM Study	I-205 to Portland central city	Study to define additional transit and system management improvements in corridor	X	X		\$ 1,155,000	2010-15
1024	Central City	ODOT	I-5/McLoughlin Ramps	McLoughlin to I-5 north at Division	Construct new I-5SB off-ramp and I-5 NB on-ramp at McLoughlin Boulevard	X	X	X	\$ 23,100,000	2016-25
1025	Central City	ODOT	I-5/North Macadam Access Improvements	NB I-5 to NB Macadam Avenue	Construct new off-ramp	X	X	X	\$ 20,000,000	2016-25
1026	Deleted (alternative improvements provided)									
1027	Central City	Portland/ODOT	South Portland Improvements	South Portland sub-area	Redesign Naito Pkwy as a neighborhood collector and reconnect east-west local streets. Rebuild Ross Island Bridge Ramps to separate regional traffic from neighborhood streets and improve access to I-405 and I-5	X	X	X	\$ 28,293,000	2010-15
1028	Central City	Portland/ODOT	Kerby Street Improvements	Kerby Street at I-5	Improve I-405/Kerby Street interchangeto calm traffic and improve local access	X	X	X	\$ 515,000	2004-09
1029	Central City	Portland	SE Water Avenue Extension	SE Water Avenue	Extend SE Water Avenue from Carruthers to Division Place	X	X	X	\$ 288,750	2004-09
1030	Central City	ODOT	Ross Island Bridge Interchange	East approach to Ross Island Bridge	Interchange improvement	X	X	X	\$ 5,082,000	2016-25
1031	Central City	ODOT	I-405/US 26 Connector	Ross Island Bridge to I-405 to US 26	Construct new freeway access	X	X		\$ 57,750,000	2016-25
1032	Central City	Portland	Southern Triangle Circulation Improvements	Between the Ross Island Bridge - Hawthorne Bridge/ Willamette River - SE Grand-MLK	Improve local street network and regional access routes in the area. Improve freeway access route from CEID to I-5 SB via the Ross Island Bridge	X	X	X	\$ 2,887,500	2016-25
1033	Deleted (Construction completed)									
1034	Deleted (Construction completed)									
1035	Central City	Portland	SW Columbia Street Reconstruction	18th Avenue to Naito Parkway	Rebuild street	X	X	X	\$ 924,000	2004-09
1036	Central City	Portland	Broadway/Flint Arena Access	Broadway/Flint at Rose Quarter	Intersection realignment	X	X	X	\$ 358,050	2004-09
1037	Central City	Portland	Bybee Boulevard Overcrossing	Bybee Boulevard/McLoughlin Boulevard	Replace substandard 2-lane bridge with 2-lane bridge with standard clearance	X	X	X	\$ 4,042,500	2010-15
1038	Central City	Portland	SE 11th/12th Rail Crossing	Western edge of SE Division Street			X		\$ 98,175	2016-25
1039	Central City	Portland	SE Belmont Ramp	Belmont ramp of Morrison Bridge, eastside	Reconstruction of the ramp to provide better access to the Central Eastside	X	X	X	\$ 1,732,500	2010-15
1040	Central City	Portland	SE Clay/MLK Intersection Improvements	SE Clay and MLK	Geometric, signalization and channelization improvements to allow transit and general traffic access to westbound Clay street from southbound MLK		X		\$ 323,400	2016-25
1041	Central City	Portland	Interstate Avenue Seismic Retrofit	Interstate Avenue bridge at Larrabe Avenue	Seismic retrofit project		X		\$ 1,455,300	2016-25
1042	Central City	Portland	NE 12th Avenue Seismic Retrofit	NE 12th Avenue/Lloyd Boulevard	Seismic retrofit project		X		\$ 415,800	2016-25
1043	Central City	Portland	Steel Bridge Rehabilitation	Steel Bridge	Major bridge maintenance, including painting, mechanical maintenance and structural improvements		X		\$ 30,000,000	2004-09
1044	Central City	Portland	NW Kittridge Avenue Bridge Seismic Retrofit	Kittridge Street bridge at Yeon Avenue	Seismic retrofit project		X		\$ 623,700	2016-25
1045	Central City	Portland	Steel Bridge East Ramps	Seismic retrofit project			X		\$ 831,600	2016-25

Shaded projects are included in Financially Constrained System

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1046	Central City	Portland	Transit Mall Restoration	Central City	Reduce maintenance and repair costs	X	X	X	\$ 2,852,850	2004-09
1047	Central City	Portland	SE 7-8th Avenue Connection	Central Eastside Industrial District	Construct new street connection from SE 7th to 8th Avenue at Division Street	X	X	X	\$ 577,500	2010-15
1048	Central City	Portland	South Waterfront Pedestrian and Bicycle Access Improvements	South Waterfront District of the central city	Implement pedestrian and bicycle district access improvements identified in the South Waterfront Framework Plan, including overcrossings of I-5, improvements to Sheridan-Corbett and the Greenway Trail	X	X	X	\$ 4,966,500	2004-09
1049	Central City	Portland	South Waterfront Transit Improvements	South Waterfront District of the central city	Implement transit improvements identified in the North Macadam Framework Plan, including central city transit hub and local bus service improvements	X	X	X	\$ 2,000,000	2010-15
1050	Central City	TriMetPortland	North Macadam TMA	South Waterfront District of the central city	Implement transportation management area improvements identified in the South Waterfront Framework Plan (placeholder TMA)	X	X	X	\$ 200,000	2004-09
1051	Central City	Portland	W. Burnside Street Improvements	W 15th to NW 23rd	Boulevard design improvements including pavement reconstruction, wider sidewalks, curb extensions, safer crossings, traffic signals at W 20th PI and W 22nd, and traffic management to limit motorist delays	X	X	X	\$ 10,000,000	2004-09
1052	Central City	Portland	North Macadam Street Improvements	South Waterfront District of the central city	Implement street improvements identified in the South WaterfrontFramework Plan, including Bancroft, Bond, Curry, River Parkway, Harrison connector, key access intersections and other street improvements	X	X	X	\$ 20,501,250	2004-09
1053	Central City	Portland	Naito Parkway Improvements	NW Davis to SW Market	Complete boulevard design improvements, including bike lanes, pedestrian crossings and pavement reconstruction	X	X	X	\$ 7,400,000	2004-09
1054	Central City	Portland	Broadway/Weidler Improvements, Phase II and III	At Arena and 15th Avenue to 24th Avenue	Complete boulevard design improvements and ITS	X	X	X	\$ 6,456,450	2004-09
1055	Central City	Portland/ODOT	MLK/Grand Improvements	Central Eastside and Lloyd districts	Complete boulevard design improvements	X	X	X	\$ 3,465,000	2016-25
1056	Deleted (project completed)									
1057	Region	Portland	Eastbank-Springwater Trail Connector (Three Bridges) Improvement	Sellwood Bridge to SPRR	Construct shared-use path and three bridges to connect the Eastbank Esplanade and Springwater Corridor shared-use path, including new bridges over McLoughlin boulevard and Johnson Creek	X	X	X	\$ 4,700,000	2004-09
1058	Deleted (Construction completed)									
1059	Deleted (alternative route provided)									
1060	Deleted (local level improvement)									
1061	Deleted (local level improvement)									
1062	Central City	Multnomah Co.	WRBAP Future Phase Project Implement.	Morrison Bridge	Morrison Bicycle Pathway; improve pedestrian access	X	X	X	\$ 1,466,850	2004-09
1063	Deleted (local level improvement)									
1064	Deleted (under construction)									

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1065	Deleted (included in project 1066)									
1066	Deleted (local level improvement)									
1067	Central City	ODOT	SE McLoughlin Boulevard Bikeway	SE 17th Avenue to SE Clatsop Street	Retrofit bike lanes to existing street		X		\$ 577,500	2016-25
1068	Central City	Portland	SE Division Place/SE 9th Bikeway	SE 7th Avenue to SE Center Street	Retrofit bike lanes to existing street	X	X	X	\$ 19,635	2016-25
1069	Deleted (local level improvement)									
1074	Deleted (Construction completed)									
1075	Deleted (Construction completed)									
1076	Deleted (included in project 1027)									
1078	Central City	Portland	West Burnside Pedestrian and Bicycle Improvements	Tichner to Skyline	Retrofit bikeway to existing street, improve sidewalks, lighting and crossings		X		\$ 317,625	2016-25
1079	Deleted (Construction completed)									
1080	Central City	Portland	Hawthorne Boulevard Pedestrian Improvements	20th Avenue to 60th Avenue	Improved lighting, crossings, bus shelters, bike parking, benches and parallel facility bike improvements	X	X	X	\$ 866,250	2004-09
1081	Deleted (Construction completed)									
1082	Central City	Portland	SE Grand Avenue Bridgehead Improvements	Central Eastside Industrial District	Reconstruct west edge of SE Grand at bridgehead to provide sidewalks and urban standard turn lanes for vehicles and truck safety and access	X	X	X	\$ 1,600,000	2004-09
1083	Central City	Portland	SE Powell/Milwaukie Intersection Improvements	SE Powell Boulevard at Milwaukie Avenue	Reconfigure signal phasing to add pedestrian crosswalk on the east leg of the intersection.		X		\$ 288,750	2004-09
1084	Central City	Portland	Clay/2nd Pedestrian/Vehicle Signal	SW Clay Street and SW 2nd Avenue	New signal installation	X	X	X	\$ 115,500	2004-09
1085	Deleted (included in project 1119)									
1086	Central City	TriMet/Portland	Portland Street Car - Phase 3b (Gibbs)	Riverplace to Gibbs Street	Construct street car		X	X	\$ 20,000,000	2004-09
1087	Central City	TriMet/Portland	Portland Street Car - Phase 3c (Bancroft)	Gibbs Street to Bancroft Street	Construct street car		X	X	\$ 12,000,000	2004-09
1088	Deleted (Study completed)									
1089	Central City	Portland	East Burnside/NE Couch Couplet and Street Improvements	East 12th Avenue to Burnside Bridge	Implement a one-couplet design including new traffic signals, widened sidewalks, curb extension, bike lanes, on-street parking and street trees	X	X	X	\$ 7,500,000	2010-15
1090	Central City	Portland	W Burnside/NW Couch Couplet and Street Improvements	Burnside Bridge to West 15th Avenue	Implement a one-couplet design including new traffic signals, widened sidewalks, curb extension, bike lanes, on-street parking and street trees	X	X	X	\$ 7,500,000	2010-15
1091	Central City	Portland	Central Eastside Truck Access Study	Central Eastside Industrial District	Complete truck access study		X		n/a	2016-25
1092	Central City	Portland	NW 14th/16th Study	Burnside to Vaughn	Signalization and improved access to I-405		X		n/a	2016-25
1093	Central City	Portland	Central City Pedestrian Enhancements Study	Central City	Study pedestrian enhancements	X	X		n/a	2004-09

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1094	Central City	Portland	SE Sandy Boulevard Study	Stark Street to Burnside	Realign blocks to improve circulation in the area				n/a	2016-25
1095	Central City	Portland	Union Station Multi-modal Center Study	North transit mall in Central City	Identify improvements to meet additional transportation services to Union Station.	X	X	X	\$ 300,000	2016-25
1096	Central City	Portland	Barbur/I-5 Corridor Study	I-405 to Highway 217	Assess corridor improvement options	X	X	X	\$ 1,732,500	2004-09
1097	Central City	Portland	Naito Parkway Street and Pedestrian Improvements	Broadway Bridge north of Terminal one property	Construct streetscape improvements including pedestrian amenities	X	X	X	\$ 3,250,000	2004-09
1098	Central City	Portland	Aerial Tram	Marquam Hill - South Waterfront District	Develop and implement an aerial tram between Marquam Hill and South Waterfront District. Project implementers include Oregon Health & Science University, Portland Aerial Tram Inc, and others.	X	X	X	\$ 15,000,000	2004-09
1100	Central City	ODOT/Portland	Central City TSM improvements	Central City - various locations	Implement Central City TSM improvements to arterials.	X	X	X	\$ 2,310,000	2004-09
1101	Central City	Portland	SW Jefferson Street ITS	At SW 18th Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 69,300	2010-15
1102	Central City	Portland	Macadam Avenue ITS	Three signals between the Sellwood Bridge and Hood/Bancroft	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 334,950	2010-15
1103	Central City	Portland	N. Going Street ITS	Two signals at N. Greeley and at Interstate Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 294,525	2010-15
1104	Central City	Portland	NW Yeon/St. Helens	Four signals between I-405/Vaughn/23rd and Nicolai Street	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 222,338	2004-09
1105	Central City	Portland	SW-NW 14/16th - SW 13th/14th Avenue ITS	Six signals between SW Clay and NW Glisan	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 202,125	2010-15
1106	Central City	Portland	Portland Streetcar - Eastside, Phase 1 (Lloyd District)	Pearl District to Lloyd District	Construct street car from NW Lovejoy/10th Avenue to NE 7th Avenue/Oregon Street	X	X	X	\$ 36,900,000	2004-09
1107	Central City	Portland	Portland Streetcar - Eastside, Phase 2 (Central Eastside Industrial District)	Lloyd District to Central Eastside Industrial District	Construct street car from NE Oregon Street to Water Avenue	X	X	X	\$ 44,000,000	2004-09
1108	Central City	Portland	Streetcar Feasibility Study	Inner eastside Portland neighborhoods	Conduct a feasibility study of streetcar service	X	X	X	n/a	2004-09
1109	Swan Island IA	Portland	Going Street Rail Overcrossing	North Going Street at Swan Island	Seismic retrofit project will include work to both the substructure and superstructure to help minimize the risk of structural collapse in a major earthquake	X	X	X	\$ 3,579,345	2004-09
1113	Swan Island IA	Portland	Going Street Bikeway	N Interstate Avenue to N Basin Street and N. Lagoon to Channel	Retrofit bike lanes to existing street	X	X	X	\$ 90,090	2004-09
1118	Hollywood TC	TriMet	Sandy Boulevard Frequent Bus	Sandy Boulevard	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 1,760,000	2010-15
1119	Hollywood TC	Portland	Sandy Boulevard/Burnside/12th Avenue Intersection	Sandy Boulevard/Burnside/12th Avenue Intersection	Redesign intersection	X	X	X	\$ 4,620,000	2004-09

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1120	Hollywood TC	Portland	Sandy Boulevard Multi-Modal Improvements, Phase I	12th Avenue to 47th Avenue	Retrofit existing street with multi-modal boulevard improvements including redesign of selected intersections to add turn lanes and improve pedestrian crossings, bike lanes, on-street parking, and safety improvements	X	X	X	\$ 17,325,000	2004-09
1122	Hollywood TC	Portland	Sandy Boulevard Multi-Modal Improvements, Phase II	47th Avenue to 99th Avenue	Retrofit existing street with multi-modal boulevard improvements including redesign of selected intersections to add turn lanes and improve pedestrian crossings, bike lanes, on-street parking, and safety improvements	X	X	X	\$ 4,620,000	2010-15
1126	Hollywood TC	Portland	NE/SE 50s Bikeway	NE Tillamook to SE Woodstock	Retrofit streets to add bike lanes	X	X	X	\$ 577,500	2004-09
1130	Hollywood TC	Portland	Hollywood TC Pedestrian District Improvements	NE Halsey Street, NE 37th to 47th, Tillamook Street to I-84	Multi-modal street improvements, traffic signals, restriping, improved pedestrian crossings and connections to transit center	X	X	X	\$ 7,680,750	2004-09
1135	St. Johns TC	TriMet	MLK/Lombard Frequent Bus	PCBD to St. Johns Town Center	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 2,100,000	2010-15
1137	St. Johns TC	Portland	Lombard/St. Louis/Ivanhoe Multi-modal Improvements	Lombard Street/St. Louis/Ivanhoe Streets	Implement signal and pedestrian crossing improvements to improve pedestrian safety and freight flow	X	X	X	\$ 1,100,000	2004-09
1138	St. Johns TC	TriMet	Lombard/39th Frequent Bus	Milwaukie Town Center to St. Johns Town Center	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 2,700,000	2004-09
1139	St. Johns TC	Portland/ODOT	St. Johns Bridge Restoration	St. Johns Bridge	Complete restoration improvements	X	X		\$ 71,263,500	2010-15
1140	St. Johns TC	ODOT	WRBAP Future Phase Project Implement.	St. Johns Bridge	Bridge Avenue trail		X		\$ 346,500	2016-25
1143	St. Johns TC	ODOT	N / NE Lombard Bikeway	N Reno to N Columbia; St. Johns Bridge to MLK Boulevard	Retrofit bike lanes to existing street	X	X	X	\$ 1,155,000	2010-15
1144	Deleted (Construction completed)									
1145	Deleted (Construction completed)									
1146	Deleted (Construction completed)									
1147	St. Johns TC	Portland	Willamette Cove Segment Trail	Willamette Cove to St. Johns Bridge	Study feasibility of shared-use path	X	X	X	n/a	2004-09
1148	St. Johns TC	Portland	North Willamette Greenway	Steel Bridge to Willamette Cove	Study feasibility of shared-use path		X		n/a	2016-25
1150	St. Johns TC and Lombard MS	Portland/ODOT	St. Johns TC Pedestrian District	Lombard Street: MLK Jr. Boulevard to St. Johns TC	Plan and construct improvements to the pedestrian environment within the Pedestrian District such as improved lighting and crossings	X	X	X	\$ 2,000,000	2004-09
1151	Deleted (Study completed; pending adoption)									
1152	Deleted (Study completed)									
1156	Lents TC	Portland	SE Ellis Bikeway	SE Foster Road to SE 92nd Avenue	Retrofit bike lanes to existing street	X	X	X	\$ 462,000	2016-25
1157	Lents TC	Portland	SE 92nd Avenue Bikeway and Pedestrian Improvements	SE Powell Boulevard to Foster Road	Construct sidewalk, crossing improvements, and bike lanes	X	X	X	\$ 1,530,500	2004-09

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1158	Lents TC	Portland	Lents TC Pedestrian District	Lents Town Center Pedestrian District	Pedestrian facility improvements to key links accessing the Foster-Woodstock couplet	X	X	X	\$ 831,600	2010-15
1159	Lents TC	Portland	Foster Pedestrian Access to Transit Improvements	Powell Boulevard to Lents TC	Improve sidewalks, lighting, crossings, bus shelters & benches	X	X	X	\$ 2,310,000	2004-09
1160	Lents TC	Portland	Foster-Woodstock, Phase I	87th-94th Avenues and 92nd Avenue within the Foster-Woodstock couplet	Implement Lent Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, increased on-street parking	X	X	X	\$ 6,930,000	2004-09
1161	Lents TC	Portland	Foster-Woodstock, Phase II	87th-94th Avenues and 92nd Avenue within the Foster-Woodstock couplet	Implement Lent Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting	X	X	X	\$ 5,775,000	2010-15
1162	Lents TC	Portland	Foster Road Improvements	79th to 87th Avenues	Implement Lent Town Center Business District Plan with new traffic signals, pedestrian amenities, wider sidewalks, pedestrian crossings, street lighting, increased on-street parking, as appropriate	X	X	X	\$ 2,310,000	2016-25
1163	Region	ODOT	I-205/Powell Boulevard/Division interchanges	I-205 and Powell Boulevard and Division Street	Construct improvements to allow full turning movements	X	X	X	\$ 12,000,000	2016-25
1164	Region	ODOT	I-205 Ramp Study - PE/EA	I-205/Powell to Division	Perform a design study to evaluate modifications to the existing overpass at I-205 and Powell Boulevard, including full access ramps to and from I-205. The study should also address impacts to the interchange influence area along Powell Boulevard, Division Street, and SE 92nd Avenue.	X	X	X	\$ 1,000,000	2004-09
1165	Region	ODOT	I-205 Ramp Right-of-way Acquisition	I-205/Powell to Division	Acquire ROW	X	X	X	\$ 2,000,000	2004-09
1166	Hillsdale TC	Portland	Capitol Highway/Vermont/30th Avenue Intersection Improvement	Capitol Highway at Vermont and 30th Avenue	Provide traffic safety and pedestrian and bicycle improvements at this intersection and approaching street segments	X	X	X	\$ 450,000	2010-15
1167	Hillsdale TC	Portland	Capitol Highway Improvements	Sunset Boulevard to Barbur Boulevard	Provide pedestrian and bicycle improvements to implement Capitol Highway Plan	X	X	X	\$ 910,000	2010-15
1168	Hillsdale TC	Portland	Hillsdale Intersection Improvements	BH Highway/Capitol Highway/Bertha Boulevard	Redesign the intersection with "boulevard design"	X	X	X	\$ 975,975	2004-09
1169	Hillsdale TC	Portland	SW Vermont Bikeway, Phase I and II	SW Oleson to 45th Avenue; SW 45th Avenue to SW Terwilliger	Retrofit bike lanes to existing street	X	X	X	\$ 3,465,000	2016-25
1170	Hillsdale TC	Portland	Capitol Highway Improvements - Marquam Segment	Huber Street to Stephenson Street	Provide pedestrian crossings and median design treatments		X		\$ 750,000	2016-25
1171	Hillsdale TC	Portland	SW 30th Avenue Bikeway	BH Highway to SW Vermont Street	Retrofit bike lanes to existing street	X	X	X	\$ 1,075,305	2016-25
1172	Hillsdale TC	Portland	SW Bertha Bikeway Improvements	SW Vermont to BH Highway	Widen street to add bike lanes	X	X	X	\$ 462,000	2004-09
1173	Hillsdale TC	Portland/ODOT	Hillsdale TC Pedestrian Improvements	Capitol, BH Highway, Bertha. and neighborhood streets	Construct pedestrian and street network improvements	X	X	X	\$ 3,465,000	2010-15
1176	Hillsdale TC	Portland	SW Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements	Capitol Highway to 65th Avenue	Construct sidewalks, crossing improvements for access to transit and bike improvements	X	X	X	\$ 2,541,000	2004-09
1177	Hillsdale TC	Portland	SW Sunset Pedestrian and Bicycle Improvements	Capitol Highway to Dosch Road	Construct sidewalks, crossing improvements for access to transit and bike improvements	X	X	X	\$ 1,386,000	2004-09
1181	Hillsdale TC	Portland	Beaverton-Hillsdale Highway ITS	Three signals: at Terwilliger, Bertha Boulevard and Shattuck Road	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 103,950	2010-15

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1184	Raleigh Hills TC	ODOT/WashCo	BH Highway/Oleson/Scholls Ferry Redesign	BH Highway/Scholls/Oleson intersection	Redesign intersection to improve safety and relieve traffic congestion (FC project to complete PE and construct Phase 1 of project realigning Oleson Rd. to provide direct connections to Scholls Ferry Rd. and BH Hwy)	X	X	X	\$ 50,000,000	*	2010-15
1185	Raleigh Hills TC	Washington Co.	Oleson Road Improvements	Fanno Creek to Hall Boulevard	Improve to urban standard with bike lanes, sidewalks, lighting, crossings, bus shelters & benches; signal at 80th	X	X	X	\$ 16,170,000		2004-09
1186	Raleigh Hills TC	Washington Co.	Scholls Ferry Bikeway	Multnomah County line to BH Highway	Retrofit street to add bike lanes	X	X		\$ 548,625		2016-25
1189	Raleigh Hills TC	Portland	SW 62nd Avenue at Beaverton-Hillsdale Highway	SW 62nd Avenue at Beaverton-Hillsdale Highway	Install median refuge to improve pedestrian crossing.	X	X	X	\$ 115,500		2004-09
1193	West Portland TC	Portland/ODOT	West Portland TC Safety Improvements	Barbur/Capitol/Taylor's Ferry intersection	Safety improvements, incl. signalization at Capitol Hwy/Taylor's Ferry and Huber/Barbur and sidewalks and crossing improvements	X	X	X	\$ 704,550		2004-09
1194	West Portland TC	Portland	Capitol Highway Seismic Retrofit	Capitol Highway bridge at Barbur Boulevard	Seismic retrofit project	X	X		\$ 1,039,500		2016-25
1195	West Portland TC	Portland/ODOT	Barbur Boulevard Multi-modal Improvements, Phase 1	Terwilliger Boulevard to south Portland city limits	Complete boulevard design improvements including sidewalks and street trees, safe pedestrian crossings, enhance transit access and stop locations, traffic signal at Barbur/30th, and bike lanes (Bertha - City Limits)	X	X		\$ 15,000,000		2004-09
1196	West Portland TC	Portland/ODOT	Barbur Boulevard Multi-modal Improvements, Phase 2	Terwilliger Boulevard to 3rd Avenue	Construct Improvements for transit, bikes and pedestrians. Transit improvements include preferential signals, pullouts, shelters, left turn lanes and sidewalks	X	X		\$ 4,000,000		2010-15
1198	West Portland TC	Portland	SW Taylor's Ferry Bikeway	SW Capitol Highway to Portland City Limits	Retrofit bike lanes to existing street; shoulder widening, drainage	X	X		\$ 2,079,000		2004-09
1199	West Portland TC	Portland/ODOT	Barbur Boulevard Pedestrian Access to Transit Improvements	Downtown Portland to Tigard	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 4,620,000		2004-09
1200	West Portland TC	Portland/ODOT	Pedestrian Overpass near Markham School	SW Barbur and I-5; connects SW Alfred Street and SW 52nd Avenue	Construct pedestrian crossing over I-5	X	X		\$ 3,465,000		2004-09
1201	West Portland TC	Portland/ODOT	West Portland TC Pedestrian District	Barbur, Capitol and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters & benches	X	X		\$ 5,775,000		2016-25
1202	West Portland TC	Portland	SW Capitol Highway Pedestrian and Bicycle Improvements	Multnomah Boulevard to Taylor's Ferry Road	Construct sidewalks, improve crossings and bike facilities	X	X	X	\$ 1,386,000		2004-09
1205	West Portland TC	ODOT	West Portland I-5 Access Study	Taylor's Ferry and Barbur ramps to I-5	Identify possible new connections over I-5 to serve motor vehicles, pedestrians, and bicycle travel		X		n/a		2004-09
1206	Deleted (included in project 1205)										
1207	Deleted (Construction completed)										
1209	Portland Mainstreet	Portland	NW 23rd Avenue Reconstruction	Burnside Street to Lovejoy Street	Rebuild street	X	X	X	\$ 1,810,000		2004-09
1210	Portland Mainstreet	Portland/ODOT	Sandy/Parkrose Connectivity Improvements	Killingsworth/102nd to 109th, I-205 to 101st	Complete bike and pedestrian connections between I-205 and Parkrose neighborhoods.		X		\$ 578,524		2016-25
1211	Portland Mainstreet	Portland	Garden Home/Oleson/Multnomah Improvements	Multnomah Boulevard to 71st Avenue	Reconstruct intersection, sidewalks, crossings	X	X	X	\$ 1,010,625		2004-09
1212	Portland Mainstreet	Portland	SE Division Bikeway	SE 52nd to SE 82nd; SE 122nd to Portland city limit	Retrofit bike lanes to existing street	X	X	X	\$ 47,355		2016-25

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1213	Deleted (under construction)									
1214	Portland Mainstreet	Portland	Division Street Transit Improvements, Phase I	SE Grand Avenue to 136th Avenue	Improve sidewalks, lighting, crossings, bus shelters & benches	X	X	X	\$ 6,814,500	2004-09
1215	Portland Mainstreet	Portland	Division Street Transit Improvements, Phase II	SE 136th Avenue to 174th Avenue	Improve sidewalks, lighting, crossings, bus shelters & benches		X		\$ 1,270,500	2016-25
1216	Portland Mainstreet	Portland/ODOT	82nd Ped Access to Transit Improvements	NE Killingsworth to SE Clatsop	Improve sidewalks, lighting, crossings, bus shelters & benches		X		\$1,732,500	2016-25
1217	Deleted (Construction completed)									
1218	Portland Mainstreet	Portland	SE Foster Road/82nd Avenue Intersection Improvements	SE Foster Road/82nd Avenue	Pedestrian improvements		X		\$ 346,500	2016-25
1219	Portland Mainstreet	Portland	Belmont Pedestrian Improvements	25th Avenue to 43rd Avenue	Identify improvements along Belmont to enhance pedestrian access to transit, improve safety, and enhance streetscape such as traffic signals, lighting, bus shelters, benches, and crossings	X	X	X	\$ 2,310,000	2010-15
1220	Portland Mainstreet	Portland	Fremont Pedestrian Improvements	NE 42nd Avenue to 52nd Avenue	Plan and develop streetscape and transportation improvements	X	X	X	\$ 288,750	2004-09
1221	Portland Mainstreet	Portland	Killingsworth Street Improvements	N. Interstate to NE MLK Jr. Blvd.	Construct street improvements to improve pedestrian connections to Interstate Max LRT and to establish a mainstreet character promoting pedestrian-oriented activities	X	X	X	\$ 4,900,000	2004-09
1222	Portland Mainstreet	Portland	SE Milwaukie Pedestrian Improvements	SE Milwaukie and Yukon to Tacoma	Plan and develop streetscape and transportation improvements	X	X		\$ 993,300	2016-25
1223	Portland Mainstreet	Portland	NE Alberta Pedestrian Improvements	NE Alberta - MLK Boulevard to 33rd Avenue	Construct streetscape and transportation improvements	X	X	X	\$ 3,003,000	2004-09
1224	Portland Mainstreet	Portland	NE Cully Boulevard Multi-modal Improvements	NE Fremont to Columbia Blvd.	Road reconstruction (Prescott-Killingsworth) including Intersection improvements at Prescott. Bike lanes (Prescott-Columbia). Sidewalks and crossing improvements (Killingsworth -Fremont)	X	X	X	\$ 3,274,425	2010-15
1225	Interstate SC	Portland	Lower Albina Area Improvements	Russell Avenue, Albina Avenue, Mississippi Avenue	Construct improvements to Russell (Williams - Interstate), Albina & Mississippi (Russell - Interstate) to enhance ped connections from Eliot neighborhood and Lower Albina dist to the LRT station	X	X	X	\$ 5,000,000	2010-15
1226	Interstate SC	Portland	Killingsworth Bridge Improvements	Killingsworth at I-5	Improvements to bridge to create a safe and pleasant crossing for pedestrians and bicyclists over I-5	X	X	X	\$ 2,700,000	2016-25
1227	Portland Mainstreet	Portland	Tacoma Mainstreet Plan Phase III, Spokane & Umatilla Bike Boulevard	7th Avenue to Tacoma Overcrossing	Project development and implementation of Spokane/Umatilla bike boulevard to complete Tacoma Mainstreet Plan	X	X	X	\$ 250,000	2004-09
1228	Region	Portland/Metro/ ODOT	Powell Boulevard/Foster Road Corridor Study - Phase 2	I-205 to Damascus	Conduct the next phase of a corridor study that develops multi-modal transportation strategies and specific roadway, bicycle and pedestrian projects that provide access to Pleasant Valley, Damascus, and the urban growth boundary expansion areas	X	X		\$ 1,200,000	2004-09
1229	Deleted (Construction completed)									
1230	Portland Mainstreet	Portland	NE/SE 122nd Avenue ITS	Seven signals between Powell Boulevard and Airport Way	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 231,000	2010-15

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1231	Portland Mainstreet	Portland	SE Tacoma Street ITS	Four signals between Sellwood Bridge and SE 45th/Johnson Creek Boulevard	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 115,500	2010-15
1232	Portland Mainstreet	TriMet	NW 23rd/Belmont Frequent Bus	NW 23rd to Mt. Tabor via Belmont Avenue	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 2,490,000	2004-09
1233	Portland Mainstreet	TriMet	Hawthorne Boulevard Frequent Bus	Hawthorne Boulevard	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 2,460,000	2004-09
1234	Portland Mainstreet	Portland	Lombard Street Improvements	I-5 to Denver Street	Establish a landscaped boulevard to promote pedestrian-oriented uses and to create a safe, pleasant pedestrian link to I-5 w/ new traffic light and road access to Fred Meyer development	X	X	X	\$ 2,800,000	2004-09
1235	Interstate SC	Portland	Prescott Station Area Street Improvements	Prescott, Skidmore and Maryland streets	Construct improvements to Prescott & Skidmore (Interstate-Maryland) & Maryland (Interstate-Prescott) to provide neighborhood focal point at LRT	X	X	X	\$ 3,400,000	2010-15
1236	Portland Mainstreet	TriMet	NE 15/Jackson Park Frequent Bus Improvements		Construct improvements that enhance Frequent Bus service	X	X	X	\$ 930,000	2004-09
1237	Portland Mainstreet	TriMet	Fessenden Frequent Bus Improvements		Construct improvements that enhance Frequent Bus service	X	X	X	\$ 1,485,000	2004-09
1239	Portland Mainstreet	Portland	NE Sandy Boulevard ITS	Burnside to 82nd Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 392,700	2004-09
1240	Portland Mainstreet	Portland	82nd Avenue ITS Corridor	82nd Avenue: entire corridor within city limits	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 404,250	2004-09
1242	Portland Mainstreet	Portland	MLK/Interstate ITS	MLK/Interstate Avenue intersection	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 635,250	2004-09
1245	Portland Corridor	Portland	Capitol Highway Pedestrian Improvements	SW Barbur Blvd. to 49th Avenue	Complete curb extensions and medians recommended in the Capitol Highway Plan	X	X	X	\$ 750,000	2010-15
1246	Portland Corridor	Portland	NE Klickitat/Siskiyou Bikeway	NE 14th Avenue to Rocky Butte Road	Retrofit streets to add bike boulevard	X	X	X	\$ 75,075	2016-25
1247	Portland Corridor	Portland	SE Holgate Bikeway, Phase I	28th Avenue to 136th Avenue	Retrofit street to add bike lanes	X	X	X	\$ 69,300	2004-09
1248	Portland Corridor	Portland	SE Holgate Bikeway, Phase II	SE McLoughlin Boulevard to SE 39th Avenue	Stripe bike lanes	X	X	X	\$ 19,635	2016-25
1249	Portland Corridor	Portland	SW Boones Ferry Bikeway	SW Terwilliger to Portland city limits	Retrofit bike lanes to existing street		X		\$ 5,775,000	2016-25
1250	Portland Corridor	ODOT	SW Macadam Corridor	SW Front Avenue to Multnomah County line	Bikeway design to be determined		X		\$ 577,500	2016-25
1251	Portland Corridor	ODOT	SE Powell Bikeway	SE 71st Street to I-205 Multi-use Path	Retrofit bike lanes to existing street		X		\$ 5,197,500	2016-25
1252	Portland Corridor	Portland	Inner Powell Streetscape Plan	Ross Island Bridge to SE 50th Avenue	Develop streetscape improvements that address pedestrian safety and urban design issues	X	X	X	n/a	2004-09
1253	Portland Corridor	Portland	NE Prescott Pedestrian and Bicycle Improvements	NE Prescott, Cully to I-205; sidewalks from Sandy to I-205	Retrofit bike lanes to existing street; improve sidewalks, lighting and crossings	X	X	X	\$ 346,500	2004-09
1254	Portland Corridor	Portland	136th Avenue Bike and Pedestrian Improvements	Foster Road to Division Street	Retrofit sidewalks and bike lanes to existing street		X			2016-25

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1255	Portland Corridor	Portland	Division Street Bikeway Improvements	SE 52nd Avenue to 76th Avenue	Retrofit bike lanes to existing street		X			2016-25
1257	Deleted (Construction completed)									
1258	Deleted (local level improvement)									
1259	South/North SC	Portland	N/NE Skidmore Bikeway	N Interstate to NE Cully	Retrofit streets to add bike boulevard	X	X	X	\$ 75,075	2004-09
1260	South/North SC	Portland	Killingsworth Pedestrian District	East of I-5; proposed S/N LRT station area	Plan and develop improvements to the pedestrian environment; improve sidewalks, lighting, crossings, bus shelters & benches		X		\$ 773,850	2016-25
1263	Banfield SC	Portland/ODOT	Banfield SC Pedestrian Improvements	60th, 82nd, 148th, 162nd & intersecting streets	Improve sidewalks, lighting, crossings, bus shelters & benches	X	X	X	\$ 2,598,750	2010-15
1264	Banfield SC	Portland	Ventura Park Pedestrian District	Eastside MAX Station Corridor at 122nd Avenue	Improve sidewalks, lighting, crossings, bus shelters & benches to improve ease of crossing and install curb extensions at transit stops.	X	X	X	\$ 600,600	2004-09
1266	Gateway RC	Portland	NE/SE 99th Avenue Phases II and III	NE Glisan Street to SE Washington Street and SE Washington Street to SE Market Street	Reconstruct primary local main street in Gateway regional center	X	X	X	\$ 4,042,500	2010-15
1267	Portland Corridor	Portland	Powell Boulevard Project Development Study	I-205 to 174th Avenue	Conduct a project development study to determine right-of-way needs and schematic designs to support identified transportation needs and planned land uses	X	X		n/a	2004-09
1268	Portland Corridor	ODOT/Portland	Powell Boulevard - Portland	I-205 to 174th Avenue	Widen street to four lanes with sidewalks and bike lanes	X	X		\$ 48,000,000	2016-25
1269	Portland Corridor	ODOT	US 30/NW 112th Intersection Improvements	US 30 at NW 112th Avenue	Add signal at intersection	X	X		\$ 135,000	2010-15
1270	Portland Corridor	TriMet	US 30 Pedestrian Access to Transit Improvements	US 30 in Linnton	Develop transit amenities within Linnton area and construct ADA pads at bus stops between NW 29th/Yeon and Sauvie Island Bridge	X	X		\$ 900,000	2016-25
1271	Portland Corridor	ODOT	Linnton Community Bike and Pedestrian Improvements	Harbor Avenue to 112th Avenue	Replace 2 traffic signals @ 105th & 107th Ave., curb bulb-outs, sidewalks, and possibly adding pedestrian crossings	X	X	X	\$ 550,000	2016-25
1272	Portland Corridor	ODOT	US 30 Pedestrian Overcrossing	NW 108th Avenue	Construct a pedestrian overcrossing	X	X		\$ 350,000	2016-25
1273	Portland Corridor	ODOT	US 30 Intersection Improvements	US 30 at NW Saltzman and Balboa streets	Realign intersections to correct offset intersections	X	X		\$ 600,000	2016-25
1274	Portland Corridor	ODOT	US 30 Bike and Pedestrian Improvements	NW 105th to Kittridge Avenues	Construct sidewalks and bike facilities	X	X		\$ 1,746,000	2010-15
1275	Portland Corridor	ODOT	US 30 Streetscape Improvements	US 30 in Linnton	Construct streetscape improvements to Visually narrow roadway, Including landscaping, pedestrian bulb outs and median	X	X		\$ 400,000	2004-09
1276	Portland Corridor	ODOT	US 30 - Willbridge Improvements	US 30 in Willbridge	Install center turn lane to Front Avenue	X	X		\$ 135,000	2016-25
1277	Portland Corridor	Portland	NW Champlain Viaduct Reconstruction	NW Champlain/US 30	Replace existing viaduct with retaining wall and geofoam fill	X	X	X	\$ 283,000	2004-09

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1278	Portland Corridor	Portland	SE 39th Avenue Reconstruction, Safety and Pedestrian Improvements	Sandy Boulevard to Woodstock Boulevard	Reconstruct street (Burnside - Holgate). Construct sidewalks and crossing improvements (Stark - Schiller). Upgrade three pedestrian signals to full signals, remodel two full signals, and provide channelization improvements to three other signals to improve safety at high accident locations	X	X	X	\$ 2,200,000	2004-09
1279	Portland Corridor	Portland	Holgate Street Improvements	SE 39th Avenue to 52nd Avenue	Reconstruct street pavement structure and stormwater drainage facilities, upgrade corner curb ramps to ADA standards, improve pedestrian crossings and add bike lanes	X	X	X	\$ 797,000	2004-09
2000	Region	Multnomah Co.	Hogan Corridor Improvements	Stark Street to Palmquist (Stark to Powell in FC)	Interim capacity improvements and access controls	X	X	X	\$ 13,860,000	* 2004-09
2001	Region	Multnomah Co.	Hogan Corridor Improvements	I-84 to Glisan Street	Construct new I-84 interchange	X	X		\$ 27,720,000	2010-15
2002	Region	ODOT	I-84/US 26 Connector R-O-W Preservation	Palmquist to Highway 26	Preserve future right-of-way	X	X		\$ 17,556,000	2004-09
2003	Region	Multnomah Co.	Hogan Corridor Improvements	Palmquist to Highway 26 in UGB	Construct new principal arterial connection	X	X		\$ 9,471,000	2016-25
2004	Region	ODOT	I-84 Widening	238th Avenue to Sandy River Bridge	Widen I-84	X	X		\$ 9,471,000	2016-25
2005	Region	ODOT	I-84 Troutdale Interchange Improvement	Troutdale interchange (exit 17)	Improve Troutdale interchange		X		\$ 17,325,000	2016-25
2006	Region	Multnomah Co.	Hogan Corridor Improvements	Glisan Street to Stark Street	Upgrade to include bicycle and pedestrian facilities and center turn lane/median	X	X	X	\$ 1,155,000	2004-09
2007	Region	TriMet	Transit center and park-and-ride upgrades	Various locations in subarea	Construct, expand and/or upgrade transit stations and park-and-rides throughout subarea	X	X			2004-25
2008	Gateway RC	Portland	102nd Avenue Boulevard and ITS/Safety Improvements, Phase 1	NE Weidler to NE Glisan Street	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting, bicycle lanes and multi-modal safety improvements	X	X	X	\$ 3,234,000	2004-09
2009	Gateway RC	Portland	Halsey Street Bridge Seismic Retrofit	Halsey Street at I-84	Seismic retrofit project		X		\$ 92,400	2016-25
2010	Gateway RC	Portland	Halsey/Weidler Boulevard and ITS	within regional center between I-205 and NE 114th Avenue	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting and new bicycle facilities	X	X	X	\$ 12,127,500	2016-25
2011	Gateway RC	Portland	Glisan Street Boulevard and ITS	within regional center between I-205 and NE 106th Avenue	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting and new bicycle facilities	X	X	X	\$ 2,310,000	2010-15
2012	Gateway RC	Portland	SE Stark/Washington Boulevard and ITS/Safety Improvements	92nd Avenue to 111th Avenue	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting, bicycle lanes and multi-modal safety improvements	X	X	X	\$ 4,389,000	2010-15
2013	Gateway RC	Multnomah Co.	NE Halsey Bikeway	162nd Avenue to 201st Avenue	Widen to retrofit bike lanes to existing street	X	X		\$ 1,420,000	2004-09
2014	Gateway RC	Multnomah Co.	Glisan Street Bikeway	162nd Avenue to 202nd Avenue	Widen to retrofit bike lanes to existing street	X	X	X	\$ 200,000	2004-09

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2015	Gateway RC	Portland	102nd Avenue Boulevard and ITS/Safety Improvements, Phase II	NE Glisan Street to SE Market Street	Implement Gateway regional center plan with boulevard design retrofit, new traffic signals, improved pedestrian facilities and crossings, street lighting, bicycle lanes and multi-modal safety improvements	X	X	X	\$ 7,091,700	2010-15
2016	Gateway RC	Portland	NE Halsey Bikeway	NE 39th Avenue to NE 102nd Avenue	Retrofit bike lanes to existing street	X	X		\$ 115,500	2004-09
2017	Gateway RC	Portland	SE Stark/Washington Bikeway	NE 75th Avenue to Portland city limits (excluding 92nd Avenue to 111th Avenue)	Retrofit bike lanes to existing street	X	X	X	\$ 346,500	2004-09
2018	Gateway RC	Portland	SE 111th/112th Avenue Bikeway	SE Mt. Scott Boulevard to SE Market Street	Retrofit bike lanes to existing street	X	X	X	\$ 1,357,703	2016-25
2019	Gateway RC	Portland	NE Glisan Bikeway	NE 47th Avenue to NE 162nd Avenue (excluding segment of I-205 to NE 106th Avenue)	Retrofit bike lanes to existing street	X	X	X	\$ 115,500	2004-09
2020	Gateway RC	Portland	Gateway Regional Center Pedestrian District Improvements, Phase 1	Gateway Regional Center	High priority local street and pedestrian improvements in regional center	X	X	X	\$ 3,465,000	2004-09
2021	Gateway RC	Portland	Gateway Regional Center Pedestrian District Improvements, Phase II	Gateway Regional Center	High priority local street and pedestrian improvements in regional center	X	X	X	\$ 6,930,000	2010-15
2022	Gateway RC	Portland	Gateway Traffic Management	Gateway Regional Center	Manage traffic infiltration in residential areas east and west of Gateway & necessary street and utility work; improve connectivity	X	X	X	\$ 1,386,000	2010-15
2023	Gateway RC	TriMet/Portland	Gateway TMA Startup	Gateway Regional Center	Implements a transportation management association program with employers (placeholder TMA)	X	X	X	\$ 200,000	2010-15
2024	Gateway RC	Portland	Gateway Regional Center Pedestrian District Improvements, Phase III	Gateway Regional Center	High priority local street and pedestrian improvements in regional center	X	X		\$ 6,930,000	2016-25
2025	Gresham RC	TriMet	Division Street Frequent Bus Capital Improvements	Gresham to PCBD	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 3,525,000	2004-09
2026	Gateway RC	Portland	NE/SE 99th Avenue Phase I/NE Pacific Avenue	NE 99th from NE Weidler to Glisan Street and NE Pacific Avenue from 97th to 102nd Avenue	Reconstruct primary local main street in Gateway regional center	X	X	X	\$ 4,042,500	2004-09
2027	Gresham RC	TriMet/Gresham	Civic Neighborhood LRT station/plaza	MAX line west of Gresham City Hall	LRT station and retail plaza	X	X	X	\$ 3,500,000	2004-09
2028	Gresham RC	ODOT	Powell Boulevard Improvements - East County	174th Avenue to Eastman Parkway	Implement streetscape design based on Gresham study recommendations	X	X	X	\$ 12,250,000	2004-09
2029	Gresham RC	Multnomah Co.	242nd Avenue Reconstruction	Powell Boulevard to Burnside Road	Reconstruct 242nd Avenue to five lanes	X	X	X	\$ 2,400,000	2016-25
2030	Gresham RC	Gresham	Palmquist Road Improvements	242nd Avenue to US 26	Widen to five lanes		X		\$ 2,656,500	2016-25
2031	Gresham RC	ODOT	Hogan Corridor Improvements	Hogan/Burnside from I-84 to US 26	Move freight from existing 181st/Burnside route	X	X		\$ 57,750	2016-25
2032	Gresham RC	Multnomah Co.	Burnside/Hogan Intersection Improvement	Intersection of 242nd/Burnside Street	Improve intersection by adding a southbound through lane	X	X	X	\$ 546,000	2016-25
2034	Gresham RC	Multnomah Co.	Division Street Improvements	257th Avenue to 268th Avenue	Improve Division Street		X		\$ 3,349,500	2016-25
2035	Gresham RC	Gresham	Cleveland Street Reconstruction	Stark Street to Powell Boulevard	Reconstruct street from Stark Street to Powell Boulevard	X	X	X	\$ 1,732,500	2010-15
2036	Gresham RC	Gresham	Wallula Street Reconstruction	Division Street to Stark Street	Reconstruct street from Division Street to Stark Street	X	X	X	\$ 1,732,500	2016-25
2037	Gresham RC	Gresham	Bull Run Road Reconstruction	242nd Avenue to 257th Avenue	Reconstruct street from 242nd Avenue to 257th Avenue		X		\$ 1,155,000	2016-25
2038	Gresham RC	Gresham	Walters Road Reconstruction	Powell Boulevard to 7th Street	Reconstruct to improve access to Springwater Trail	X	X	X	\$ 1,155,000	2016-25

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Appendix 1.1

RTP Project List
August 17, 2004

2000 RTP Project list as
Amended by Metro Resolution No. 03-3380A, Ordinance No. 04-1045A

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	2020 RTP Priority System	2025 RTP Illustrative System	2025 RTP Financially Constrained System	Est. Project Cost in 2003 dollars ("*" indicates phasing in financially	RTP Program Years
2039	Gresham RC	Gresham	Regner Road Reconstruction	Cleveland Street to city limits	Reconstruct Regner Road from Cleveland to city limits	X	X	X	\$ 14,200,000	2016-25
2040	Gresham RC	Gresham	Gresham RC Collector Improvements	Barnes Road, Williams Street, Chase Road, Welch Road, Palmlblad Road, Salquist Road, Hillyard Road	Improve collector system near Gresham RC		X		\$ 5,775,000	2016-25
2041	Gresham RC	Multnomah Co.	257th Avenue Corridor Improvements	Division Street to Powell Valley Road	Reconstruct street to arterials standards, including bike lanes, sidewalks, drainage, lighting and traffic signals	X	X	X	\$ 4,800,000	2004-09
2042	Gresham RC	Multnomah Co.	257th Avenue Intersection Improvements	Intersection of 257th/Palmquist Road/US 26	Realign intersection to provide for safety, capacity, bike and pedestrian movements	X	X	X	\$ 4,899,510	2004-09
2043	Gresham RC	Multnomah Co.	Powell Valley Road Improvements	242nd Avenue to 282nd Avenue	Improve Powell Valley Road with pedestrian and bicycle facilities		X		\$ 4,712,400	2016-25
2044	Gresham RC	Multnomah Co.	Orient Drive Improvements	282nd Avenue to 257th Avenue	Improve Orient Drive	X	X	X	\$ 4,158,000	2016-25
2045	Gresham RC	Multnomah Co.	190th Avenue Improvements	Butler Road to Highland Drive and Powell Boulevard to 190th Avenue	Reconstruct and widen street to five lanes with sidewalks and bike lanes. Widen and determine the appropriate cross-section for Highland Drive and Pleasant View Drive from Powell Boulevard to 190th Avenue based on the recommendations from Phase 2 of the Powell Boulevard/Foster Road Corridor Study	X	X	X	\$ 12,500,000	* 2010-15
2046	Gresham RC	Multnomah Co.	Division Street Improvements	Birdsdale Avenue to Wallula Avenue	Complete boulevard design improvements		X		\$ 4,620,000	2016-25
2047	Gresham RC	Gresham	Division Street Improvements	Kelly Street to Burnside Street	Complete boulevard design improvements	X	X	X	\$ 3,500,000	2004-09
2048	Gresham RC	Multnomah Co.	Burnside Street Improvements	NE Wallula Street to Hogan Road	Complete boulevard design improvements	X	X	X	\$ 7,484,400	2004-09
2049	Deleted (Project included in #2028)									
2050	Region	ODOT/Gresham/Multnomah Co.	I-84 to US 26 Corridor Study (ROW and arterials)	I-84 to US 26	Study to identify additional access management strategies, define long-term freight route in corridor and evaluate potential new alignment south Powell Boulevard to US 26	X	X		\$ 1,155,000	2010-15
2051	Springwater IA	ODOT	US 26/Springwater Interchange Improvement	US 26 at Springwater	New interchange on US 26 to serve industrial area		X	X	\$ 25,000,000	2004-09
2052	Gresham RC	Gresham	MAX Shared-Use Path	Ruby Junction to Cleveland Station	Construct new shared-use path	X	X	X	\$ 2,000,000	2004-09
2053	Gresham RC	Gresham	Gresham/Fairview Trail	Springwater Trail to Marine Drive	Springwater Trail connection	X	X	X	\$ 1,963,500	2004-09
2054	Gresham RC	Gresham	Springwater Trail Connections	Springwater Trail at 182nd Avenue and Pleasant View/190th Ave.	Provide bike access to regional trail	X	X	X	\$ 1,039,500	2016-25
2055	Gresham RC	Gresham	SW Walters Road/Springwater Trail Access	SW 7th to Powell Boulevard	Upgrade pedestrian signal to full traffic signal and provide bike access to regional trail	X	X	X	\$ 346,500	2016-25
2056	Gresham RC	Multnomah Co.	Division Street Bikeway	174th Avenue to Wallula Avenue	Retrofit street to add bike lanes	X	X	X	\$ 460,000	2010-15
2057	Gresham RC	Gresham/ODOT	Gresham RC Pedestrian and Ped-to-MAX Improvements	Burnside, Division, Powell, Civic Way, Eastman Pkwy, Main Street, Cleveland and intersecting streets and LRT stations areas	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 5,000,000	* 2004-09
2058	Gresham RC	Gresham	Springwater Trail Pedestrian Access	Eastman, Towle, Roberts, Regner, Hogan	Improve sidewalks and lighting	X	X	X	\$ 2,000,000	2016-25
2059	Gresham RC	Gresham	Division Street Pedestrian to Transit Access Improvements	174th to Wallula Avenue	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,155,000	2016-25

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2062	Deleted (Project completed)										
2063	Gresham RC	TriMet/Metro	Study LRT extension to Mt. Hood Community Col.	TBD	Study LRT to Mt. Hood Community College; a preliminary study was done between 1993-95 as part of the East Multnomah County Long-Range Transit Plan.	X	X		n/a		2016-25
2065	Gresham RC	Gresham	Phase 3 Signal Optimization	System-wide	Optimize signals	X	X	X	\$ 2,310,000	*	2004-09
2068	PDX IA	ODOT	I-205 Interchange Improvement	I-205 SB/Airport Way Interchange	Widen I-205 southbound on-ramp at Airport Way	X	X		\$ 10,000,000		2016-25
2069	PDX IA	ODOT	I-205 Interchange Improvement	I-205 NB/Airport Way Interchange	New I-205 NB on-ramp at I-205/Airport Way interchange (Phase 1 in FC: modify signing, striping channelization and signal timing for NB on-ramp)	X	X	X	\$ 23,100,000	*	2004-09
2070	PDX IA	ODOT	I-205 Interchange Improvement	I-205 SB/Airport Way Interchange	Widen I-205 SB on-ramp at Airport Way; modify signing, striping channelization and/or signal timing for the I-205 NB on-ramp at Airport Way	X	X	X	\$ 650,000		2004-09
2071	PDX IA	ODOT	I-205 Auxiliary Lane	Airport Way to Columbia Boulevard	New I-205 auxiliary lane from Airport Way to Columbia Boulevard	X	X		\$ 23,100,000		2016-25
2072	PDX IA	ODOT	I-205 Auxiliary Lane	I-84 to Columbia Boulevard	New auxiliary lane from I-84 to Columbia Boulevard	X	X		\$ 5,775,000		2016-25
2073	South Shore IA	Multnomah Co.	I-84/I-205/Tillamook Shared-Use Connector Study	I-84/122nd Avenue to I-205	Study feasibility of corridor		X		n/a		2016-25
2074	South Shore IA	Multnomah Co.	Sandy Boulevard Widening	122nd Avenue to 238th Avenue	Widens street to five lanes with sidewalks and bike lanes	X	X	X	\$ 11,800,000		2016-25
2075	South Shore IA	Multnomah Co.	207th North Extension	Sandy Boulevard to Airport Way	New street connection between 207th Avenue and Airport Way		X		\$ 6,699,000		2016-25
2076	South Shore IA	TriMet	181st Avenue Frequent bus	Gresham to Columbia South Shore	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 1,350,000		2010-15
2077	South Shore IA	Multnomah Co.	181st Avenue Widening	Halsey Street to EB on-ramp to I-84	Widens street to three lanes southbound	X	X	X	\$ 1,097,500		2004-09
2078	South Shore IA	Multnomah Co.	162nd Railroad Crossing Improvements	162nd Avenue/railroad bridge	Replacing railroad bridge to allow for road widening		X		\$ 6,006,000		2016-25
2079	Deleted (Construction completed)										2016-25
2080	South Shore IA	Multnomah Co.	202nd Railroad Crossing Improvement	202nd Avenue/railroad bridge	Replacing railroad bridge to allow for road widening	X	X	X	\$ 4,042,500		2004-09
2081	South Shore IA	Multnomah Co.	223rd Railroad Crossing Improvement	223rd Avenue/railroad bridge	Replacing railroad bridge to allow for road widening and two crossings; one north of Sandy and one south of I-84	X	X	X	\$ 9,240,000		2004-09
2082	South Shore IA	Multnomah Co.	Columbia River Highway Railroad Crossing Improvement	Columbia River Highway east of I-84	Replacing railroad bridge to allow for road widening	X	X		\$ 1,386,000		2016-25
2083	South Shore IA	Multnomah Co.	Sandy Boulevard Overpass	Sandy Boulevard at I-84	Construct overpass to reconnect Sandy Boulevard over I-84		X		\$ 27,720,000		2016-25
2084	South Shore IA	Multnomah Co.	181st Avenue Intersection Improvement	181st Avenue/Glisan Street intersection	Improve intersection	X	X	X	\$ 623,700		2016-25
2085	South Shore IA	Multnomah Co.	181st Avenue Intersection Improvement	181st Avenue/Burnside Road intersection	Improve intersection	X	X	X	\$ 346,500		2016-25
2086	Deleted (Construction completed)										

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2087	Deleted (Construction completed)									2016-25
2088	South Shore IA	Portland	NE Marine Drive/122nd Avenue Improvements	NE Marine Drive/122nd Avenue intersection	Signalization, widen dike to install left turn lane on Marine Drive	X	X	X	\$ 1,943,865	2004-09
2091	South Shore IA	Portland	NE/SE 148th Avenue Bikeway	Division	Retrofit bike lanes to existing street	X	X	X	\$ 35,805	2010-15
2093	South Shore IA	Multnomah Co.	Marine Drive Safety Corridor Plan	Marine Drive from Troutdale to Rivergate	Long-term traffic management plan		X		n/a	2016-25
2098	Rockwood TC	Multnomah Co.	162nd Avenue Improvements	Glisan Street to Halsey Street	Reconstruct and widen to five lanes		X		\$ 2,356,200	2016-25
2099	Rockwood TC	Multnomah Co.	201st/202nd Avenue Corridor Improvements	Sandy Boulevard-Powell Boulevard	Reconstruct and widen to three lanes (Sandy to Halsey in FC System)	X	X	X	\$ 9,909,900	* 2004-09
2101	Rockwood TC	Gresham	Stark Street Improvements	190th to 197th	Complete boulevard design improvements	X	X	X	\$ 3,465,000	2010-15
2102	Rockwood TC	Gresham	Stark Street Improvements	181st to 190th	Complete boulevard design improvements	X	X	X	\$ 3,465,000	2004-09
2103	Rockwood TC	Multnomah Co.	181st Avenue Improvements	Glisan to Yamhill	Complete boulevard design improvements	X	X	X	\$ 3,326,400	2010-15
2104	Rockwood TC	Multnomah Co.	Burnside Road Boulevard Improvements	181st Avenue to 197th Avenue	Complete boulevard design improvements	X	X	X	\$ 4,200,000	2004-09
2105	Rockwood TC	Gresham	Rockwood TC Pedestrian and Ped-to-MAX Improvements	181st, 188th, Stark and intersecting streets and LRT station areas	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 3,465,000	2016-25
2108	Deleted (Construction completed)									
2109	Fairview/WV TC	Multnomah Co.	Glisan Street Improvements	202nd Avenue to 207th Avenue	Complete reconstruction of Glisan Street to five lanes	X	X	X	\$ 1,800,000	2004-09
2110	Fairview/WV TC	Multnomah Co.	MKC Collector	Halsey Street to Arata Road	Construct new collector of regional significance	X	X	X	\$ 1,100,000	2016-25
2111	Deleted (Construction completed)									
2112	Fairview/WV TC	Multnomah Co.	223rd Avenue Improvements	Glisan to Stark	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 1,155,000	2016-25
2113	Fairview/WV TC	Multnomah Co.	Halsey Street Improvements	190th Avenue to 207th Avenue	Widen to three lanes with sidewalks and bike lanes	X	X		\$ 2,772,000	2004-09
2115	Fairview/WV TC	MultCo/FV/ WV	Fairview-Wood Village TC Pedestrian Improvements	Fairview, Halsey, Glisan and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,386,000	2016-25
2116	Fairview/WV TC	Multnomah Co.	NE 223rd Avenue Bikeway and Pedestrian Improvements	NE Halsey Street to Marine Drive	Retrofit bike lanes and sidewalks on existing street	X	X	X	\$ 577,731	2010-15
2117	Fairview/WV TC	Multnomah Co.	207th/223rd Access Management Plan	207th/Glisan/223rd from I-84 to Burnside	Traffic Management Plan to protect mobility on 207th/223rd to Gresham		X		n/a	2016-25
2118	Fairview/WV TC	MultCo/FV/ WV	Arata Road Improvement	Wood Village Boulevard to 238th Drive	Upgrade street with center turn lane/median, sidewalks and bicycle lanes		X		\$ 1,000,000	2010-15
2120	Troutdale TC	Multnomah Co.	Sandy Boulevard Bicycle and Pedestrian Improvements	162nd to Troutdale	Retrofit bike lanes and sidewalks on existing street	X	X	X	\$ 8,316,000	2016-25
2121	Troutdale TC	ODOT/MultCo	Columbia River Highway Improvements	Kibling Avenue to Sandy River	Upgrade to include bicycle and pedestrian facilities		X		\$ 1,386,000	2016-25
2122	Troutdale TC	Multnomah Co.	Troutdale Road Improvements	Cherry Park Road to Strebin Road	Upgrade to include bicycle and pedestrian facilities		X		\$ 2,217,600	2016-25
2123	Troutdale TC	Multnomah Co.	Stark Street Improvements	257th Avenue to Troutdale Road	Widens street to five lanes	X	X	X	\$ 3,465,000	2004-09
2124	Troutdale TC	Multnomah Co.	Halsey Street Improvements - Troutdale	238th to 257th	Improve Halsey Street to 3 lanes and complete boulevard design improvements	X	X	X	\$ 3,742,200	2010-15

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2125	Troutdale TC	Mult. Co./Troutdale	Troutdale TC Pedestrian Improvements	Old Col. River Highway, 257th/Graham, Buxton Road	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 115,500	2016-25
2126	Troutdale TC	Troutdale	257th Avenue Pedestrian Improvements	Cherry Park Road to Stark Street	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,155,000	2004-09
2127	Troutdale TC	MultCo/Troutdale	Edgefield Station Recreational Intermodal Facility	249th and Halsey	Develop Edgefield Station as a recreational intermodal facility		X		\$ 5,775,000	2016-25
2128	Troutdale TC	Multnomah Co.	40-mile Loop Trail	223rd Avenue/Marine Drive to Troutdale town center	Study feasibility of corridor		X		n/a	2016-25
2131	Burnside SC	Gresham	SE 174th Avenue Bikeway	Springwater Trail to SE Stark Street	Retrofit bike lanes to existing street		X		\$ 23,100	2016-25
2132	Burnside SC	Gresham	Burnside SC Pedestrian Improvements	172nd, 197th, Glisan, Stark and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 7,103,250	2016-25
2133	Portland Corridor	ODOT	I-205 Shared-Use Path Crossing Improvements	Several locations	Improve access to I-205 shared-use path	X	X		\$ 317,625	2004-09
3000	Region	ODOT	Highway 217 Improvements	I-5 to US 26	Add capacity to existing highway	X	X		\$115,500,000	2016-25
3001	Region	ODOT	Highway 217 Improvements	NB - TV Highway/Canyon Road to US 26	Widen NB to three lanes; ramp improvements	X	X	X	\$ 31,000,000	2010-15
3002	Region	ODOT	US 26/217 Interchange Improvement	EB US 26/SB Highway 217 Interchange	Braided ramps	X	X		\$ 57,750,000	2010-15
3003	Region	ODOT	US 26/Jackson School Road interchange	Jackson School Road at US 26	Construct new interchange	X	X	x	\$ 18,480,000	2004-09
3004	Region	ODOT	US 217 EIS Study	I-5 to US 26	Complete planning and environmental works for improvements in corridor	X	X	X	\$ 6,000,000	2010-15
3005	Region	ODOT	US 26 Refinement and EA Study	Sylvan interchange to 185th Avenue	Complete planning and environmental work for improvements in corridor	X	X	X	\$ 577,500	2004-09
3006	Region	ODOT	US 26 Improvements	US 26 between Sylvan and Highway 217	Complete interchange improvements by adding third through-lane and collector distributor system from Camelot Court to Sylvan Road (Phase 3)	X	X	X	\$ 25,410,000	2004-09
3007	Deleted (Construction completed)									
3008	Region	ODOT	US 26 Improvements	Highway 217 to Murray Boulevard	Widen US 26 to six lanes	X	X	X	\$ 37,600,000	2004-09
3009	Region	ODOT	US 26 Improvements	Murray Boulevard to Cornell Road	Widen US 26 to six lanes	X	X	X	\$ 8,370,000	2004-09
3010	Region	MultCo/WashCo	Cornelius Pass Road	US 26 to US 30	Improve to better accommodate freight movement		X		\$ 28,875,000	2016-25
3011	Region	ODOT	US 26 Improvements	Cornell Road to 185th Avenue	Widen US 26 to six lanes	X	X	X	\$ 12,300,000	2004-09
3012	Region	Hillsboro	Rock Creek Greenway Shared-Use Path	TV Highway to Evergreen Parkway	Completes shared-use path along Rock Creek from Tualatin Valley Highway to Evergreen Parkway	X	X	X	\$ 4,212,000	2004-09
3013	Region	Various	Bronson Creek Greenway Shared-Use Path	Beaverton Creek to Powerline Trail	Study feasibility of corridor and construct shared-use path	X	X	X	\$ 871,000	2004-09
3014	Region	Various	Powerline Beaverton Trail Corridor Trail	Bronson Creek Greenway to Farmington Road	Plan, design and construct shared-use path	X	X	X	\$ 3,118,500	2004-09
3015	Region	Various	Beaverton Creek Greenway Corridor Study	Rock Creek to Fanno Creek Greenway	Study feasibility of corridor and construct shared-use path	X	X	X	\$ 1,500,000	2004-09
3016	Region	Washington Co.	Washington County ATMS	Washington County	Acquire hardware for new traffic operations center and conduct needs analysis	X	X	X	\$ 1,155,000	2004-09
3017	Region	TriMet	Beaverton Hillsdale Highway- Frequent Bus	Beaverton-Hillsdale Highway	Improvements to enhance Frequent bus service	X	X	X	\$ 3,300,000	2004-09

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3018	Region	TriMet	Transit center and park-and-ride upgrades	Various locations in subarea	Construct, expand and/or upgrade transit stations and park-and-rides throughout subarea	X	X		See Tri-Met Total	2004-25
3019	Beaverton RC	Beaverton	Beaverton Connectivity Improvements I: East-West	(1) Center: Cedar Hills to Hocken via Westgate/Dawson; (2) Crescent: Cedar Hills to Hall; (3) Millikan Way: Watson/Hall to 114th; (4) Broadway to 115th connection; (5) Electric to Whitney to Carousel to 144th	Complete central Beaverton street connections	X	X	X	\$ 19,100,000	2004-09
3020	Beaverton RC	Beaverton	Beaverton Connectivity Improvements II: North/South	(6) Rose Biggi: Westgate to Broadway; (7) 120th Ave.: Center to Canyon; (8) 114th/115th: LRT to Beaverton-Hillsdale Hwy./Griffith Drive; (9) Tualaway Ave.: Electric to Millikan	Complete central Beaverton street connections	X	X	X	\$ 15,000,000	2004-09
3021	Region	Washington Co.	2040 Centers and Station Areas Pedestrian System Infill	Regional pedestrian system in Washington County	Fill in missing gaps in regional pedestrian system	X	X	X	\$ 5,000,000	2004-09
3022	Region	Washington Co.	2040 Centers and Station Areas Bicycle System Infill	Regional bicycle system in Washington County	Fill in missing gaps in regional bicycle system	X	X	X	\$ 5,000,000	2004-09
3023	Beaverton RC	WashCo/Beaverton/ODOT	Highway 217 Interchange Improvements	NB/SB at Walker Road, SB at TV Highway, NB/SB at BH Highway and at Allen Boulevard	Capacity increase and/or braided ramp between the highest priority interchanges identified through the Highway 217 Corridor study (#6009)	X	X		\$ 4,158,000	2004-09
3024	Deleted (included in Project #3011)									
3025	Beaverton RC	ODOT/WashCo	TV Highway Improvements	Cedar Hills Boulevard to 10th Avenue	Widen to seven lanes Cedar Hills to Murray; six lanes limited access from Murray to Brookwood and five lanes from Brookwood to 10th	X	X		\$ 38,346,000	2016-25
3026	Deleted (Construction completed)									
3027	Deleted (Construction completed)									
3028	Deleted (under construction)									
3029	Beaverton RC	Beaverton	Lombard Improvements	Broadway to Farmington	Three lane improvement to realign road with segment to the north with pedestrian facilities	X	X	X	\$ 1,848,000	2004-09
3030	Beaverton RC	Beaverton	Farmington Road Improvements	Hocken Avenue to Murray Boulevard	Widen to five lanes; intersections improvements, add turn lanes, bike lanes and sidewalks	X	X	X	\$ 14,000,000	2004-09
3031	Beaverton RC	Beaverton	Allen Boulevard Improvements	Highway 217 to Murray Boulevard	Widen to five lanes	X	X		\$ 10,800,000	2016-25
3032	Beaverton RC	Beaverton	Cedar Hills Boulevard Improvements	Farmington Road to Walker Road	Widen to five lanes with sidewalks and bike lanes	X	X	X	\$ 4,600,000	2010-15
3033	Beaverton RC	Beaverton	125th Avenue Extension	Brockman Street/Greenway to Hall Boulevard	Construct two/three-lane extension with intersection improvements, bike lanes and sidewalks	X	X	X	\$ 10,200,000	2004-09
3034	Beaverton RC	Beaverton	Hall Boulevard Extension	Cedar Hills Boulevard to Hocken	Construct three-lane extension with bikeways and sidewalks	X	X	X	\$ 5,700,000	2010-15
3035	Beaverton RC	Beaverton	Hocken Avenue Improvements	LRT to Beaverton Creek	Widen to 3 lanes with bike lanes and sidewalks and reconstruct bridge	X	X	X	\$ 1,300,000	2004-09
3036	Beaverton RC	Washington Co.	158th/Merlo Road Improvements	170th Avenue to Walker Road	Widen to five lanes with sidewalks and bike lanes	X	X		\$ 12,700,000	2016-25

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3037	Beaverton RC	Beaverton	Nimbus Road Extension	Hall Boulevard to Denney Road	Extend two-lane roadway		X		\$ 10,300,000	2016-25
3038	Beaverton RC	Beaverton	Center Street Improvements	Hall Boulevard to 113th Avenue	Widen to three lanes with bikeways and sidewalks	X	X	X	\$ 3,696,000	2016-25
3039	Beaverton RC	Beaverton	Hocken Avenue Improvements	Farmington Road to Millikan Way	Widen street to accommodate 2 additional lanes between Tualatin Valley Highway and Farmington Road to allow turn lanes	X	X	X	\$ 2,000,000	2010-15
3041	Beaverton RC	Beaverton	Hall/Watson Improvements	Allen Boulevard to Cedar Hills Boulevard	Complete boulevard design improvements including crosswalks and intersection improvements, lighting and furniture replacement, create pedestrian plazas and park entries, add turn lanes, bike lanes, and sidewalks	X	X	X	\$ 5,500,000	2004-09
3042	Beaverton RC	ODOT/Beaverton/ TriMet	TV Highway Pedestrian Access to Transit Improvements	Murray to Highway 217	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 9,240,000	2010-15
3043	Deleted (Project no longer in TSP)									
3045	Beaverton RC	Beaverton	Farmington Road Bikeway	Hocken to Highway 217	Retrofit to include bike lanes	X	X	X	\$ 3,234,000	2010-15
3046	Beaverton RC	Beaverton	Hall Boulevard Bikeway	BH Highway to Cedar Hills Boulevard	Retrofit to include bike lanes	X	X	X	\$ 1,500,000	2004-09
3047	Beaverton RC	Beaverton	Watson Avenue Bikeway	BH Highway to Hall Boulevard	Retrofit to include bike lanes	X	X	X	\$ 100,000	2004-09
3049	Beaverton RC	Beaverton	Downtown Beaverton Pedestrian/Bike Improvements	Hocken Avenue/TV Highway/113th Avenue/110th Avenue/Cabot Street	Improve sidewalks, bike lanes, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,293,600	2004-09
3050	Beaverton RC	Beaverton/WashCo/ TriMet	Walker Road Pedestrian Improvements	Polsky/108th to Highway 217	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 115,500	2016-25
3051	Beaverton RC	WashCo/Beaverton/ TriMet	Hall Boulevard/Watson Pedestrian-to-Transit Improvements	Cedar Hills Boulevard to Tigard TC	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,848,000	2010-15
3052	Beaverton RC	Beaverton	110th Avenue Pedestrian Improvements	B-H Highway to Canyon Road	Fill in missing sidewalks	X	X	X	\$ 34,650	2004-09
3053	Beaverton RC	Beaverton	117th Avenue Pedestrian Improvements	light rail transit to Center Street	Improve sidewalks, lighting, crossings	X	X	X	\$ 34,650	2004-09
3054	Beaverton RC	Washington Co.	Murray Boulevard Bike/Pedestrian Improvements	Scholls Ferry Road to TV Highway	Safety islands and pedestrian crossing improvements at intersections, fill in bicycle network gaps	X	X		\$ 577,500	2016-25
3055	Beaverton RC	ODOT/Beaverton	Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements	65th Avenue to Highway 217 (only portion from 91st to Hwy. 217 Financially Constrained)	Improve sidewalks, lighting, crossings, bus shelters and benches; stripe bike lanes	X	X	X	\$ 12,127,500	2016-25
3056	Beaverton RC	ODOT	Canyon Road/TV Highway Bike and Pedestrian Improvements	SW 91st Avenue to Highway 217	Bike lanes, sidewalks and pedestrian crossings	X	X		\$ 1,692,075	2016-25
3057	Beaverton RC	Beaverton	Denney Road Bike/Pedestrian Improvements	Nimbus Avenue to Scholls Ferry Road	Improve sidewalks, crossings and fill in bicycle network gaps	X	X	X	\$ 242,550	2016-25
3058	Beaverton RC	TriMet/Beaverton	Beaverton Regional Center TMA	Beaverton Regional Center	Implements a transportation management association program with employers	X	X	X	\$ 200,000	2004-09
3060	Beaverton RC	ODOT/WashCo	TV Highway Access Management	117th Avenue to Hillsboro	Access management	X	X		\$ 17,325,000	2010-15
3061	Beaverton RC	ODOT/WashCo	TV Highway System Management	TV Highway from Highway 217 to 209th	Interconnect signals on TV Highway from 209th Avenue to Highway 217	X	X	X	\$ 1,732,500	* 2010-15
3063	Beaverton RC	Washington Co.	Murray Boulevard Improvements	TV Highway to Allen Boulevard	Signal coordination	X	X	X	\$ 57,750	2004-09
3066	Bethany TC	Washington Co.	Springville Road Improvements	Kaiser to 185th Avenue	Widen to include bike lanes		X		\$ 866,250	2016-25

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Appendix 1.1

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August 17, 2004

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3067	Bethany TC	Washington Co.	185th Avenue Improvements	West View High School to Springville Road	Widen to five lanes with bike lanes and sidewalks	X	X	X	\$ 5,775,000	2010-15
3068	Beaverton Corridor	Washington Co.	Garden Home/92nd Avenue Improvements	Allen Boulevard to Oleson Road	Widen to three lanes with bikeways and sidewalks		X		\$ 5,197,500	2016-25
3069	Beaverton Corridor	Washington Co.	Scholls Ferry Road Improvements	Allen Boulevard to Beaverton-Hillsdale Highway	Widen to three lanes with sidewalks and bike lanes	X	X		\$ 13,300,000	2016-25
3071	Region	WashCo/THPRD	Fanno Creek Greenway Shared-Use Path	Greenwood Inn to Scholls Ferry Road	Completes Fanno Creek Greenway shared-use path	X	X	X	\$ 1,732,500	2004-09
3072	Beaverton Corridor	Tualatin Hills PRD	Beaverton Powerline Shared-Use Trail	Farmington Road to Scholls Ferry Road	Construct multi-use trail within powerline easement	X	X	X	\$ 2,000,000	2004-09
3073	Beaverton Corridor	Washington Co.	Barnes Road Bikeway	Burnside to Leahy Road	Retrofit to include bike lanes		X		\$ 577,500	2016-25
3074	Beaverton Corridor	Beaverton	Hall Boulevard Bikeway	12th Street to south of Allen Boulevard	Retrofit to include bike lanes; intersection turn lanes at Allen Boulevard	X	X	X	\$ 1,660,890	2004-09
3075	Beaverton Corridor	Beaverton/WashCo	Cedar Hills Boulevard Improvements	Butner Road to Walker Road	Improve sidewalks, lighting, crossings, bike lanes, bus shelters and benches	X	X	X	\$ 1,270,500	2004-09
3076	Beaverton Corridor	Beaverton	Allen Boulevard Improvements	Highway 217 to Western Avenue	Widen to five lanes with bike lanes and sidewalks	X	X	X	\$ 1,155,000	2016-25
3077	Beaverton Corridor	Beaverton	Western Avenue Pedestrian Improvements	5th Street to 800 feet south of 5th Street	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 55,440	2016-25
3078	Beaverton Corridor	ODOT	Canyon Road Bicycle and Pedestrian Improvements	US 26 to 110th Avenue	Retrofit to include bike lanes/sidewalks	X	X		\$ 15,592,500	2010-15
3079	Beaverton Corridor	Beaverton	Allen Boulevard Bike/Ped Improvements	Western Avenue to Scholls Ferry Road	Retrofit to include bike lanes and fill in missing sidewalks	X	X	X	\$ 320,000	2010-15
3082	Beaverton IA	Beaverton	Western Avenue Bike Lanes	B-H Highway to Allen Boulevard	Retrofit to include bike lanes		X		\$ 360,000	2016-25
3083	Westside SC	Washington Co.	170th Improvement	Blanton Street to Farmington Road	Widen to five lanes with sidewalks and bike lanes		X		\$ 9,240,000	2016-25
3084	Westside SC	Washington Co.	170th Improvement	Alexander Road to Merlo Road	Widen to five lanes with sidewalks and bike lanes	X	X		\$ 9,240,000	2016-25
3085	Deleted (Construction completed)									
3086	Westside SC	Washington Co.	158th Avenue Improvements	Walker to Jenkins Road	Widen to include bike lanes	X	X		\$ 519,750	2016-25
3087	Westside SC	Beaverton	Millikan Way Improvements	TV Highway to 141st Avenue	Widen to five lanes with sidewalks and bike lanes	X	X		\$ 5,000,000	2016-25
3088	Westside SC	Beaverton	Millikan Way Improvements	141st Avenue to Hocken Road	Widen to three lanes with sidewalks and bike lanes	X	X		\$ 3,700,000	2016-25
3089	Westside SC	Washington Co.	160th Avenue Improvements	Tualatin Valley Highway to Farmington Road	Widen to five lanes with sidewalks and bike lanes		X		\$ 2,310,000	2016-25
3090	Westside SC	Washington Co.	Walker Road Improvements	173rd to Stucki Boulevard	Widen to include bike lanes		X		\$ 866,250	2016-25
3091	Westside SC	Hillsboro	Quatama Street Improvements	205th Avenue to 227th Avenue; 227th at Baseline	Widen to three lanes and extend to Baseline with sidewalks and bike lanes	X	X	X	\$ 9,436,350	2010-15
3092	Westside SC	Washington Co.	Powerline/Rock Creek Trail	Bethany/Kaiser Road to Evergreen Road/Rock Creek Greenway	Construct shared-use path for bicyclists and pedestrians just north of US 26	X	X	X	\$ 1,155,000	2004-09
3093	Westside SC	Washington Co.	Murray Boulevard Bikeway	Farmington Road to S of TV Highway	Retrofit to include bike lanes	X	X		\$ 231,000	2016-25
3094	Westside SC	Hillsboro	Cornell Road Bikeway	Elam Young Parkway (W) to Ray Circle	Retrofit to include bike lanes	X	X	X	\$ 884,730	2004-09

Appendix 1.1

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August 17, 2004

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3095	Westside SC	Washington Co.	170th Avenue Pedestrian Improvements	Merlo Drive to Elmonica light rail station	Fill in sidewalk gaps and extend to light rail eastside only	X	X	X	\$ 311,850	2004-09
3096	Deleted (included in Project #3021)									
3097	Westside SC	Washington Co.	Baseline Road Pedestrian Improvements	158th Avenue to 166th Avenue	Improve sidewalks and pedestrian crossings		X		\$ 110,880	2016-25
3098	Westside SC	Washington Co.	Walker Road Bike/Ped Improvements	Canyon Road to Cedar Hills Boulevard	Retrofit to include bike lanes and sidewalks	X	X	X	\$ 866,250	2016-25
3099	Hillsboro RC	Washington Co.	1st Avenue/Glencoe Road	Lincoln Street to Evergreen Road	Widen to three lanes with sidewalks and bike lanes	X	X	X	\$ 14,800,000	2004-09
3101	Hillsboro RC	Hillsboro	Jackson School Road Improvements	Evergreen Road to Grant Street	Widen to three lanes with sidewalks and bike lanes		X		\$ 5,162,850	2016-25
3102	Hillsboro RC	Washington Co.	Baseline Road Improvements	201st to 231st Avenue	Widen to three lanes with bike lanes and sidewalks	X	X	X	\$ 24,255,000	2004-09
3103	Hillsboro RC	Washington Co.	Baseline Road Improvements	185th Avenue to Brookwood Parkway	Widen to five lanes with bike lanes and sidewalks		X		\$ 34,800,000	2016-25
3104	Hillsboro RC	Hillsboro	NW Aloclek Drive Extension	NW Amberwood Drive to Cornelius Pass Road	New three-lane facility with sidewalks and bike lanes	X	X	X	\$ 2,948,715	2004-09
3105	Hillsboro RC	Hillsboro	E/W Collector	185th Avenue to west of Cornelius Pass Road	New 3-lane facility	X	X	X	\$ 6,781,005	2004-09
3106	Hillsboro RC	Washington Co.	229th/231st/234th Connector	Lois Street to Dogwood Street	New 3-lane facility and bridge	X	X	X	\$ 24,300,000	2004-09
3107	Westside SC	Hillsboro/WashCo.	SW 205th Avenue Improvements	LRT to Baseline Road	Widen to five lanes, including bridge, sidewalks and bike lanes (sidewalk on eastside and bike lanes only in financially constrained system)	X	X	X	\$ 7,076,685	2010-15
3108	Deleted (Construction completed)					X				
3109	Hillsboro RC	ODOT/WashCo/ Hillsboro	Hillsboro to US 26 Improvements	Shute Road/Cornell Corridor	Improve primary access route from regional center to US 26		X		n/a	2016-25
3110	Deleted (Construction completed)									
3111	Hillsboro RC	Washington Co.	First Avenue Improvements	Grant Street to Glencoe High School	Improve sidewalks and pedestrian crossings and make transit improvements	X	X	X	\$ 808,500	2004-09
3112	Hillsboro RC	ODOT	First Avenue Improvements	Oak Street to Baseline Street	Rechannelize NB and SB to provide protected left turn lanes and signal phasing at 1st/Oak and 1st/Baseline	X	X	X	\$ 190,575	2004-09
3113	Hillsboro RC	Hillsboro	10th Avenue Improvements	Main Street to Baseline Road	Add right turn lane and widen sidewalk	X	X	X	\$ 1,915,000	2004-09
3114	Hillsboro RC	Hillsboro	NE 28th Avenue Improvements	Grant Street to East Main Street	Widen to three lanes with sidewalks, bike lanes, street lighting and landscaping	X	X	X	\$ 3,191,000	2004-09
3115	Hillsboro RC	Washington Co.	10th Avenue Improvements	Washington Street to Main Street	Widen to provide third NB through lane	X	X		\$ 734,000	2010-15
3116	Hillsboro RC	Hillsboro	10th Avenue Improvements	Walnut Street to Baseline Street	Construct one additional NB turn lane and rechannelize WB Baseline Street approach to 10th Avenue to provide two approach lanes	X	X		\$ 2,255,715	2010-15
3117	Hillsboro RC	Hillsboro	East-West Connector	Brookwood Parkway to 28th Avenue	Extend Grant Street beyond 28th Avenue with a new 3-lane facility		X		\$ 9,061,600	2004-09
3118	Hillsboro RC	Hillsboro	Tualatin Valley Highway/Brookwood Avenue Intersection Alignment	Tualatin Valley Highway at Brookwood Avenue	Reconfigure TV Highway/Brookwood Avenue/Witch Hazel intersection and roadway improvements to Alexander Street	X	X	X	\$ 10,000,000	2004-09

Appendix 1.1

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3119	Hillsboro RC	ODOT	TV Highway Improvements - Hillsboro	Shute Park to Baseline/Oak Street to Tenth	Complete boulevard design improvements	X	X		\$ 2,310,000	2004-09
3120	Hillsboro RC	ODOT/Wash. Co.	TV Highway Pedestrian Improvements	10th to Cornelius Pass Road	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 9,586,500	2016-25
3121	Region	ODOT	TV Highway Corridor Study	Highway 217 to downtown Hillsboro	Study to define access management strategy and define needed improvments for motor vehicle, truck, transit, bike and pedestrian travel in the corridor	X	X		\$ 1,732,500	2004-09
3123	Hillsboro RC	TriMet/Hillsboro	Hillsboro Regional Center TMA Startup	Hillsboro Regional Center	Implements a transportation management association program with employers	X	X	X	\$ 200,000	2004-09
3124	Hillsboro RC	ODOT	TV Highway System Management	209th Avenue to 10th Avenue	Interconnect signals	X	X		\$ 1,732,500	2004-09
3126	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 5,775,000	2010-15
3127	Hillsboro Corridor	ODOT/Hillsboro/ WashCo	Hillsboro RC Pedestrian Improvements	18th, 21st, Oak, Maple and Walnut streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,914,500	2004-09
3128	Hillsboro RC	Washington Co.	Cornell Road Improvements	Arrington Road to Main Street	Widen to five lanes	X	X	X	\$ 6,930,000	2016-25
3129	Deleted (Outside Metro Planning Area Boundary)									
3130	Deleted (Construction completed)									
3131	Sunset IA	Washington Co.	Evergreen Road Improvements	25th Avenue to 253rd Avenue	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 4,679,500	2004-09
3132	Deleted (Construction completed)									
3133	Sunset IA	Washington Co./ ODOT	Cornelius Pass Road Interchange Improvement	US 26/Cornelius Pass Road	Construct eastbound on-ramp, westbound off-ramp and southbound auxiliary lane	X	X	X	\$ 5,775,000	2004-09
3134	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to three lanes including sidewalks, bike lanes and signals at Johnson and Francis	X	X	X	\$ 10,395,000	2004-09
3135	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	Baseline Road to Aloclek Drive	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 17,325,000	2004-09
3136	Deleted (Construction completed)									
3137	Sunset IA	Washington Co.	Brookwood Avenue Improvements	TV Highway to Baseline Road	Widen to three lanes including sidewalks and bike lanes	X	X	X	\$ 12,500,000	2004-09
3138	Deleted (Construction completed)									
3139	Sunset IA	Hillsboro	US 26 Overcrossing - Sunset IA	NW Bennett Avenue to NW Wagon Way	Construct two-lane new overcrossing with sidewalks and bike lanes to better connect areas north and south of US 26	X	X	X	\$ 6,633,743	2004-09
3140	Sunset IA	Hillsboro	229th Avenue Extension	NW Wagon Way to West Union Road	New three-lane facility with sidewalks and bike lanes	X	X	X	\$ 2,867,800	2010-15
3141	Sunset IA	Washington Co.	170th/173rd Improvements	Baseline to Walker	Improve to 3 lanes	X	X	X	\$ 6,352,500	2010-15
3142	Sunset IA	Washington Co.	Johnson Street Extension	170th Avenue to Cornelius Pass Road	Three lane extension (two lanes west bound and one lane eastbound with turn lanes), including bike lanes and sidewalks	X	X		\$ 21,000,000	2010-15
3143	Sunset IA	Washington Co.	Walker Road Improvements	Cedar Hills to 158th Avenue	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 23,100,000	2010-15
3144	Sunset IA	Washington Co.	Walker Road Improvements	158th Avenue to Amberglen Parkway	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 11,550,000	2010-15

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3145	Sunset IA	Washington Co.	Walker Road Improvements	Highway 217 to Cedar Hills Boulevard	Widen to five lanes including sidewalks and bike lanes		X		\$ 30,607,500	2016-25
3146	Sunset IA	WashCo/Hillsboro	Cornelius Pass Intersection Improvements	Intersection at Quatama	Improve Quatama/Cornelius Pass Road intersection		X		\$ 577,500	2016-25
3147	Sunset IA	Hillsboro	25th Avenue Improvements	Cornell Road to Evergreen	Widen street to three lanes with bike lanes	X	X	X	\$ 2,553,000	2010-15
3148	Beaverton RC	Washington Co.	Walker Road Improvements	Highway 217 to Cedar Hills Boulevard	Widen to three lanes including sidewalks and bike lanes	X	X	X	\$ 9,240,000	2010-15
3149	Sunset IA	ODOT/Washington Co.	Shute Road Interchange Improvements	Shute Road and US 26	Relocate westbound on-ramp to construct westbound to southbound loop ramp and widen overcrossing to accommodate additional southbound through lane	X	X	X	\$ 6,382,000	2004-09
3150	Sunset IA	Washington Co.	Cornell Road System Management	10th Avenue to Multnomah County line	Upgrade traffic controllers and install CCTV cameras and monitoring stations	X	X	X	\$ 800,000	2004-09
3151	Sunset IA	TriMet	US 26 Corridor TDM Program	Sunset Industrial Area	Implements a transportation management association program with employers		X		\$ 1,501,500	2016-25
3152	Deleted (Project completed)									
3153	Forest Grove TC	Forest Grove	David Hill Road Connector	Thatcher Road to Highway 47 (Sunset Drive)	Extend easterly from Thatcher Road to Sunset Drive (Highway 47) as a two -lane arterial facility with left-turn lanes at major intersections, traffic signal at 47 and bike lanes	X	X	X	\$ 7,165,000	2004-09
3154	Deleted (Construction completed)									
3155	Forest Grove TC	ODOT	Highwy 47 Traffic Signals	Highway 47/Elm Street and Highway 47/Maple Street	Add traffic signals at Elm and Maple streets		X		\$ 500,000	2004-09
3156	Forest Grove TC	Forest Grove/ WashCo.	Forest Grove-Cornelius Industrial Connector	Yew to Holladay	Two-lane improvements parallel to TV Highway	X	X		\$ 1,440,000	2010-15
3157	Forest Grove TC	Washington Co.	Sunset Drive Improvements	University Avenue to Beal Road	Widen to three lanes including bike lanes, signals and sidewalks	X	X	X	\$ 6,954,000	2004-09
3158	Forest Grove TC	Washington Co.	Martin Road/Cornelius-Schefflin Road Improvements	Forest Grove northern UGB to Roy Road	Realign with widened paved shoulders Martin Road and Cornelius Schefflin Road	X	X	X	\$ 14,206,500	2004-09
3159	Forest Grove TC	ODOT/Forest Grove	Highway 8 Improvements - Forest Grove	B' Street to Cornelius city limits	Complete boulevard design improvements (OTIA project in FC)	X	X	X	\$ 9,240,000	* 2010-15
3160	Forest Grove TC	Washington Co.	Verboort Road Intersection Improvement	at Highway 47	Intersection safety improvement	X	X	X	\$ 231,000	2010-15
3161	Forest Grove TC	Forest Grove	Gales Creek Road Intersection Realignment	at Thatcher Road	Realign intersection to increase capacity		X		\$ 1,420,650	2016-25
3162	Deleted (included in Project #3159)									
3163	Forest Grove TC	ODOT/Forest Grove	Forest Grove TC Pedestrian Improvements	TV Highway, Pacific, 19th, College, Sunset, "B" and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 2,463,234	2004-09
3164	Forest Grove TC	TriMet	TV Highway Frequent Bus	Forest Grove to Hillsdale via TV Highway and B-H Highway	Provide improvements that enhance frequent bus service	X	X	X	\$ 1,575,000	2004-25
3165	Forest Grove TC	ODOT	Highwy 47/Quince Street	Tualatin Valley Highway/Quince St. intersection	Modify traffic signal and add turn lanes at Quince Street		X		\$ 1,000,000	2016-25
3166	Cornelius	Cornelius/ODOT	Highway 8 Intersection Reconstruction - 10th Avenue	Intersection of 10th Avenue and Highway 8 couplet at Baseline and Adair	Increase turning radii, add protected turn lanes, and improve pedestrian crossings to support freight access and improve pedestrian and vehicle safety	X	X	X	\$ 879,000	2004-09

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3167	Cornelius	Cornelius/ODOT	Highway 8 Intersection Realignment - 19th/20th Avenue	Intersection of 19th/20th Avenue and Highway 8 at initiation of couplet	Create new intersection by the aligning of 19th Avenue/20th Avenue at Highway 8; improve S. 20th (including RR crossing) to S. Alpine and improve N. 19th to RR crossing north of N. Davis)	X	X	X	\$ 3,100,000	2004-09
3168	Cornelius	Cornelius/ODOT	Highway 8/14th Avenue Intersection Improvements	Intersection of 14th Avenue at Highway 8 couplet (Adair and Baseline)	Intersection geometry improvements and conversion of pedestrian signal to full mode signalization for improved Main Street District circulation and improved pedestrian safety on Adair and Baseline streets	X	X	X	\$ 450,000	2004-09
3169	Cornelius	Cornelius/ODOT	Main Street Couplet improvements	Highway 8 couplet from 10th to 19th Avenue	Complete boulevard design improvements to Baseline, 11th, 12th, 13th, 14th, and 17th Avenues, and pedestrian alley within the Adair/Baseline couplet in Main Street District	X	X	X	\$ 6,930,000	2004-09
3170	Cornelius	Cornelius/ODOT	West Couplet Enhancement	1st Avenue to 10th Avenue	Complete boulevard design improvements	X	X	X	\$ 3,465,000	2010-15
3171	Cornelius	Cornelius/Wash Co.	North Davis Street Reconstruction	19th Avenue to 10th Avenue	Reconstruct street to urban standards	X	X	X	\$ 1,600,000	2010-15
3172	Forest Grove TC	Forest Grove	23rd/24th Avenue Extension	Hawthorne Ave. to Quince St. (Hwy. 47)	Construct collector roadway with left-turn lane at Hawthorne	X	X	X	\$ 2,782,000	2004-09
3173	Sunset TC	Washington Co.	US 26 Undercrossing - Sunset TC	Barnes to Butner west of Highway 217	Construct new underpass to better connect areas north and south of US 26		X		\$ 11,550,000	2016-25
3174	Sunset TC	Washington Co.	Barnes Road Improvements	Leahy Road to 84th Avenue	Widen to five lanes with bike lanes and sidewalks		X		\$ 4,966,500	2016-25
3175	Sunset TC	Washington Co.	Barnes Road Improvements	Highway 217 to 119th Avenue	Widen to five lanes with bike lanes and sidewalks	X	X		\$ 7,161,000	2010-15
3176	Sunset TC	Washington Co.	95th Avenue Extension	Leahy Road to Barnes Road	Construct new two-lane road connection with bike and pedestrian facilities	X	X		\$ 1,732,500	2016-25
3177	Sunset TC	Washington Co.	Cedar Hills Boulevard/Barnes Road Intersection Improvement	Cedar Hills at Barnes Road	Add through and turn lanes, new traffic signal and signal at US 26 EB off-ramp	X	X		\$ 2,079,000	2004-09
3178	Sunset TC	Washington Co.	Westhaven Road Pathways	Morrison to Springcrest	Constructs off-road pathway to improve bicycle and pedestrian access to Sunset transit center	X	X	X	\$ 577,500	2010-15
3180	Sunset TC	Washington Co.	119th Avenue Improvements	Barnes Road to Cornell Road	Construct new collector with sidewalks and bike lanes	X	X		\$ 3,003,000	2010-15
3181	Cedar Mill TC	Washington Co.	Cornell Road Improvements - West Cedar Mill	US 26 to 143rd Avenue	Widen to five lanes with bike lanes and sidewalks	X	X		\$ 3,465,000	2016-25
3182	Cedar Mill TC	Washington Co.	Cornell Road Improvements - West Cedar Mill	143rd Avenue to Murray Boulevard	Widen to five lanes with boulevard design treatment	X	X	X	\$ 6,930,000	2016-25
3183	Cedar Mill TC	Washington Co.	Cornell Road Improvements	Murray Boulevard to Saltzman Road	Widen to three lanes with bikeways and sidewalks	x	X	X	\$ 9,200,000	2004-09
3184	Cedar Mill TC	Washington Co.	Cornell Road Improvements - East Cedar Mill	Saltzman to Miller Road	Widen to three lanes and improve crossings, bus shelters	X	X		\$ 12,705,000	2016-25
3185	Cedar Mill TC	Washington Co.	Barnes Road Improvement	Saltzman Road to 119th Avenue	Widen to five lanes with intersection improvement at Saltzman	X	X	X	\$ 6,121,500	2004-09
3186	Cedar Mill TC	Washington Co.	Murray Boulevard Improvements - Cedar Mill	US 26 to Cornell Road	Widen Murray Boulevard to five lanes and improve Cornell/Murray intersection	X	X	X	\$ 12,000,000	2004-09
3188	Cedar Mill TC	Washington Co.	Saltzman Road Improvements	Cornell Road to Laidlaw Road	Widen to three lanes with sidewalks and bike lanes	X	X	X	\$ 19,000,000	2004-09
3189	Deleted (included in Project #3188)									

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Appendix 1.1

RTP Project List
August 17, 2004

2000 RTP Project list as
Amended by Metro Resolution No. 03-3380A, Ordinance No. 04-1045A

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	2020 RTP Priority System	2025 RTP Illustrative System	2025 RTP Financially Constrained System	Est. Project Cost in 2003 dollars ("*" indicates phasing in financially	RTP Program Years
3190	Cedar Mill TC	Washington Co.	143rd Avenue Improvements	Cornell Road to West Union Road	Widen to three lanes with sidewalks and bike lanes	X	X		\$ 5,775,000	2010-15
3191	Deleted (Project included in other projects on list)									
3192	Cedar Mill TC	Washington Co.	Cedar Mill Town Center Local Connectivity, Phase 1	Various locations in the town center	Construct additional local road connections to improve traffic circulations	X	X	X	\$ 1,155,000	2004-09
3193	Deleted (included in Project #3183)									
3194	Deleted									
3195	Cedar Mill TC	Washington Co.	Saltzman Pedestrian Improvements	Marshall Road to Dogwood Road	Construct sidewalks on west side of road	X	X	X	\$ 560,175	2004-09
3197	Bethany TC	Washington Co.	Bethany Boulevard Improvements, Phase 1	Bronson Road to West Union Road	Widen to three lanes with bike lanes and sidewalks	X	X	X	\$ 5,775,000	2004-09
3198	Bethany TC	Washington Co.	Bethany Boulevard Improvements, Phase 2	Bronson Road to West Union Road	Widen to five lanes with bike lanes and sidewalks	X	X		\$ 2,310,000	2016-25
3199	Bethany TC	Washington Co.	West Union Road Improvements	143rd Avenue to future Springville Road extension	Widen to three lanes, including sidewalks and bike lanes		X		\$ 21,000,000	2016-25
3200	Bethany TC	Washington Co.	Kaiser Bikeway	West Union to Springville Road	Widen to include bike lanes		X		\$ 739,200	2016-25
3201	Bethany TC	Washington Co.	Kaiser Road Pedestrian Improvements	Bronson Creek to Springville Road	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 577,500	2016-25
3202	Bethany TC	Washington Co.	West Union Road Improvements	Future Sprinville Road extension to Cornelius Pass Road	Widen to five lanes including sidewalks and bike lanes		X		\$ 12,400,000	2016-25
3203	Bethany TC	Washington Co.	174th Avenue Improvements	Bronson Road to Meadowgrass Road	Widen to three lanes with bike lanes and sidewalks		X		\$ 13,900,000	2016-25
3204	Tanasbourne TC	Washington Co.	Cornell Road Improvements - East Tanasbourne	179th Avenue to Bethany Boulevard	Widen to five lanes with sidewalks and bike lanes	X	X	X	\$ 6,600,000	2010-15
3205	Tanasbourne TC	Washington Co.	173rd/174th Undercrossing	Cornell Road to Bronson Road	Construct new two lane undercrossing with sidewalks and bike lanes	X	X		\$ 17,094,000	2016-25
3206	Tanasbourne TC	Washington Co.	Thompson Road Improvements	Bronson Creek Drive to Saltzman Road	Widen to three lanes with sidewalks and bike lanes		X		\$ 2,310,000	2016-25
3207	Tanasbourne TC	Washington Co.	185th Avenue Improvements	Improve 185th Avenue and Cornell Road with "boulevard" design treatment, including improved sidewalks and bus stops, curb extensions, street trees, lighting, etc., within the town center.	Complete boulevard design improvements		X		\$ 4,620,000	2016-25
3208	Tanasbourne TC	Washington Co.	Tanasbourne TC Pedestrian Improvements	Cornell, Evergreen Pkwy and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 231,000	2016-25
3209	Bethany TC	Washington Co.	Springville Road Pedestrian Improvements	Kaiser to 185th	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 577,500	2016-25
3210	Tanasbourne TC	Washington Co.	185th Avenue Pedestrian Improvements	Westview HS to West Union Road	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X		\$ 51,975	2016-25
3214	Farmington TC	Washington Co.	Farmington Road Improvements	172nd Avenue to 185th Avenue	Widen to five lanes	X	X		\$ 11,550,000	2016-25
3215	Farmington TC	Washington Co.	Kinnaman Road Improvements	Farmington to 209th Avenue	Widen to two lanes WB, 1 lane EB, turn lane and bikeways and sidewalks	X	X		\$ 15,400,000	2016-25
3216	Farmington TC	Washington Co.	185th Avenue Improvements	TV Highway to Bany Road	Widen to three lanes	X	X	X	\$ 9,240,000	2010-15

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3217	Farmington TC	Washington Co.	Farmington Road Improvements	185th Avenue to 209th Avenue	Widen to three lanes	X	X	X	\$ 10,000,000	2010-15
3220	Aloha TC	WashCo/ODOT	Aloha TC Pedestrian Improvements	Tualatin Valley Highway, 185th and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X		\$ 1,155,000	2016-25
3221	Beaverton Corridor	Washington Co.	Kinnaman Road Pedestrian Improvements	Farmington to 198th	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 231,000	2016-25
3223	Beaverton Corridor	Washington Co.	185th Avenue Improvements	Tualatin Valley Highway to Kinnamon Road	Widen to five lanes with sidewalks and bike lanes	X	X		\$ 8,085,000	2016-25
3225	Aloha TC	Washington Co.	209th Avenue Improvements	Kinnaman Road to Farmington Road	Widen to three lanes with bike lanes and sidewalks		X		\$ 21,000,000	2010-15
3226	Bethany TC	Washington Co.	Springville Road Improvements	185th Avenue to Portland Community College	Widen to five lanes with bike lanes and sidewalks		X		\$ 3,800,000	2010-15
3227	Bethany TC	Washington Co.	Springville Road Improvements	PCC access to Kaiser Road	Widen to three lanes with bike lanes and sidewalks		X		\$ 9,600,000	2016-25
3228	Bethany TC	Washington Co.	Laidlaw Road Improvements	Weest Union Road to Kaiser Road	Widen to three lanes with bike lanes and sidewalks		X		\$ 11,000,000	2010-15
3229	Bethany TC	Washington Co.	Kaiser Road Improvements	Bethany Boulevard to Cornell Road	Widen to three lanes with bike lanes and sidewalks		X		\$ 18,600,000	2010-15
3230	Bethany TC	Washington Co.	Kaiser Road Improvements	Springville Road to Bethany Boulevard	Widen to five lanes with bike lanes and sidewalks		X		\$ 4,600,000	2016-25
3231	Elmonica SC	Washington Co.	Jenkins Road Improvements	Murray Boulevard to 185th Avenue	Widen to five lanes with bike lanes and sidewalks		X		\$ 7,300,000	2010-15
3232	Aloha TC	Washington Co.	197/198th Avenue Improvements	Tualatin Valley Highway to Baseline Road	Widen to three lanes with bike lanes and sidewalks		X		\$ 13,900,000	2016-25
3233	Sunset IA	Washington Co.	Cornelius Pass Road Interchange	US 26 at Cornelius Pass Road	Construct a northbound to westbound loop ramp		X		\$ 30,000,000	2016-25
3234	Cedar Mill TC	Washington Co.	Barnes Road Improvements	Leahy Road to County Line	Widen to three lanes including bike lanes and sidewalks		X		\$ 7,500,000	2016-25
4000	Region	Region	Vancouver Rail Bridge Replacements	Rail bridge on Columbia River	Replace rail bridge swing span based on recommendations from I-5 Trade Corridor EIS study	X	X		\$ 42,000,000	2010-15
4001	Region	TriMet	Killingsworth Frequent Bus	Swan Island to Clackamas TC	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 4,540,000	2010-15
4002	Region	ODOT	I-5 Interstate Bridge and I-5 Widening - ROW	I-5/Columbia River to Columbia Boulevard	Acquire right-of-way	X	X		\$ 20,000,000	2004-09
4003	Region	ODOT	I-5 Interstate Bridge and I-5 Widening	I-5/Columbia River to Columbia Boulevard	Improve I-5/Columbia River bridge (local share of joint project) based on recommendations in I-5 Trade Corridor Study	X	X		\$ 231,000,000	2004-09
4004	Region	ODOT	I-5 Reconstruction and Widening	Greeley Street to I-84	Modernize freeway and ramps to improve access to the Lloyd District and Rose Quarter (Greeley ramp improvements in financially constrained system)	X	X	X	\$ 106,260,000	* 2004-09
4005	Region	ODOT	I-5 North Improvements	Lombard Street to Expo Center/Delta Park	Widen to six lanes	X	X	X	\$ 41,000,000	2004-09
4006	Region	ODOT	I-5/Columbia Boulevard Improvement	I-5/Columbia Boulevard interchange	Construct full direction access interchange based on recommendations from I-5 North Trade Corridor Study	X	X	X	\$ 56,000,000	2010-15
4007	Region	Multnomah Co.	Sauvie Island Bridge Replacement	Sauvie Island Bridge	Replace substandard bridge	X	X	X	\$ 31,000,000	2004-09
4008	Region	Metro/ODOT	I-205 North Corridor Study	Highway 224 to Vancouver, Wa.	Develop traffic management plan	X	X		\$ 1,155,000	2010-15
4009	Region	ODOT	I-5 Trade Corridor Study and Tier 1 DEIS	I-405 (OR) to I-205 (WA)	Plan improvements to I-5 to benefit freight traffic	X	X	X	\$ 15,000,000	2004-09

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Appendix 1.1

RTP Project List
August 17, 2004

2000 RTP Project list as
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RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	2020 RTP Priority System	2025 RTP Illustrative System	2025 RTP Financially Constrained System	Est. Project Cost in 2003 dollars ("*" indicates phasing in financially	RTP Program Years
4010	Columbia Corridor	Portland	Columbia Boulevard Seismic Retrofit	Columbia Boulevard bridge at Taft Avenue	Seismic retrofit project		X		\$ 415,800	2016-25
4011	Columbia Corridor	Portland	NE Marine Drive Bikeway	NE 6th to 33rd Avenue and Gantenbein to Vancouver Way	Retrofit bike lanes to existing street; off-street paths in missing locations	X	X	X	\$ 519,750	2004-09
4012	Columbia Corridor	Portland	N/NE Lombard/Killingsworth ITS	Six signals: at junction, MLK, Interstate, Greeley, Portsmouth and Philadelphia/Ivanhoe	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 242,550	2010-15
4013	Columbia Corridor	ODOT/Portland	US 30 Bypass Phase I Refinement Study	I-5 to I-84	Refine long-term improvements as defined in the Columbia Corridor Study to consider additional TSM and access management	X	X		n/a	2004-09
4014	Columbia Corridor	ODOT/Portland	Northeast Portland Highway Study	Columbia/Lombard - I-5 to US-30	Define long-term improvements and primary freight strategy in corridor	X	X		\$ 577,500	2016-25
4015	Deleted (Project included in #4037)									
4016	Columbia Corridor	ODOT/Metro	North Willamette Crossing Study	US 30 to Rivergate north of St. Johns	Study the need for a new bridge from US-30 to Rivergate	X	X		\$ 1,155,000	2016-25
4017	PDX IA	Port	SW Quad Access	33rd Avenue	Provide street access from 33rd Avenue into SW Quad	X	X	X	\$ 1,732,500	2004-09
4018	PDX IA	Port/Portland	Columbia/Lombard Street Crossover	at 33rd Avenue	Improve access from Columbia Boulevard to 33rd Avenue to the north for air cargo-related development		X		\$ 8,778,000	2016-25
4019	Deleted (Construction completed)									
4020	Deleted (Construction completed)									
4021	PDX IA	Port	Airport Way Improvements, West	82nd Avenue to PDX terminal	Widen to three lanes in both directions	X	X	X	\$ 11,550,000	2010-15
4022	PDX IA	Portland/Port	East Columbia/Lombard Street Connector	Columbia/US 30 Bypass: NE 82nd Avenue to I-205	Provide free-flow connection from Columbia Boulevard/82nd Avenue to US 30 Bypass/I-205 interchange	X	X	X	\$ 28,865,250	2004-09
4023	PDX IA	Port	Marx Drive Extension	Marx Drive to 82nd Avenue	Extend Marx to 82nd Avenue	X	X		\$ 363,825	2010-15
4024	Deleted (Construction completed)									
4025	Deleted (Construction completed)									
4026	PDX IA	Port/Portland	Cascades Parkway Connection	Cascades Parkway to Alderwood Road	Construct two-lane extension	X	X	X	\$ 1,732,500	2004-09
4027	Deleted (Construction completed)					X				
4028	PDX IA	Port	Airport Way/82nd grade separation	82nd Avenue/Airport Way	Construct grade separated overcrossing	X	X	X	\$ 12,705,000	2010-15
4029	PDX IA	Portland	PDX ITS	Traffic signalization	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 11,895,000	2004-09
4030	Deleted (Project included in #4037)									
4031	PDX IA	Port	Airport Way return and Exit Roadways	Airport Way	Relocate Airport Way exit roadway and construct new return roadway	X	X	X	\$ 16,170,000	2010-15
4032	PDX IA	Port	Airport Way terminal entrance roadway relocation	PDX terminal	Relocate and widen Airport Way northerly at terminal entrance to maintain access and circulation	X	X	X	\$ 4,620,000	2004-09

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4033	PDX IA	Port	Airport Way east terminal access roadway	PDX east terminal	Construct Airport Way east terminal access roadway	X	X	X	\$ 9,240,000	2010-15
4034	PDX IA	Portland	33rd Avenue Bridge and Ramps Seismic Retrofit	NE 33rd Avenue at Columbia Boulevard	Seismic retrofit project		X		\$ 1,039,500	2016-25
4035	Deleted (duplicated in Project #4034)									
4036	PDX IA	Portland	42nd Avenue Bridge Seismic Retrofit	NE 42nd Avenue at Lombard Street	Seismic retrofit project		X		\$ 473,550	2016-25
4037	PDX IA	Portland/Port	Lombard-Columbia Connection near MLK Jr. Boulevard	Columbia Boulevard and Lombard Street near MLK	Improve road connection between Columbia Boulevard and Lombard in the vicinity of MLK Jr. Boulevard to 11/13th Avenue to facilitate freight movement	X	X	X	\$ 16,835,000	2004-09
4038	PDX IA	Port	82nd Avenue/Alderwood Road Improvement	82nd Avenue/Alderwood Road intersection	Construct new turn lanes, restripe and modify traffic signal	X	X	X	\$ 790,000	2004-09
4039	PDX IA	Port	NE 92nd Avenue	NE 92nd/Columbia Boulevard/Alderwood	Improvement to be defined	X	X	X	\$ 1,732,500	2016-25
4040	PDX IA	Portland	47th Avenue Intersection and Roadway Improvements	at Columbia Boulevard	Widen and channelize NE Columbia Boulevard to facilitate truck turning movements; add sidewalks and bike facilities	X	X	X	\$ 2,800,000	2004-09
4041	PDX IA	Portland	Columbia Boulevard/Alderwood Improvements	at Alderwood Road intersection	Widen and signalize intersection	X	X	X	\$ 1,460,000	2004-09
4042	PDX IA	Port	Cornfoot Road Intersection Improvement	Alderwood/Cornfoot intersection	Add signal, improve turn lanes at intersection	X	X	X	\$ 730,000	2004-09
4043	PDX IA	Portland	33rd/Marine Drive Intersection Improvement	NE 33rd and Marine Drive	Signalize 33rd/Marine Drive intersection for freight movement	X	X	X	\$ 288,750	2010-15
4044	PDX IA	Port/Portland	Columbia/82nd Avenue Improvements	Columbia Boulevard at 82nd Avenue southbound ramps	Add through lanes on Columbia Boulevard, a SB right turn lane and signalize	X	X	X	\$ 1,130,000	2004-09
4045	PDX IA	Port/Portland	Airport Way/122nd Avenue Improvements	Airport Way at 122nd Avenue	Add NB left turn lane, modify traffic signal and reconstruct island	X	X	X	\$ 490,000	2004-09
4046	PDX IA	Portland	NE Alderwood Bikeway	NE Columbia Boulevard to Alderwood Trail	Retrofit bike lanes to existing street	X	X	X	\$ 462,000	2010-15
4047	Deleted (Construction completed)									
4048	Deleted (alternative route provided on 37th)									
4049	PDX IA	Portland	NE 82nd Avenue Bikeway	Columbia Boulevard to Airport Way	Retrofit bike lanes to existing street	X	X	X	\$ 11,550	2004-09
4050	PDX IA	Portland	N/NE Columbia Boulevard Bikeway	N Lombard to MLK Boulevard	Retrofit bike lanes to existing street	X	X	X	\$ 109,725	2010-15
4051	PDX IA	Portland	NE Cornfoot Bikeway	NE Alderwood to NE 47th Avenue	Retrofit bike lanes to existing street	X	X	X	\$ 1,607,760	2016-25
4052	Deleted (Construction completed)									
4053	PDX IA	Port	Pedestrian and Bicycle Access Improvements	PDX terminal between N. Frontage Road and the terminal building	Provide pedestrian and bicycle access to the terminal	X	X	X	\$ 600,000	2004-09
4054	PDX IA	Portland	N Columbia Pedestrian Improvements, Phase I and Phase II	Swift to Portland Road; Argyle Way to Albina	Construct sidewalk and crossing improvements.	X	X	X	\$ 3,003,000	2004-09
4055	PDX IA	Port	Airtrans/Cornfoot Rd Intersection Improvement	Airtrans and Cornfoot Road	Provide channelization, construct new traffic signal	X	X	X	\$ 250,000	2004-09
4056	PDX IA	Portland	Columbia Boulevard ITS	Six signals between N. Burgard and I-205	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 358,050	2010-15

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4057	PDX IA	Portland	N/NE Marine Drive ITS	Three signals between N. Portland Road and NE 185th Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 866,250	2004-09
4058	PDX IA	Portland	NE Airport Way ITS	Three signals between I-205 and NE 158th Avenue	Communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow	X	X	X	\$ 3,465,000	* 2004-09
4059	PDX IA	Port	82nd Avenue Pedestrian Access Improvements	Airport Way to Alderwood Road	Provide pedestrian improvements	X	X	X	\$ 577,500	2004-09
4060	PDX IA	Port/Portland	Lightrail station/track realignment	PDX terminal	Realign light rail track into terminal building (incudes double tracking)	X	X	x	\$ 14,000,000	2010-15
4061	Rivergate IA	Port/Portland	West Hayden Island Bridge and Acces Road	Marine Drive to West Hayden Island	New four-lane connection from Rivergate to W. Hayden Island terminals	X	X		\$ 57,519,000	2010-15
4062	Deleted (Construction completed)									
4063	Rivergate IA	ODOT/Portland	N. Lombard Improvements	Lombard Street from Rivergate Boulevard (Purdy) to south of Columbia Slough bridge	Widen street to three lanes	X	X	X	\$ 3,610,000	2004-09
4064	Rivergate IA	Port	Marine Drive Improvement, Phase 2	Rail overcrossing	Contract rail overcrossing	X	X		\$ 20,790,000	2016-25
4065	Rivergate IA	Port/Portland	North Lombard Overcrossing	South Rivergate	Construct overpass from Columbia/Lombard intersection into South Rivergate entrance to separate rail and vehicular traffic. Project includes motor vehicle lanes, bike lanes, and sidewalks.	X	X	X	\$ 24,453,660	2004-09
4066	Rivergate IA	Port	Columbia River Channel Deepening Study	Astoria to Portland	Conduct feasibility/environmental study	X	X		n/a	2004-09
4067	Rivergate IA	Port	Columbia River Channel Deepening - Regional Share	Deepen Columbia River Channel from Astoria to Portland	State-wide issue, project is outside Metro region	X	X	X	statewide project	2004-09
4068	Rivergate IA	Port/RR	Rivergate Rail expansion	Includes a series of improvements in Rivergate	Expand rail capacity in and to the Rivergate area	X	X		\$ 17,000,000	2004-09
4069	Rivergate IA	Port/RR	Hayden Island rail access	Rail facilities from Rivergate to Hayden Island	Rail access to Hayden Island development	X	X		\$ 3,000,000	2010-15
4070	Rivergate IA	Port/RR	Additional tracks - Kenton Line	North Portland to Fir Street	Add track and sidings between Pen Junction and I-205	X	X		\$ 17,600,000	2010-15
4071	Rivergate IA	Port/RR	Barnes Yard Expansion	Bonneville Yard to Barnes Yard	Construct additional unit train trackage between Bonneville and Barnes Yard for storage	X	X		\$ 5,197,500	2004-09
4072	Columbia Corridor	Portland	N. Force/Broadacre/Victory Bikeway	N. Marine Drive to N. Denver	Signed bikeway connection to I-5 river crossing	X	X	X	\$ 23,100	2016-25
4073	Rivergate IA	Portland/Metro	Kelley Point Park AccessTrail/40 Mile Loop Trail	Vicinity of Kelley Point Park	Construct shared-use path	X	X	X	\$ 132,825	2004-09
4074	Deleted (included in Project #4073)									
4075	Rivergate IA	ODOT/RR	3rd Track Connector Study	North Portland to Vancouver, WA	Study additional rail capacity to address growth in high speed rail and commuter rail		X		n/a	2004-09
4076	Rivergate IA	Various	Columbia Slough Greenway Trail Study	Kelly Point Park to Blue Lake Park	Determine feasibility of shared-use path of regional significance	X	X	X	\$ 150,000	2004-09
4077	Rivergate IA	Port/RR	Penn Junction Realignment	UP/BNSF Main line	Realign track configuration and signaling	X	X		\$ 5,000,000	2004-09
4078	Rivergate IA	Port/RR	WHI Rail Yard	West Hayden Island	Construct 7 track rail yard	X	X		\$ 9,500,000	2010-15
4079	Rivergate IA	Port/RR	Additional tracks - North Rivergate	Rivergate	Additional mainline track between BN Ford facility and B Yard	X	X		\$ 300,000	2016-25

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4080	Deleted (Project completed)									
4081	Deleted (Project completed)									
4082	Rivergate IA	Port/RR	Ramsey Rail Complex	South of Columbia Slough bridge	Construct six tracks and one mainline track and lead	X	X	X	\$ 12,000,000	2004-09
4084	PDX IA	Port	East Airport Pedestrian and Bicycle Access Improvements	Mt. Hood Avenue to Marine Drive	Provide bicycle and pedestrian connection between Mt. Hood Avenue and Marine Drive	X	X	X	\$ 550,000	2004-09
4085	PDX IA	Port	Terminal area Bicycle and Pedestrian Improvements	Southside of PDX terminal to 82nd Avenue	Provide bicycle and pedestrian connection between terminal and 82nd Avenue south of Airport Way	X	X	X	\$ 350,000	2010-15
4086	PDX IA	Port	PIC Bike and Pedestrian Improvements	Portland International Center	Provide bicycle and pedestrian connection between Alderwood Road and Mt. Hood LRT station	X	X	X	\$ 240,000	2004-09
4087	Rivergate IA	Port	Leadbetter Street Extension and Grade Separation	to Marine Drive	Extend street and construct grade separation	X	X	X	\$ 8,000,000	2004-09
4088	Rivergate IA	Port/Portland	Terminal 4 Driveway Consolidation	Lombard Street at Terminal 4	Consolidate two signalized driveways at Terminal 4	X	X	X	\$ 1,000,000	2004-09
4089	Columbia Corridor	Port/Portland	Columbia Boulevard Improvements	60th Avenue to 82nd Avenue	Widen street to five lanes		X		\$ 15,000,000	2010-15
4090	Region	ODOT	I-5 Reconstruction and Widening - PE/EA	Greeley Street to I-84	Conduct preliminary engineering and environmental work to modernize reeway and ramps to improve access to the Lloyd District and Rose Quarter		X		\$ 15,000,000	2010-15
4091	Region	ODOT	I-5 Reconstruction and Widening - ROW Preservation	Greeley Street to I-84	Acquire R-O-W		X		\$ 5,000,000	2010-15
4092	Region	Region	BNSF Rail Bridge	Columbia River	Construct improvements to increase track speeds on approaches too movable river spans		X		\$ 8,000,000	2004-09
4093	Region	Region	North Portland Junction	North Portland	Install revised rail corssovers and higher turnout speeds		X		\$ 9,200,000	2004-09
4094	Region	Region	Graham Line Connection	South of Steel Bridge	Restablish a connection in the southeast quadrant at East Portland between UP's Brooklyn and Graham rail lines		X		\$ 11,000,000	2010-15
4095	Region	Region	Albina to Willsburg Junction Improvements	Between Milwaukie and UPRR Albina Rail Yards	Implement track and signal improvements to allow for increased track speeds between		X		\$ 8,800,000	2004-09
4096	Region	Region	Willsburg Junction to Clackamas	Milwaukie to I-205	Extend two tracks from Willsburg Junction to Clackamas		X		\$ 19,000,000	2004-09
4097	Region	Region	Albina Yard Mainline Improvements	Near UPRR Albina Rail Yards	Upgrade river lead tracks between Albina and East Protland, and a second track through the East Portland yard, interlocking the Seattle and Brooklyn subdivisions		X		\$ 12,000,000	2004-09
4098	Region	Region	Graham Line Siding	Graham rail line	Add controlled siding on the UP Graham line		X		\$ 12,000,000	2004-09
4099	Region	Region	North Portland Rail Grade Separation	BNSF Rail Bridge and Columbia Slough and North Portland Junction	Grade separation rail/highway traffic on North Columbia Boulevard at Penn Junction		X		\$ 75,000,000	2016-25
5000	Region	TriMet	Oregon City LRT Extension	Oregon City to Milwaukie extension	New LRT Service		X		\$ 577,500,000	2016-25
5001	Region	TriMet	Transit center and park-and-ride upgrades	Various locations in subarea	Construct, expand and/or upgrade transit stations and park-and-rides throughout subarea	X	X	X	See Tri-Met Total	2004-25
5002	Region	ODOT	I-205 Improvements	99E to Highway 213	General purpose, express, HOV or peak period pricing capacity improvements to be determined based on I-205 South Corridor Study		X		\$ 86,625,000	2016-25

Appendix 1.1

RTP Project List
August 17, 2004

2000 RTP Project list as
Amended by Metro Resolution No. 03-3380A, Ordinance No. 04-1045A

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	2020 RTP Priority System	2025 RTP Illustrative System	2025 RTP Financially Constrained System	Est. Project Cost in 2003 dollars ("*" indicates phasing in financially	RTP Program Years
5003	Region	ODOT	Sunrise Highway -Unit 1, Phase 2	122nd Avenue to Rock Creek	Construct new 4-lane facility and construct interchanges at 135th and Rock Creek junction	X	X		\$ 104,550,000	2004-09
5004	Region	ODOT	Sunrise Highway R-O-W Preservation	Rock Creek to 257th Avenue	Acquire right-of-way	X	X		\$ 46,200,000	2004-09
5005	Region	ODOT	Sunrise Highway - Unit 2, Phase 1	Rock Creek to 257th Avenue	Construct new 4-lane facility	X	X		\$ 184,800,000	2016-25
5006	Region	ODOT	Sunrise Highway - Unit 2, Phase 2	257th Avenue to US 26	Construct new 4-lane facility	X	X		\$ 177,000,000	2016-25
5007	Region	ODOT	Highway 212	Rock Creek to Damascus	Construct climbing lanes to 172nd Avenue	X	X	X	\$ 1,501,500	2004-09
5008	Region	ODOT	Highway 212/I-205 Interchange Improvement	Highway 212/I-205	Increase ramp capacity from I-205 to Highway 212		X		\$ 17,325,000	2016-25
5009	Region	ODOT	I-205 Improvements	West Linn to I-5	General purpose, express, HOV or peak period pricing capacity improvements to be determined based on I-205 South Corridor Study	X	X		\$ 80,850,000	2016-25
5010	Region	ODOT	I-205 Express Lanes	Highway 213 to just north of I-84	General purpose, express, HOV or peak period pricing capacity improvements to be determined based on I-205 South Corridor Study		X		\$ 34,650,000	2016-25
5011	Region	ODOT/ClackCo	I-205 North Auxiliary Lane Improvements	I-205 at Sunnybrook Road	Complete interchange	X	X		\$ 10,510,500	2004-09
5012	Region	ODOT	I-205 Bridge Improvements	I-205 Bridge in Oregon City	General purpose, express, HOV or peak period pricing capacity improvements to be determined based on I-205 South Corridor Study	X	X		\$ 86,625,000	2016-25
5013	Region	ODOT	I-205 Climbing Lanes	Willamette River to West Linn in Clackamas County	New SB Truck climbing lane at I-205 bridge (between Willamette River and 10th Street) - PE/ROW in financially constrained system	X	X	X	\$ 46,200,000	* 2016-25
5014	Region	ODOT	I-205 Auxiliary Lanes	82nd Drive to Highway 212/224	Add auxiliary lanes	X	X		\$ 9,240,000	2016-25
5015	Region	ODOT	Highway 99E/224 Improvements	Ross Island Bridge to I-205	Access management, reversible travel lane from Ross Island Bridge to Harold and widen to six lanes from Harold to I-205	X	X		\$ 110,880,000	2016-25
5016	Region	ODOT	Highway 213 Grade Separation	Washington Street at Highway 213	Grade separate southbound Highway 213 at Washington Street and add a northbound lane to Highway 213 from just south of Washington Street to the I-205 on-ramp.	X	X	X	\$ 10,395,000	2010-15
5017	Region	ODOT	Highway 213 Intersection Improvements	Abernethy at Highway 213	Intersection improvements	X	X	X	\$ 3,465,000	2010-15
5018	Deleted (Construction completed)									
5019	Region	ODOT	Highway 213 Interchange Improvements	Beavercreek/Highway 213	Grade separate existing intersections		X		\$ 20,790,000	2016-25
5020	Region	ODOT	Highway 213 Improvements	Clackamas CC to Leland Road	Access management, sidewalks and capacity improvements including (adding one lane in each direction north of Canyon Ridge Drive in FC system)	X	X	X	\$ 17,325,000	* 2010-15
5021	Region	ODOT	Highway 224 Extension	I-205 to Highway 212/122nd Avenue	Construct new four-lane highway and reconstruct Highway 212/122nd Avenue interchange	X	X	X	\$ 84,315,000	2010-15
5022	Deleted (Construction completed)									
5023	Region	ODOT	I-205/Highway 213 Interchange Improvement	I-205 at Highway 213	Reconstruct I-205 southbound off-ramp to Highway 213 to provide more storage and enhance freeway operations and safety	X	X	X	\$ 1,155,000	2010-15

Appendix 1.1

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5024	Region	ODOT/Clackamas County	Sunrise Project Supplemental EIS	I-205 to Rock Creek	Corridor analysis from I-205 to 172nd Avenue to develop and complete the environmental process that would determine selected alternative and develop phasing recommendations adequate to support future ROW acquisition	X	X	X	\$ 2,736,195	2004-09
5025	Region	ODOT/Clackamas County	Sunrise Corridor Unit 2 Locational EIS	Rock Creek to US 26	Evaluate Sunrise Corridor Unit 2 as part of the Damascus/Boring Concept plan		X	X	\$ 1,848,000	2004-09
5026	Region	Metro	Portland Traction Co. Shared-Use Trail	Milwaukie to Gladstone	Planning, PE and construction of multi-use trail	X	X	X	\$ 1,386,000	2004-09
5027	Region	Metro/ODOT	I-205 South Corridor Study- EIS	I-5 to Highway 224	Conduct EIS corridor analysis to study long-term transit and road improvements	X	X	X	\$ 5,000,000	2010-15
5028	Region	ODOT/Metro	Highway 224/McLoughlin Boulevard Corridor Study	Portland central city to Clackamas regional center	Corridor analysis to study long-term transit and road improvements	X	X		\$ 1,155,000	2016-25
5029	Region	ODOT	South Corridor Transit Study (McLoughlin/Highway 224) and EIS	Ross Island Bridge to I-205	Study to develop long-term strategy for corridor and complete EIS	X	X		\$ 9,240,000	2004-09
5030	Region	ODOT	Highway 213 Green Corridor Plan	Highway 213 south of Leland Road	Develop Green Corridor plan	X	X		n/a	2010-15
5031	Region	ODOT	Highway 213 Corridor Study	Highway 213 south of I-205	Corridor analysis to study long-term transit and road improvements	X	X		\$ 577,500	2016-25
5032	Region	Various	North Clackamas Greenway Corridor Study	Milwaukie to Clackamas RC	Study feasibility of corridor	X	X		n/a	2004-09
5033	Region	Various	Willamette River Greenway Study	Sellwood Bridge to Lake Oswego	Study feasibility of corridor	X	X	X	n/a	2004-09
5034	Region	ODOT/Clackamas County	Sunrise Highway R-O-W Preservation	I-205 to Rock Creek	Acquire right-of-way		X		\$ 40,000,000	2004-09
5035	Milwaukie TC	TriMet	McLoughlin Boulevard Rapid Bus	Milwaukie TC to Oregon City TC	Construct improvements that enhance Rapid Bus service	X	X	X	see Tri-Met total	2010-15
5036	Deleted									
5037	Milwaukie TC	Milwaukie/ClackCo	Lake Road Improvements	21st Avenue to Highway 224	Reconstruct street to narrow travel lanes and bike lanes and add sidewalks, landscaped median, curbs, storm drainage and left turn refuges at some intersections	X	X	X	\$ 5,500,000	2010-15
5038	Deleted (Construction to be completed in 2003)									
5039	Deleted (included in Project #5049)									
5040	Milwaukie TC	Milwaukie	Railroad Avenue Bike/Ped Improvement	37th Avenue to Linwood Road	Retrofit bike lanes and sidewalks	X	X	X	\$ 7,000,000	2010-15
5041	Milwaukie TC	Milwaukie	37th Avenue Bike/Ped Improvement	Highway 224 to Harrison Street	Retrofit bike lanes and sidewalks	X	X	X	\$ 410,000	2016-25
5042	Deleted (Project to be completed through redevelopment)									
5043	Milwaukie TC	Clack. Co./Milwaukie	Stanley Avenue Multi-modal Improvements	Willow Street to Johnson Creek Boulevard	Extend sidewalk to Johnson Creek Boulevard and accommodate bicycles		X		\$ 173,000	2016-25
5044	Milwaukie TC	Milwaukie	Oatfield Road Improvement	Oatfield Road/Lake Road intersection	New EB right turn lane at Oatfield Road/Lake Road intersection		X		\$ 207,000	2010-15
5045	Milwaukie TC	Clack. Co./Milwaukie	Linwood/Harmony/Lake Road Improvements	Linwood/Harmony/Lake Road intersection	Add NB right turn lane, add EB right turn lane, add WB left turn lane and grade separate UPRR	X	X	X	\$ 28,000,000	2010-15
5046	Deleted (Construction completed)									

Appendix 1.1

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5047	Milwaukie TC	ODOT	McLoughlin Boulevard Improvements - Milwaukie	Scott Street to Harrison Street	Complete boulevard design improvements		X		\$ 3,300,000	2004-09
5048	Milwaukie TC	ODOT	McLoughlin Boulevard Improvements - Milwaukie	Harrison Street to Kellogg Creek	Complete boulevard design improvements	X	X	X	\$ 3,900,000	2004-09
5049	Milwaukie TC	ODOT	McLoughlin Boulevard Improvements - Milwaukie	Kellogg Creek to River Road	Complete boulevard design improvements	X	X		\$ 3,000,000	2004-09
5050	Milwaukie TC	Milwaukie	Harrison Street Bikeway	Highway 99E to King Road via 42nd Avenue	Retrofit bike lanes to existing street	X	X		\$ 560,000	2004-09
5051	Deleted (included in Project #5037)									
5052	Milwaukie TC	Milwaukie	17th Avenue Trolley Trail Connector	Springwater Corridor to Trolley Trail	Construct sidewalks on 17th Avenue to provide trail connection	X	X	X	\$ 200,000	2004-09
5053	Milwaukie TC	Region	Tillamook Branch Trestle Trail Study	Milwaukie TC to Lake Oswego TC	Conduct feasibility study of east-west multi-use trail connection across Willamette River in conjunction with evaluating bridge as a freight connection and possible future commuter rail connection	X	X	X	n/a	2004-09
5054	Milwaukie TC	Milwaukie/ODOT	Milwaukie Town Center Pedestrian Improvements	McLoughlin, Harrison, Monroe, Washington, Main and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 2,400,000	2016-25
5055	Milwaukie TC	Milwaukie/ODOT	Milwaukie TC River Access Improvements	McLoughlin Boulevard	Improve pedestrian access to Willamette River from Milwaukie		X		\$ 10,000,000	2016-25
5056	Milwaukie TC	Clackamas Co.	Lake Road Pedestrian Improvements	Harmony Road to Johnson Road	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 115,500	2016-25
5057	Milwaukie TC	Clack. Co./Milwaukie	Linwood/Flavel Avenue Pedestrian Improvements	Johnson Creek Boulevard to Harmony Road	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 600,000	2010-15
5058	Milwaukie TC	Milwaukie	17th Avenue Pedestrian Improvements	Lava Drive to Ochoco Street	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 920,000	2016-25
5059	Milwaukie TC	Milwaukie	King Road Boulevard Improvements	42nd Avenue to Linwood Avenue	Boulevard design, including wider sidewalks, bikeway, median treatment and access management	X	X	X	\$ 5,000,000	2010-15
5062	Milwaukie TC	TriMet/Milwaukie	Milwaukie TMA Startup	Milwaukie town center area	Implements a transportation management association program with employers	X	X	X	\$ 200,000	2016-25
5064	Clackamas RC	TriMet	I-205 Rapid Bus	Clackamas RC to Oregon City via I-205	Construct improvements that enhance Rapid Bus service	X	X		see Tri-Met total	2004-09
5065	Deleted (TMA has been formed)									
5066	Clackamas RC	Clackamas Co.	East Sunnyside Road Improvements	122nd Avenue to 172nd Avenue	Widen to five lanes to improve safety and accessibility to Damascus	X	X	X	\$ 45,045,000	* 2010-15
5067	Clackamas RC	Clackamas Co.	Johnson Creek Boulevard Interchange Improvements	Johnson Creek Boulevard at I-205	Add loop ramp and NB on-ramp; realign SB off-ramp	X	X	X	\$ 8,000,000	2016-25
5068	Clackamas RC	Clackamas Co.	Johnson Creek Boulevard Improvements	45th Avenue to 82nd Avenue	Widen to three lanes and widen bridge over Johnson Creek to improve freight access to I-205	X	X		\$ 8,085,000	2016-25
5069	Clackamas RC	Clackamas Co.	Harmony Road Improvements	Sunnyside Road to Highway 224	Widen to five lanes to improve safety and accessibility	X	X	X	\$ 7,392,000	2010-15
5070	Clackamas RC	Clackamas Co.	Otty Road Improvements	82nd Avenue to 92nd Avenue	Widen and add turn lanes	X	X	X	\$ 1,848,000	2004-09
5071	Clackamas RC	Clackamas Co.	William Otty Road Extension	I-205 frontage road to Valley View Terrace	Extend William Otty Road as two-lane collector to improve east-west connectivity	X	X	X	\$ 5,313,000	2016-25
5072	Clackamas RC	Clackamas Co.	West Monterey Extension	82nd Avenue to Price Fuller Road	Two-lane extension to improve east-west connectivity	X	X	X	\$ 1,767,150	2010-15

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Appendix 1.1

RTP Project List
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5073	Clackamas RC	Clackamas Co.	Monterey Improvements	82nd to new overcrossing of I-205	Widen to five lanes from 82nd to I-205	X	X	X	\$ 5,197,500	2004-09
5074	Clackamas RC	Clackamas Co.	Causey Avenue Extension	Causey - over I-205 to new east frontage road	Extend new three-lane crossing over I-205 to improve east-west connectivity	X	X	X	\$ 6,294,750	2016-25
5075	Clackamas RC	Clackamas Co.	79th Avenue Extension	King Road to Clatsop Street	Build N-S collector west of 82nd Avenue		X		\$ 5,775,000	2016-25
5076	Clackamas RC	Clackamas Co.	Fuller Road Improvements	Johnson Creek Boulevard to Otty Road	Widen street and add turn lanes	X	X	X	\$ 2,600,000	2004-09
5077	Clackamas RC	Clackamas Co.	Summers Lane Extension	122nd Avenue to 142nd Avenue	New three-lane extension to provide alternative e/w route to Sunnyside	X	X	X	\$ 8,373,750	* 2016-25
5078	Clackamas RC	Clackamas Co.	Mather Road Improvements	97th Avenue to 122nd Avenue	Connect to Summers Lane extension and widen		X		\$ 3,465,000	2016-25
5079	Clackamas RC	Clackamas Co.	122nd/Hubbard/135th Improvement	Sunnyside Road to Hubbard Road	Reconstruct and widen to three lanes		X		\$ 7,276,500	2016-25
5080	Clackamas RC	Clackamas Co.	Fuller Road Improvements	Harmony Road to Monroe Street	Widen to three lanes with sidewalks and bike lanes; includes disconnecting auto access to King Road	X	X	X	\$ 4,755,135	2016-25
5081	Clackamas RC	Clackamas Co.	Boyer Drive Extension	82nd Avenue to Fuller Road	New two-lane extension	X	X	X	\$ 1,963,500	2016-25
5082	Clackamas RC	Clackamas Co.	82nd Avenue Multi-Modal Improvements	Clatsop Road to Monterey Avenue	Widen to add sidewalks, lighting, crossings, bike lanes and traffic signals	X	X	X	\$ 11,550,000	* 2010-15
5083	Clackamas RC	Clackamas Co.	Causey Avenue Extension	I-205 frontage road to William Otty Road	Construct new two lane extension	X	X		\$ 13,629,000	2010-15
5084	Clackamas RC	Clackamas Co.	Fuller Road Extension	Otty Road to King Road	Construct new two lane extension	X	X		\$ 4,620,000	2016-25
5085	Clackamas RC	Clackamas Co.	Clackamas RC Bike/Pedestrian Corridors	Clackamas RC existing and new developments	Provide bike and pedestrian connections in the RC	X	X	X	\$ 5,775,000	2016-25
5086	Clackamas RC	Clackamas Co.	82nd Avenue Boulevard Design Improvements	Monterey Avenue to Sunnybrook Street	Complete boulevard design improvements	X	X	X	\$ 4,620,000	2004-09
5087	Clackamas RC	Clackamas Co.	West Sunnybrook Road Extension	82nd Avenue to Harmony Road	Construct three-lane extension to provide alternative e/w route to Sunnyside Road	X	X	X	\$ 2,310,000	2016-25
5089	Clackamas RC	Clackamas Co.	Sunnyside Road Bikeway	SE 82nd Avenue to I-205	Restripe to include bike lanes	X	X	X	\$ 231,000	2010-15
5090	Clackamas RC	Clackamas Co.	Lawnfield Road Bikeway	SE 82nd Dr. to SE 97th Avenue	Widen to include bike lanes	X	X	X	\$ 115,500	2016-25
5091	Clackamas RC	Clackamas Co.	Causey Avenue Bikeway	I-205 path to SE Fuller	Restripe to include bike lanes	X	X	X	\$ 23,100	2010-15
5092	Clackamas RC	Clackamas Co.	SE 90th Avenue Bikeway	SE Causey to SE Monterey	Construct bike lanes	X	X	X	\$ 92,400	2016-25
5093	Clackamas RC	Clackamas Co.	SE 97th Avenue Bikeway	SE Lawnfield to SE Mather	Construct bike lanes	X	X	X	\$ 23,100	2016-25
5094	Clackamas RC	Clackamas Co.	CRC Trail	Clackamas Regional Park to Phillips Creek	N Clackamas shared-use path	X	X	X	\$ 358,050	2010-15
5095	Clackamas RC	Clackamas Co.	Phillips Creek Greenway Trail	Causey Avenue to Mt. Scott Greenway	Conduct feasibility study and construct trail (\$100,000 feasibility study in FC only)	X	X	X	\$ 602,910	* 2004-09
5096	Clackamas RC	Clackamas Co.	District Park Trail	Phillips Creek Trail to Mt. Scott Trail	Construct trail	X	X		\$ 202,125	2004-09
5097	Clackamas RC	Clackamas Co.	Hill Road Bike Lanes	Oatfield Road to Thiessen Road	Construct bike lanes	X	X		\$ 433,125	2004-09
5098	Clackamas RC	TriMet	King Road Frequent Bus	Clackamas Regional Center	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 1,236,000	2010-15

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5099	Clackamas RC	TriMet	Webster Road Frequent Bus	Clackamas Regional Center	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 1,510,000	2010-15
5100	Clackamas RC	Clackamas Co.	Fuller Road Pedestrian Improvements	Harmony Road to King Road	Improve sidewalks	X	X	X	\$ 635,250	2004-09
5101	Clackamas RC	Clack. Co./ODOT	Clackamas RC Pedestrian Improvements	82nd Avenue, Sunnyside, Sunnybrook, Monterey and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,732,500	2016-25
5102	Clackamas RC	Clackamas Co.	Clackamas RC Redevelopment	Clackamas Regional Center	Master plan and retrofit existing site to construct future street grid		X		n/a	2016-25
5103	Clackamas RC	Clackamas Co.	Clackamas County ITS Plan	County-wide	Advanced transportation system management and intelligennt transportation system program	X	X	X	\$ 6,514,200	2004-09
5104	Deleted (included in Project #5087)									
5105	Clackamas IA	Clackamas Co.	102nd Avenue/Industrial Way Improvements	Highway 212 to Mather Road	Extend Industrial Way from Mather Road to Lawnfield Road		X		\$ 7,680,000	2004-09
5106	Clackamas IA	Clackamas Co.	SE 82nd Drive Improvements	Highway 212 to Lawnfield Road	Widen to five lanes to accommodate truck movement	X	X	X	\$ 6,930,000	2016-25
5107	Clackamas IA	Clackamas Co.	SE 82nd Drive Improvements	Gladstone to Highway 212, phase 2	Widen to five lanes		X		\$ 8,662,500	2016-25
5108	Deleted (Construction completed)								\$ -	
5109	Clackamas IA	Clackamas Co.	82nd Drive Bicycle Improvements	SE Jennifer Street to Fred Meyer	Widen to include bike lanes	X	X	X	\$ 138,600	2010-15
5110	Clackamas IA	Clackamas Co.	Jennifer Street Bicycle Improvements	SE 106th to 120th Avenue	Widen to include bike lanes	X	X	X	\$ 288,750	2004-09
5113	Clackamas Corridor	Clackamas Co.	Mt. Scott Boulevard Improvements	SE Idleman to Clackamas Co. Line	Widen to include bike lanes		X		\$ 231,000	2016-25
5114	Clackamas Corridor	ODOT	Highway 99E Bikeway	Harrison Street (Milw) to Clackamas R (OC)	Retrofit to include bike lanes		X		\$ 4,042,500	2016-25
5115	Clackamas Corridor	Clackamas Co.	Roethe Road Bicycle Improvements	SE River Road to Highway 99E	Widen to include bike lanes	X	X		\$ 346,500	2004-09
5116	Clackamas Corridor	Oregon City	Warner Milne Bikeway	Central Pt. Road to Molalla Avenue	Retrofit to include bike lanes	X	X		\$ 462,000	2016-25
5117	Clackamas Corridor	Clackamas Co.	Linwood Road Bike Lanes	SE Monroe Street to SE Johnson Creek Boulevard	Widen to include bike lanes	X	X	X	\$ 323,400	2004-09
5120	Gladstone TC	Gladstone	Oatfield Road Improvements	Webster Road to 82nd Avenue	Widen to three lanes; fill in sidewalks and bike lanes		X		\$ 1,617,000	2016-25
5121	Gladstone TC	Clackamas Co.	McLoughlin Boulevard Improvement	River Road to Clackamas River	Complete multi-modal improvements, such as boulevard treatment at intersections, and appropriate TSM strategiessuch as signal intertie		X		\$ 11,550,000	2016-25
5122	Gladstone TC	Gladstone	Portland Avenue Bikeway	Clackamas Boulevard to Jersey Street	Bikeway design to be determined	X	X		\$ 5,775	2016-25
5123	Gladstone TC	Gladstone	Clackamas Boulevard Bikeway	82nd Dr. to McLoughlin Boulevard	Bikeway design to be determined	X	X		\$ 11,550	2016-25
5124	Gladstone TC	Gladstone	Gloucester Street Bikeway	Oatfield Road to River Road	Bikeway design to be determined		X		\$ 11,550	2016-25
5125	Gladstone TC	Clack. Co./Gladstone	Webster Road Pedestrian Improvements	Johnson Road to Oatfield Road	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 577,500	2016-25
5126	Oregon City RC	Oregon City	South Amtrak Station Phase 2	Oregon City Amtrak Station	Improve Amtrak station	X	X	X	\$ 1,500,000	2004-09
5127	Oregon City RC	Oregon City	Water Street Viaduct Improvements	8th Street to 10th Street	Replace two viaducts plus city funded pedestrian enhancements		X		\$ 10,800,000	2004-09

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5128	Oregon City RC	TriMet	Oregon City Rapid Bus	Tigard to Tualatin P&R to Oregon City TC	Construct improvements that enhance Rapid Bus service	X	X		see Tri-Met total	2016-25
5129	Oregon City RC	TriMet	90VMOC-Rapid bus	Vancouver Mall to Oregon City via I-205	Construct improvements that enhance Rapid Bus service	X	X		see Tri-Met total	2016-25
5130	Deleted (Construction completed)									
5131	Oregon City RC	Clackamas Co.	Abernethy Road Improvements	Highway 213 to Main Street	Widen Abernethy from Highway 213 to Main Street		X		\$ 3,580,500	2016-25
5132	Oregon City RC	Oregon City	Main Street Extension	Highway 99E to Main Street	Widen to include bike lanes	X	X	X	\$ 53,477	2004-09
5133	Oregon City RC	Oregon City	Washington/Abernethy Connection	Abernethy Road to Washington Street	Construct new two lane minor arterial with sidewalks and bike lanes	X	X	X	\$ 4,000,000	2010-15
5134	Oregon City RC	ODOT/ClackCo	McLoughlin Boulevard Improvements Phase 2- Oregon City	Clackamas River Bridge to I-205 and 10th Street to SPRR Tunnel	Complete boulevard design improvements		X		\$ 8,855,000	2010-15
5135	Oregon City RC	ODOT/ClackCo	McLoughlin Boulevard Improvements Phase 1 - Oregon City	I-205 to 10th Street	Complete boulevard design improvements	X	X	X	\$ 5,850,000	2010-15
5136	OC Corridor	Clackamas Co.	7th Street Improvements	High Street to Division Street	Complete boulevard design improvements	X	X	X	\$ 5,000,000	2016-25
5137	Oregon City RC	Oregon City	Washington Street Improvements	Abernathy to 5th Street	Complete boulevard design improvements	X	X	X	\$ 1,022,175	2010-15
5138	Oregon City RC	Oregon City	Washington Street Improvements	Abernathy to Highway 213	Complete boulevard design improvements	X	X	X	\$ 1,524,600	2016-25
5139	Oregon City RC	Oregon City	Leland Road Pedestrian Improvements	Warner Milne to Meyers Road	Construct sidewalks		X		\$ 3,000,000	2016-25
5140	Oregon City RC	Oregon City	Oregon City Loop Trail	TBD	Right of way acquisition		X		??	2016-25
5141	Oregon City RC	Oregon City	South End Road Bike/Pedestrian Improvements	High Street to urban growth boundary	Retrofit to include bike lanes and infill sidewalks		X		\$ 1,789,095	2016-25
5142	Oregon City RC	TriMet	Mollala Avenue Frequent Bus	Oregon City to Clackamas Community College	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 1,085,000	2010-15
5143	Oregon City RC	Oregon City/ ODOT/TriMet	Oregon City RC Pedestrian Improvements	McLoughlin, Main, Washington, 7th, 5th and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 1,155,000	2016-25
5144	Oregon City RC	Oregon City/ODOT	Oregon City RC River Access Improvements	McLoughlin Boulevard	Improve pedestrian access to the Willamette River from downtown Oregon City	X	X	X	\$ 1,500,000	2016-25
5147	Oregon City RC	TriMet/Oregon City	Intercity passenger station	Oregon City TC	Intercity passenger connections with LRT/Bus		X		\$ 2,310,000	2016-25
5149	Oregon City RC	Oregon City	Oregon City Bridge Study	Highway 43/7th Street in Oregon City	Evaluate long-term capacity of Oregon City bridge	X	X	X	n/a	2016-25
5150	Oregon City RC	TriMet/Oregon City	Oregon City TMA Startup Program	Oregon City Regional Center	Implements a transportation management association program with employers	X	X	X	\$ 200,000	2016-25
5151	Oregon City RC	Oregon City	Clackamas River Shared-Use Path	I-205 to Clackamette Park	Construct shared-use path	X	X		\$ 265,650	2004-09
5152	Oregon City RC	Oregon City	Willamette River Shared-Use Path	Clackamette Park and Smurfit	Construct shared-use path	X	X	X	\$ 500,000	2010-15
5153	OC Corridor	Clackamas Co.	Beavercreek Road Improvements Phase 2	Highway 213 to Clackamas Community College	Widen to 5 lanes with sidewalks and bike lanes	X	X		\$ 3,003,000	2010-15
5154	OC Corridor	Clackamas Co.	Beavercreek Road Improvements Phase 3	Clackamas Community College to urban growth boundary	Widen to 4 lanes with sidewalks and bike lanes	X	X	X	\$ 2,310,000	2016-25

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Appendix 1.1

RTP Project List
August 17, 2004

2000 RTP Project list as
Amended by Metro Resolution No. 03-3380A, Ordinance No. 04-1045A

RTP #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	2020 RTP Priority System	2025 RTP Illustrative System	2025 RTP Financially Constrained System	Est. Project Cost in 2003 dollars ("*" indicates phasing in financially	RTP Program Years
5156	OC Corridor	Clackamas Co.	Beavercreek Road Improvements, Phase 1	Highway 213 to Molalla Avenue	Green Street major arterial design, widen to five lanes, improve access management, and provide sidewalks and bike lanes to connect multi-family and commercial/ employment areas	X	X	X	\$ 4,500,000	2010-15
5157	OC Corridor	Oregon City	Mollala Avenue Streetscape Improvements	7th Street to Highway 213 (9 segments)	Streetscape improvements, including widening sidewalks, sidewalk infill, ADA accessibility, bike lanes, reconfigure travel lanes, add bus stop amenities, streetscape	X	X	X	\$ 15,000,000	* 2004-25
5161	Lake Oswego TC	TriMet	Macadam Frequent Bus	Lake Oswego to PCBD	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 2,015,000	2010-15
5163	Deleted (Construction completed)									
5164	Lake Oswego TC	Lake Oswego	"A" Avenue Bikeway	Iron Mountain to State Street	Alternative parallel routes will need to be examined, such as B Ave.; bikeway design to be determined	X	X		\$ 1,732,500	2010-15
5165	Lake Oswego TC	Lake Oswego	Willamette Greenway Path	Roehr Park to George Rogers Park	shared-use path	X	X	X	\$ 127,050	2010-15
5166	Lake Oswego TC	Lake Oswego/ODOT	Lake Oswego TC Pedestrian Improvements	Highway 43, "A" and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 1,155,000	2016-25
5167	Lake Oswego TC	ODOT/LO/WL	Highway 43 Pedestrian Access to Transit Improvements	key locations along Highway 43 and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 1,155,000	2016-25
5168	Lake Oswego TC	Lake Oswego	Country Club Road Pedestrian Improvements	Boones Ferry to "A" Avenue	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 577,500	2016-25
5169	Lake Oswego TC	Lake Oswego	Trolley Trestle Repairs	Lake Oswego to Portland	Repair trestles along rail line	X	X	X	\$ 1,155,000	2004-09
5170	Lake Oswego TC	ODOT	Highway 43 Traffic Management Plan	Highway 43 from McVey to I-205	Develop traffic management plan to address growing demand	X	X		n/a	2004-09
5171	Lake Oswego TC	Lake Oswego	Transit Station Relocation	from 4th Avenue to location TBD	Relocate transit station	X	X	X	\$ 4,190,000	2016-25
5172	Lake Oswego TC	TBD	Lake Oswego Trolley Study	Study phasing of future trolley commuter service between Lake Oswego and Portland	Study phasing of future trolley commuter service between Lake Oswego and Portland	X	X	X	n/a	2004-09
5192	West Linn TC	Clackamas Co.	Highway 43/Willamette Falls Intersection Imp.	Highway 43/Willamette Falls Intersection	Improve safety/capacity of Highway 43 intersection at Willamette Falls Dr.	X	X		\$ 1,270,500	2016-25
5193	West Linn TC	West Linn	Willamette Falls Drive Improvement	10th Street to Highway 43	Upgrade street to urban standards with sidewalks and bike lanes	X	X		\$ 4,937,625	2004-09
5194	West Linn TC	Clackamas Co.	Highway 43 Intersection Improvements	Intersection at Pimlico Drive	Improve intersection to be safer for all modes of travel	X	X		\$ 3,811,500	2016-25
5195	Deleted (Project to be completed through Project #5196)									
5196	West Linn TC	West Linn/ODOT	West Linn TC Pedestrian Improvements	Highway 43, Willamette Falls Drive, and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X		\$ 1,155,000	2016-25
5197	West Linn TC	Clackamas Co.	Rosemont Corridor Plan	West Linn to Stafford Road	Study Rosemont as alternate n/s route; Study connection to I-205 at Exit 6		X		n/a	2016-25
5198	West Linn TC	ODOT	Highway 43 Improvements	Shady Hollow Lane to Robinwood Main Street	Complete boulevard design improvements	X	X		\$ 9,240,000	2016-25
5199	Region	ODOT	I-205 Auxiliary Lanes	I-5 to Stafford Road	Add auxiliary lanes as part of pavement preservation project	X	X	X	\$ 8,000,000	2004-09
5200	Stafford UR	Clackamas Co.	Rosemont Road Improvements	Stafford Road to Parker Road/Sunset	Reconstruct and widen to three lanes; add turn lanes		X		\$ 6,121,500	2016-25

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5201	Stafford UR	Clackamas Co.	Childs Road Improvements	Stafford Road to 65th Avenue	Widen to three lanes including bike lanes and sidewalks		X		\$ 4,897,200	2016-25
5202	Stafford UR	Clackamas Co.	Stafford Road Improvements	I-205 to Rosemont Road	Widen to three lanes including bike lanes and sidewalks		X		\$ 4,389,000	2016-25
5203	Deleted (Project to be completed public/private partnership)									
5204	Stafford UR	Clackamas Co.	Stafford Road	Stafford Road/Rosemont intersection	Realign intersection, add signal and right turn lanes	X	X	X	\$ 866,250	2004-09
5205	Stafford UR	Clackamas Co.	Stafford Basin Future Street Plan	Develop future street plan for Stafford Basin			X		n/a	2016-25
5207	Happy Valley TC	Clack. Co./Happy Valley/NCPRD	Mt. Scott Creek Trail	Sunnyside Road to Mt. Talbert	Feasibility study and construction of undercrossing of Sunnyside Road to Mt. Talbert (feasibility study of \$100,000 in FC only)	X	X	X	\$ 767,000	* 2016-25
5208	Happy Valley TC	Clackamas Co.	Idleman Road Improvements	Johnson Creek Boulevard to Mt. Scott Boulevard	Reconstruct and widen to three lanes	X	X		\$ 4,389,000	2016-25
5209	Happy Valley TC	Clackamas Co.	122nd/129th Improvements	Sunnyside Road to King Road	Widen to three lanes, smooth curves	X	X	X	\$ 3,465,000	2016-25
5210	Happy Valley TC	Clackamas Co.	Mt. Scott Boulevard/King Road Improvements	Happy Valley city limits to 145th Avenue	Widen to three lanes		X		\$ 4,620,000	2016-25
5211	Happy Valley TC	Happy Valley	Scott Creek Lane Pedestrian Improvements	SE 129th Avenue to Mountain Gate Road	Construct pedestrian path and bridge crossing	X	X	X	\$ 103,950	2004-09
5212	Region	ODOT/Clackamas County	Sunrise Highway Unit 1, Phase 2 PE	135th Avenue to 172nd Avenue	Conduct preliminary engineering to construct new 4-lane facility and construct interchanges at 135th and Rock Creek Junctions		X		\$ 18,450,000	2004-09
5213	Region	ODOT/Clackamas County	Sunrise Highway Unit 1, Phase 2 R-O-W Preservation	135th Avenue to 172nd Avenue	Acquire right-of-way		X		\$ 7,986,000	2004-09
6000	Region	WashCo/TriMet	Beaverton-Wilsonville Commuter Rail	Wilsonville to Beaverton	Peak-hour service only with 30-minute frequency in existing rail corridor	X	X	X	\$ 82,582,500	2004-09
6001	Deleted (Project defined in Project #6000)									
6002	Region	Metro/ODOT	Wilsonville-Salem Commuter Rail Extension Study	Wilsonville to Salem	Peak-hour service on existing tracks	X	X		n/a	2016-25
6003	Region	Metro/ODOT	Tualatin-Portland Commuter Rail Extension Study	Tualatin to Union Station via Lake Oswego and Milwaukie	Peak-hour service only on existing tracks	X	X		n/a	2016-25
6004	Region	ODOT	I-5/99W Connector Corridor Study	I-5 to 99W	Conduct study and complete environmental design work for I-5 to 99W Connector	X	X	X	\$ 1,732,500	2004-09
6005	Region	ODOT	I-5/99W Connector: Phase 2 Freeway	I-5 to 99W	Construct four-lane tollway with access control on 99W in Sherwood area		X		\$ 288,750,000	2016-25
6006	Region	ODOT	I-5/99W Connector: Phase 2 Freeway Preliminary Engineering	I-5 to 99W	Complete preliminary engineering for four-lane tollsway with access control on 99W in Sherwood area to I-5	X	X		\$ 15,000,000	2010-15
6007	Region	Various	Fanno Creek Greenway Extension Planning	Tigard to Tualatin	Planning and PE to extend greenway	X	X		n/a	2004-09
6008	Washington Sq. RC	Tigard/WashCo/Beaverton	Washington Square Connectivity Improvements	Washington Square Regional Center	Increase local street connections based on recommendations in regional center plan	X	X		n/a	2016-25
6009	Deleted (Study underway)									
6010	Washington Sq. RC	ODOT/WashCo	Highway 217 Interchange Imp. - Denney Road	Denney Road at the Highway 217 on and off-ramps	Improve Denney Road at the Highway 217 on and off-ramps, including lights and covered culverts	X	X		\$ 577,500	2016-25

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6011	Washington Sq. RC	ODOT/Tigard	Highway 217 Overcrossing - Cascade Plaza	Nimbus to Locust	Provide a new connection from Nimbus to Washington Square south of Scholls Ferry Road	X	X	X	\$ 26,000,000	2016-25
6012	Washington Sq. RC	Washington Co.	103rd Avenue improvements	Western Avenue to Walker Road	Improve existing roadway and construct new connections and intersection alignments to provide connectivity and capacity from Walker Road to Western Avenue. Project includes sidewalks and bike lanes and should be built as development occurs.	X	X		\$ 6,000,000	2016-25
6013	Washington Sq. RC	ODOT	Hall Boulevard Improvements	Scholls to Locust	Widen to 5 lanes with boulevard design	X	X		\$ 5,428,500	2010-15
6014	Deleted (Construction completed)									
6015	Washington Sq. RC	Tigard/WashCo	Greenburg Road Improvements, North	Hall Boulevard to Washington Square Road	Widen to five lanes with bikeways and sidewalks	X	X	X	\$ 2,887,500	2004-09
6016	Washington Sq. RC	Tigard/WashCo	Greenburg Road Improvements, South	Shady Lane to North Dakota	Widen to five lanes with bikeways and sidewalks	X	X	X	\$ 2,310,000	2004-09
6017	Washington Sq. RC	Washington Co.	Taylor's Ferry Road Extension	Washington Drive to Oleson Road	Three lane extension with bikeway and sidewalks	X	X		\$ 2,194,500	2016-25
6018	Washington Sq. RC	Washington Co.	Scholls Ferry/Allen Intersection Improvement	Scholls Ferry Road/Allen Boulevard intersection	Realign intersection	X	X	X	\$ 2,310,000	2010-15
6019	Washington Sq. RC	Washington Co.	Oak Street Improvements	Hall Boulevard to 80th Avenue	Signal improvement, bikeway and sidewalks	X	X	X	\$ 924,000	2004-09
6020	Region	Tualatin Hills PRD	Beaverton Powerline Shared-Use Trail	Scholls Ferry Road to Tualatin River Greenway	Plan, design and construct multi-use path	X	X	X	n/a	2004-09
6021	Washington Sq. RC	Beaverton/WashCo	Scholls Ferry Road Improvements	Highway 217 to 125th Avenue	Widen to seven lanes with access management		X		\$ 18,202,800	2016-25
6022	Washington Sq. RC	WashCo/Tigard/ODOT	Washington Square RC Pedestrian Improvements	Palm Boulevard, Washington Square Road, Eliander Lane, Scholls Ferry, Hall, Greenburg, Oleson, Cascade, and streets within and through the mall area	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X		\$ 6,930,000	2016-25
6023	Washington Sq. RC	Washington Co.	Scholls Ferry Pedestrian Improvements	Beaverton-Hillsdale Highway to Hall Boulevard	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X		\$ 577,500	2016-25
6025	Washington Sq. RC	Washington Co.	Scholls Ferry Road TSM Improvements	Highway 217 to 125th Avenue	Implement appropriate TSM strategies such as signal interconnects, signal re-timing and channelization to improve traffic flows	X	X	X	\$ 577,500	2004-09
6026	Washington Sq. RC	TriMet/WashCo	Washington Square Regional Center TMA Startup Program	Washington Square Regional Center	Implements a transportation management association program with employers	X	X	X	\$ 200,000	2004-09
6027	Tigard TC	ODOT	I-5/217 Interchange Phase 2	Highway 217 and I-5	Complete interchange reconstruction	X	X		\$ 45,045,000	2010-15
6028	Tigard TC	ODOT	I-5/217 Interchange Phase 3	Highway 217 and I-5	Complete interchange reconstruction with new southbound Highway 217 to I-5 flyover ramp	X	X		\$ 17,325,000	2010-15
6029	Tigard TC	TriMet	Hall/Kruse Frequent Bus	Tigard-Lake Oswego-Kruse Way	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 275,000	2010-15
6030	Tigard TC	ODOT	Hall Boulevard Improvements	Locust to Durham Road	Improve Hall Boulevard to 5 lanes	X	X		\$ 41,600,000	2004-09
6031	Tigard TC	Tigard	Greenburg Road Improvements	Tiedeman Avenue to 99W	Widen to 5 lanes		X		\$ 5,544,000	2016-25
6032	Tigard TC	ODOT	Highway 217 Overcrossing - Tigard	Hunziker Street to 72nd at Hampton	Realign Hunziker Road to meet Hampton Street at 72nd Avenue and removes existing 72nd/Hunziker Road intersection		X		\$ 10,000,000	2016-25
6033	Deleted (Construction completed)									

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6034	Tigard TC	Tigard	Walnut Street Improvements, Phase 3	135th Avenue to 121st Avenue	Widen to three lanes with bikeways and sidewalks	X	X	X	\$ 6,601,356	2010-15
6035	Tigard TC	Tigard	Gaarde Street Improvements	110th Avenue to Walnut Street	Widen to three lanes with bikeways and sidewalks	X	X	X	\$ 4,620,000	2004-09
6036	Tigard TC	Tigard	Bonita Road Improvements	Hall Boulevard to Bangy Road	Widen to four lanes	X	X		\$ 9,240,000	2010-15
6037	Tigard TC	Tigard	Durham Road Improvements	Upper Boones Ferry Road to Hall Boulevard	Widen to five lanes	X	X		\$ 4,042,500	2010-15
6038	Tigard TC	Tigard	Walnut Street Extension	Hall Boulevard to Hunziker Street	Extend street east of 99W to connecto to Hall Boulevard and Hunziker Street		X		\$ 19,000,000	2010-15
6039	Tigard TC	ODOT	99W Improvements	I-5 to Greenburg Road	Widen to seven lanes	X	X		\$ 28,875,000	2016-25
6040	Tigard TC	Tigard	72nd Avenue Improvements	99W to Hunziker Road	Widen to five lanes	X	X	X	\$ 3,465,000	2004-09
6041	Tigard TC	Tigard	72nd Avenue Improvements	Hunziker Road to Bonita Road	Widen to five lanes	X	X	X	\$ 5,775,000	2010-15
6042	Tigard TC	Tigard	72nd Avenue Improvements	Bonita Road to Durham Road	Widen to five lanes with bikeways and sidewalks	X	X	X	\$ 5,775,000	2010-15
6043	Tigard TC	Washington Co.	Upper Boones Ferry Road	I-5 to Durham Road	Widen to five lanes	X	X		\$ 8,200,000	2016-25
6044	Tigard TC	Tigard	Dartmouth Street Extension	Darmouth Road to Hunziker Road	Three lane extension; new Highway 217 overcrossing	X	X		\$ 32,340,000	2016-25
6045	Tigard TC	Tigard	Dartmouth Street Improvements	72nd Avenue to 68th Avenue	Widen to four lanes with turn lanes	X	X	X	\$ 577,500	2010-15
6046	Deleted (Construction completed)									
6047	Tigard TC	ODOT	Highway 217/72nd Avenue Interchange Improvements	Highway 217 and 72nd Avenue	Complete interchange reconstruction with additional ramps and overcrossings	X	X		\$ 17,325,000	2010-15
6048	Washington Sq. RC	Beaverton/WashCo	Scholls Ferry Road Intersection Improvement	At Hall Boulevard	Add SB right turn lane from SB Hall Boulevard		X		\$ 577,500	2016-25
6049	Tigard TC	ODOT	Highway 99W Bikeway	Hall Boulevard to Greenburg Road	Retrofit for bike lanes	X	X		\$ 577,500	2010-15
6050	Tigard TC	WashCo/Tigard/ODOT	Tigard TC Pedestrian Improvements	Highway 99W, Hall Boulevard, Main Street, Hunziker, Walnut and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 3,465,000	2016-25
6051	Tigard TC	ODOT	Hall Boulevard Bikeway and Pedestrian improvements	Oak Street to Highway 99W	Bike lanes, sidewalks & pedestrian. crossings	X	X		\$ 1,155,000	2004-09
6052	Washington Sq. RC	Tigard/Beaverton	Highway 217 Overcrossing	Nimbus Drive to northern mall area	Two-lane overcrossing with sidewalks and bike lanes	X	X		\$ 30,000,000	2016-25
6053	Washington Sq. RC	Tigard	Nimbus Avenue Extension	Nimbus Avenue to Greenburg Road	Two-lane extension with sidewalks and bike lanes	X	X		\$ 38,000,000	2016-25
6054	Tigard TC	ODOT	Highway 99W Access Management Plan - Tigard	Highway 99W from I-5 to Durham Road	Develop access control plan for Highway 99W	X	X		n/a	2004-09
6055	Tigard TC	ODOT	Highway 99W System Management	99W from I-5 to Durham Road	Signal interconnect on 99W from I-5 to Durham Road	X	X		\$ 2,310,000	2010-15
6056	Tigard TC	ODOT	Highway 99W/Hall Boulevard Intersection Improvements	99W/Hall Boulevard	Add turn signals and modify signal	X	X	X	\$ 4,273,500	2010-15
6057	Washington Sq. RC	Tigard	Washington Squire Regional Center Greenbelt Shared Use Path	Hall Boulevard to Highway 217	Complete shared-use path construction	X	X	X	\$ 2,000,000	2010-15
6058	King City TC	Tigard	Durham Road Improvements	Hall Boulevard to 99W	Widen to five lanes with sidewalks and bike lanes	X	X		\$ 5,890,500	2016-25

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6059	Deleted (Construction completed)									
6060	King City TC	WashCo/KC/Tigard/ ODOT	King City TC Pedestrian Improvements	Highway 99W, 116th, and Durham Road	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 3,465,000	2016-25
6062	King City TC	King City	King City TC Plan	King City TC	Determine long-term transportation needs	X	X		n/a	2010-15
6063	Happy Valley TC	Various	Lower Tualatin River Greenway Trail	Powerline Trail to Willamette River	Feasibility study to construct a shared-use pther		X		\$ 75,000	2016-25
6064	Tualatin TC	TriMet	Hall Boulevard Frequent Bus	Tualatin-Hall-TV Highway	Construct improvements that enhance Frequent Bus service	X	X	X	\$ 7,700,000	2010-15
6065	Tualatin Ind. Area	Tualatin	Herman Road Improvements	Tualatin Road to Cipole Road	Widen to three lanes including bike lanes and sidewalks	X	X	X	\$ 12,000,000	2004-09
6066	Tualatin TC	ODOT/Tualatin	I-5 Interchange Improvement - Nyberg Road	Nyberg Road/I-5 interchange.	Widen Nyberg Road/I-5 interchange	X	X	X	\$ 4,600,000	2004-09
6067	Tualatin TC	ODOT	Boones Ferry Road Improvements	Durham Road to Wilsonville TC	Three lane improvement to complete sidewalks and bike facilities	X	X		\$ 27,027,000	2010-15
6068	Tualatin TC	ODOT	Boones Ferry Road Improvements	Tualatin-Sherwood Road to Wilsonville	Widen to five lanes with bikeways and sidewalks		X		\$ 11,550,000	2016-25
6069	Tualatin TC	Tigard/Tualatin	Hall Boulevard Extension	Extension from Durham to Tualatin Road	Extend Hall Boulevard to connect across the Tualatin River	X	X		\$ 28,875,000	2016-25
6070	Tualatin TC	ODOT/WashCo	Lower Boones Ferry	Boones to Bridgeport	Sidewalk, bikeway, interconnect signals	X	X	X	\$ 5,800,000	2004-09
6071	Tualatin TC	Washington Co.	Tualatin-Sherwood Road Improvements	99W to Teton Avenue	Widen to five lanes with bike lanes and sidewalks; intertie signals at Oregon and Cipole streets	X	X	X	\$ 28,875,000	2010-15
6072	Deleted (Construction completed)									
6073	Tualatin TC	Tualatin	124th Avenue Improvements	Myslony Street to Tualatin-Sherwood Road	Construct new 3 lane arterial with bikeways and sidewalks	X	X	X	\$ 7,854,000	2010-15
6074	Tualatin TC	Tualatin	65th/Tualatin River Crossing and connections	65th and McEwan between Lower Boones Ferry Road and Meridian Park Hospital	Construct new crossing of Tualatin River and connections to 65th and Lower Boones Ferry Road	X	X		\$ 19,750,500	2016-25
6075	Region	Various	Tonquin Trail	Connecting Wilsonville, Sherwood, tualatin, Tigard and Durham	Feasibility study to construct a shared-use path		X		\$ 100,000	2010-15
6076	Tualatin Ind. Area	Tualatin	Myslony/112th Connection	Myslony to Tualatin-Sherwood Rd. @ Avery	Extend 3 lane road with sidewalks and bike lanes	X	X	X	\$ 1,500,000	2004-09
6077	Tualatin TC	Washington Co.	Tualatin-Sherwood Road Bikeway	I-5 to Boones Ferry Road	Retrofit for bike lanes	X	X		\$ 1,155,000	2016-25
6078	Tualatin TC	Tualatin	Boones Ferry Road-Martinazzi Bike/Ped Path	Between Boones Ferry Road and Martinazzi north of Ibach Court	Construct new bike/pedestrian path	X	X		\$ 375,375	2016-25
6079	Tualatin TC	WashCo/Tualatin/ ODOT	Tualatin TC Pedestrian Improvements	Nyberg, Boones Ferry, Tualatin, Tualatin-Sherwood, Sagert and neighborhood streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X	X	\$ 577,500	2004-09
6080	Tualatin TC	Tualatin/Durham	Tualatin River Pedestrian Bridge	Durham City Park to Tualatin Community Park	Construct cantilevered pedestrian/bike path on railroad trestle across Tualatin River to Tualatin town center	X	X	X	\$ 1,155,000	2004-09
6081	Tualatin TC	WashCo/Tualatin	Nyberg Road Pedestrian and Bike Improvements	65th Avenue to I-5	Complete sidewalks and bike facilities	X	X	X	\$ 1,155,000	2004-09
6082	Tualatin TC	Washington Co.	Tualatin Freight Access Plan	Tualatin-Sherwood Road Corridor	Develop interim circulation/freight management plan	X	X		n/a	2004-09
6083	Tualatin TC	TriMet /WashCo	Tualatin Town Center TMA Startup	Tualatin Town Center	Implements a transportation management association program with employers	X	X	X	\$ 103,950	2004-09

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6084	Wilsonville TC	Wilsonville	Kinsman Road Extension - south	Willsonville Road to Brown Road (5th Street extension)	Two-lane extension		X		\$ 3,200,000	2010-15
6085	Wilsonville TC	Wilsonville/SMART	Wilsonville-PCBD Express	Express bus service from Wilsonville Road/Boones Ferry Road to Portland CBD	Express bus service connection to PCBD	X	X		see Project #8035-8037 costs	2016-25
6086	Wilsonville TC	Wilsonville	Kinsman Road Extension	Kinsman Road to Boeckman Road	Two-lane extension	X	X	X	\$ 7,620,000	2004-09
6087	Wilsonville TC	Wilsonville	Kinsman Road Extension	Boeckman Road to Ridder Road	Two-lane extension	X	X		\$ 3,910,000	2004-09
6088	Wilsonville TC	Wilson./WashCo	Elligsen Road Improvements	Canyon Creek to Parkway Center	Improve Elligsen Road to 5 lanes	X	X	X	\$ 1,750,000	2010-15
6089	Wilsonville TC	Clackamas Co.	Stafford Road Improvements	I-205 to Boeckman Road	Reconstruct, widen and add turn lanes		X		\$ 3,300,000	2016-25
6090	Wilsonville TC	Wilsonville	Boeckman Road Extension - West	Boeckman Road to Tooze Road	Extend 3 lanes with sidewalks and bike lanes	X	X	X	\$ 16,170,000	2010-15
6091	Wilsonville TC	Wilsonville	Boeckman Road I-5 Overcrossing	Parkway Avenue to 100th Avenue	Improve existing overcrossing to 5 lanes with sidewalks and bike lanes	X	X		\$ 9,890,000	2010-15
6092	Deleted									
6093	Wilsonville TC	Wilsonville	Barber Street Extension	Barber Street at Kinsman Road	Extend Barber Street as 3 lanes to 110th	X	X	X	\$ 7,310,000	2016-25
6094	Deleted (Construction completed)									
6095	Wilsonville TC	Wilsonville	5th Street Extension	5th Street to Brown Road/Wilsonville Road intersection	Three lane extension from 5th Street to Brown Road, turn lanes at major intersections		X		\$ 6,390,000	2016-25
6096	Deleted									
6097	Wilsonville TC	Clackamas Co.	Stafford Road Safety Improvements	I-205 to Boeckman Road	Safety improvements	X	X		\$ 2,310,000	2010-15
6098	Wilsonville TC	Wilsonville	Kinsman Road Extension	Ridder Road to Day Road	Two-lane extension		X		\$ 4,700,000	2004-09
6099	Wilsonville TC	Wilsonville	Elligsen Road Improvements	Canyon Creek to Stafford Road	Two-lane extension		X		\$ 5,000,000	2010-15
6100	Wilsonville TC	Wilsonville	Barber Street Bikeway	Kinsman Road to Boberg Road	Complete N/S bikeway corridor		X		\$ 1,340,000	2016-25
6101	Wilsonville TC	Wilsonville	Wilsonville Road Bikeway	Rose Lane to Willamette Way West	Retrofit street to add bike lanes		X		\$ 577,500	2010-15
6102	Wilsonville TC	Wilsonville	Parkway Avenue Bikeway	Town Center Loop to Boeckman Road	Retrofit to wide outside lanes	X	X		\$ 2,470,000	2010-15
6103	Wilsonville TC	Wilsonville	Parkway Avenue Bikeway (N of Boeckman)	Boeckman Road to Parkway Center Drive	Retrofit street to add bike lanes	X	X		\$ 3,610,000	2016-25
6104	Wilsonville TC	Wilsonville	Wilsonville TC Pedestrian Improvements	Wilsonville Road, Parkway Avenue, Boones Ferry , Town Center Loop and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 2,160,000	2016-25
6105	Wilsonville TC	Wilsonville	Town Center Loop Bike and Pedestrian Improvements	Parkway to Wilsonville Road	Retrofit street to add bike lanes and sidewalks	X	X	X	\$ 251,000	2010-15
6106	Deleted (Construction completed)									
6107	Wilsonville TC	Wilsonville	Boeckman Road Extension - East	Canyon Creek to Wilsonville Road	Three-lane extension with sidewalks and bike lanes		X		\$ 4,400,000	2016-25
6108	Wilsonville TC	Wilsonville	Brown Road Improvements	Wilsonville Road to Evergreen Avenue	Three-lane extension with sidewalks and bike lanes		X		\$ 1,800,000	2010-15
6109	Sherwood TC	Washington Co.	Beef Bend/175th Avenue Realignment	Beef Bend at 175th Avenue	Realign intersection to eliminate offset of Been Bend road with 175th Avenue	X	X	X	\$ 924,000	2016-25

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6110	Sherwood TC	Washington Co.	Highway 99W Circulation Improvements Study	99W corridor from Tualatin-Sherwood to Chapman	Study potential of frontage roads on both sides of 99W to manage access	X	X		n/a	2004-09
6111	Deleted (Construction completed)									
6112	Sherwood TC	Washington Co.	Beef Bend Road Improvements	Bull Mountain Road to Scholls Ferry Road	Widen to four lanes with limited access		X		\$3,465,000	2016-25
6113	Deleted (Construction completed)									
6114	Sherwood TC	Sherwood/WashCo	Edy Road/Sherwood Improvements	Borchers to Pine/3rd Street	Widen; install signals; add bike lanes		X		\$ 1,732,500	2016-25
6115	Sherwood TC	Sherwood/WashCo	Edy Road Improvements	North city limits to 99W	Widen to include sidewalks and bike lanes		X		\$ 1,155,000	2016-25
6116	Sherwood TC	Sherwood/WashCo	Sherwood TC Bicycle/Pedestrian Bridges	Sherwood/Edy/ 99W; Meineke/99W; Sunset/99W			X		\$ 11,550,000	2016-25
6117	Sherwood TC	Sherwood/WashCo	Sherwood TC Pedestrian Improvements	Sherwood Road, Oregon, Pacific and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches	X	X		\$ 1,732,500	2016-25
6119	Murray/Scholls TC	Washington Co./Beaverton	Teal Boulevard Extension	Barrows Road to Scholls Ferry Road	Construct 2-lane extension with sidewalks and bike lanes to town center loop and Barrows Road	X	X	X	\$ 4,000,000	2004-09
6120	Murray/Scholls TC	Washington Co.	Barrows Road Improvements	Murray Boulevard to 175th Avenue	Widen to add bike lanes		X		\$ 577,500	2016-25
6121	Murray/Scholls TC	Beaverton/WashCo/Tigard	Murray Boulevard Extension	Scholls Ferry Road to Barrows Road at Walnut Street	Construct 2-lane roadway and bridge, additional turn lanes at intersections, bike lanes, and sidewalks	X	X	X	\$ 1,900,000	2004-09
6122	Murray/Scholls TC	Beaverton	Davies Road Connection	Scholls Ferry Road to Barrows Road	Three lane connection with bikeways and sidewalks	X	X	X	\$ 1,900,000	2010-15
6124	LO Corridor	Clackamas Co.	Carmen Drive Improvements	I-5 to Quarry	Reconstruct and widen to three lanes to include bike lanes	X	X		\$ 3,811,500	2010-15
6125	Deleted (Construction completed)									
6126	Deleted (under construction)									
6127	LO Corridor	Lake Oswego	Boones Ferry Road Improvements -	Kruse Way to Washington Court	Widen to five lanes with sidewalks and bike lanes; Boones Ferry Corridor Stugy completed in 2000 with Lake Grove Town Center study work continuing in 2003/04 funded by City. Project will be broken into three phases; upper, middle and lower.	X	X	X	\$ 8,200,000	2010-15
6128	Deleted (Construction completed)									
6129	LO Corridor	Clackamas Co.	Bangy Road Intersection Improvements	Bangy Road/Bonita Road intersection	Add traffic signal and turn lanes	X	X	X	\$ 375,375	2010-15
6130	LO Corridor	Clackamas Co.	Bangy Road Intersection Improvements	Bangy Road/Meadows Road intersection	Add traffic signal and turn lanes	X	X	X	\$ 375,375	2010-15
6131	LO Corridor	Lake Oswego	Willamette River Greenway	Roehr Park to Tryon Creek	shared-use path	X	X	X	\$ 346,500	2010-15
6133	Lake Grove TC	Clackamas Co.	Bonita Road Improvements	SE Bangy Road to SE Carmen Drive	Reconstruct and widen to three lanes	X	X		\$ 3,811,500	2010-15
6135	Lake Grove TC	Clackamas Co.	Boones Ferry Road Bike Lanes	Kruse Way to Multnomah County line	Construct bike lanes	X	X	X	\$ 635,250	2004-09
6136	Lake Grove TC	Portland	Boones Ferry Pedestrian Improvements	Terwilliger to Kruse Way	Improve sidewalks, lighting, crossings, bus shelters and benches		X		\$ 1,155,000	2016-25

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6137	Deleted (Study nearly completed)										
6138	Wilsonville TC	ODOT/Wilsonville	Wilsonville Road/I-5 Interchange Improvements (Phase 1 and 2)	Town Center Loop to Boones Ferry Road ramps	Construct ramp improvements (PE and ROW only in financially constrained system)	X	X	X	\$ 20,900,000	*	2004-09
6139	Wilsonville TC	ODOT/Wilsonville	Wilsonville Road/I-5 Interchange Improvements (Phase 3)	I-5 in Wilsonville area	Construct auxiliary lanes		X		\$ 11,300,000		2016-25
6140	Wilsonville TC	Wilsonville	Miley Road Improvements	French Prairie to west of I-5	Widen street to four lanes		X		\$ 2,300,000		2010-15
6141	Region	ODOT/WashCo	I-5/99W Connector: Phase 1 Arterial	I-5 to 99W	Acquire right-of-way and construct new arterial based on recommendations from I-5/99W Arterial connection study that protects through traffic movements between these highways			X	\$ 53,000,000		2004-09
6142	Durham TC	Durham	Upper Boones Ferry Road Improvement	Durham Road to Tualatin River	Widen to 3 lanes with sidewalks and bike lanes	X	X	X	\$ 1,000,000		2004-09
7000	Damascus TC	Clackamas Co.	172nd Avenue Improvements	Foster Road to Highway 212	Widen to five lanes	X	X	X	\$ 8,085,000		2016-25
7001	Damascus TC	Clackamas Co.	Sunnyside Road Improvements	172nd Avenue to Highway 212	Widen to five lanes in preferred/3 lanes in strategic and constrained	X	X	X	\$ 4,158,000		2010-15
7002	Damascus TC	Clackamas Co.	Foster Road Improvements	Highway 212 to 172nd Avenue	Widen to five lanes in preferred/3 lanes in strategic	X	X		\$ 20,790,000		2016-25
7003	Damascus TC	Portland	Foster Road Improvements	172nd Avenue to Jenne Road	Widen to five lanes	X	X		\$ 5,775,000		2016-25
7005	Pleasant Valley TC	Multnomah Co.	190th Avenue Extension	Butler/190th to 172nd/Foster Road intersection	Five lane extension	X	X		\$ 11,550,000		2010-15
7006	Pleasant Valley TC	Portland	SE Foster Improvements	SE 122nd Avenue to Jenne Road	Widen Foster Road to four lanes from SE 122nd to SE Barbara Welch Road. Widen and determine the appropriate cross section of Foster Road from SE Barbara Welch Road to Jenne Road by completing Phase 2 of the Powell Boulevard/Foster Road Corridor Study in order to meet roadway, transit, pedestrian and bike needs	X	X	X	\$ 14,000,000		2010-15
7007	Pleasant Valley TC	Portland/Gresham	SE 174th North/South Improvements	SE Foster to Powell Boulevard	Based on the recommendations from the Powell Boulevard/Foster Road Corridor Study (#1228), construct a new north-south capacity improvement project in the vicinity of SE 174th Avenue/Jenne Road between SE Powell Boulevard and Giese Road in Pleasant Valley. This replaces former project 7007 which widened Jenne Road to three lanes from Powell Boulevard to Foster Road	X	X	X	\$ 13,000,000		2010-15
7008	Deleted (under construction)										
7009	Pleasant Valley TC	Clackamas Co.	SE 145th/147th Bike Lanes	SE Clatsop to SE Monner	Widen to construct bike lanes	X	X	X	\$ 1,039,500		2010-15
7010	Pleasant Valley TC	Clackamas Co.	SE 162nd Avenue Bike Lanes	SE Monner to SE Sunnyside	Widen to construct bike lanes	X	X	X	\$ 392,700		2016-25
7011	Pleasant Valley TC	Clackamas Co.	SE Monner Bike Lanes	SE 147th to 162nd Avenue	Widen to construct bike lanes	X	X	X	\$ 392,700		2016-25
7012	Deleted (Project included in #2045)										
7013	Deleted (Project included in #1228)										
7015	Pleasant Valley TC	Metro	Towle/Eastman Corridor Plan	Towle/Eastman from Powell to 190th	Develop a corridor plan to address N/S access to urban reserves	X	X		n/a		2010-15

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7016	Pleasant Valley TC	Portland/Gresham/ Metro	SE 174th Avenue/New Roadway Project Development Study	Jenne Road/174th from Powell to Foster	Study a new extension of SE 174th Avenue between Jenne and the future Giese Roads. The study may result in an amendment to planning documents to call for a new extension of SE 174th Avenue in lieu of widening Jenne Road to three lanes between Foster Road and Powell Boulevard (former project 7007).	X	X		n/a	2010-15
7019	Sunshine Valley RR	Clackamas Co.	242nd Avenue Improvements	Multnomah County line to Highway 212	Reconstruct and widen to three lanes	X	X	X	\$ 4,620,000	2016-25
7020	Sunshine Valley RR	Metro	Regner/222nd Corridor Plan	Regner/222nd Ave from Roberts to Highway 212	Develop traffic management plan to protect rural character/uses	X	X		n/a	2016-25
7021	Sunshine Valley RR	Metro	Hogan/242nd Corridor Plan	Hogan/242nd from Palmquist to Highway 212	Develop traffic management plan in urban growth boundary	X	X		n/a	2004-09
7022	Damascus TC	TriMet	Sunnyside Road Frequent bus	Clackamas TC to Damascus TC	Construct improvements that enhance Frequent bus service	X	X	X	\$ 913,000	2010-15
7023	Damascus TC	TriMet	Powell/Foster Rapid Bus	PCBD to Damascus TC	Construct improvements that enhance Rapid bus service	X	X		See Tri-Met Total	2016-25
7024	Region	TriMet	Transit center	Damascus	Construct transit station to serve Damascus	X	X		See Tri-Met Total	2016-25
7025	Region	Various Partners	East Buttes Powerline Corridor Trail	SE 172nd Avenue to Gresham-Fairview Trail	Initiate a feasibility study of the trail proposed in the Pleasant Valley concept plan to evaluate property ownership, alignment options, environmental issues		X		\$ 100,000	2016-25
7026	Pleasant Valley TC	Gresham	Towle Avenue Improvements	Butler Road to Eastman Parkway	Construct sidewalks, bike lanes and intersection improvements		X		\$ 400,000	2016-25
7027	Pleasant Valley TC	Gresham	Butler Road Improvements	190th Avenue to Regner Road	Construct sidewalks and bike lanes		X		\$ 200,000	2016-25
7028	Pleasant Valley TC	Gresham	Butler Road Improvements	Regner Road to 242nd Avenue	Construct sidewalks and bike lanes		X		\$ 200,000	2016-25
7029	Pleasant Valley TC	Gresham	162nd Avenue Improvements	Powell Boulevard to Division Street	Study feasibility of narrowing travel lanes to construct sidewalks and bike lanes		X		\$ 50,000	2016-25
7030	Pleasant Valley TC	Gresham	Regner Road Improvements	Butler Road to Roberts Road	Construct sidewalks, bike lanes and intersection improvements		X		\$ 450,000	2016-25
7031	Pleasant Valley TC	Portland	Clatsop Road Bike Improvements, 1	132nd Avenue to 145th Avenue	Retrofit bike lanes to existing street		X		\$ 200,000	2016-25
7032	Pleasant Valley TC	Portland	Clatsop Road Bike Improvements, 2	Butler Road to Roberts Road	Retrofit bike lanes to existing street		X		\$ 200,000	2016-25
7034	Pleasant Valley TC	Gresham/Mult. Co	Foster Road Extension		New north extension of Foster Road	X	X	X	\$ 1,700,000	2010-15
7035	Pleasant Valley TC	Gresham/Mult. Co	Giese Road Extension	Giese Road to Foster Road	New extension of Giese Road to Foster Road	X	X	X	\$ 2,900,000	2016-25
7036	Pleasant Valley TC	Gresham/Mult. Co	190th Avenue Improvements	Butler Road to city limits	Widen to five lanes with sidewalks and bike lanes	X	X	X	\$ 4,100,000	2016-25
7037	Pleasant Valley TC	Gresham/Mult. Co	172nd Avenue Improvements	Giese Road to Butler Road	Upgrade street to urban standards with sidewalks and bike lanes	X	X	X	\$ 1,900,000	2016-25
7038	Pleasant Valley TC	Gresham/Mult. Co	172nd Avenue Improvements	Butler Road to Cheldelin Road	Upgrade street to urban standards with sidewalks and bike lanes	X	X	X	\$ 5,600,000	2016-25
7039	Pleasant Valley TC	Gresham/Mult. Co	Giese Road Improvements	172nd Avenue to 182nd Avenue	Upgrade street to urban standards with sidewalks and bike lanes	X	X	X	\$ 4,300,000	2016-25
7040	Pleasant Valley TC	Gresham/Mult. Co	Giese Road Improvements	182nd Avenue to 190th Avenue	Upgrade street to urban standards with sidewalks and bike lanes	X	X	X	\$ 3,000,000	2016-25

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7041	Pleasant Valley TC	Gresham/Mult. Co	Foster Road bridge	Foster Road	Construct bridge crossing	X	X	X	\$ 1,100,000	2016-25
7042	Pleasant Valley TC	Gresham/Mult. Co	Giese Road Extension bridge	Giese Road	Construct bridge crossing	X	X	X	\$ 1,100,000	2016-25
7043	Pleasant Valley TC	Gresham/Mult. Co	Butler Road Bridge	Bulter Road	Construct bridge crossing	X	X	X	\$ 1,700,000	2016-25
8000	Region	Metro	Bicycle Travel Demand Forecasting Model	Region-wide	Develop regional bicycle travel demand forecasting model	X	X	X	\$ 115,500	2004-09
8001	Region	Metro	Bike Safety, Educ.& Encouragement Pilot Project	Region-wide	Encourage bicyclist, pedestrian and motorist safety	X	X	X	\$ 115,500	2004-09
8002	Region	Metro	Expand "Bike Central" Program	Selected Regional Centers and Town Centers	Provide shower, locker and storage facilities for bike commuters	X	X	X	\$ 346,500	2010-15
8003	Region	Metro	LRT Station Area "Free Bike" Pilot Project	LRT Station Areas throughout the region	Administer free bike program in station areas	X	X	X	\$ 57,750	2016-25
8004	Region	TriMet	LRT and Transit Station Bike Parking	Selected LRT Station Areas and transit centers	Administer and maintain bicycle lockers	X	X	X	\$ 57,750	2010-15
8005	Region	Metro	Regional TOD Projects	Region-wide	Flexible funding program to leverage transit-oriented development	X	X	X	\$ 43,000,000	2004-25
8006	Region	Metro	Alternative transportation strategies study	Region-wide		X	X		n/a	2016-25
8007	Region	ODOT	Pedestrian/Bicycle Improvements to ODOT Preservation/Maintenance Projects	Various locations in region	Implement bicycle and pedestrian enhancements as part of preservation and maintenance projects on ODOT facilities	X	X	X	\$ 10,000,000	2004-25
8008	Region	ODOT	Interchange Access Management	Various interchanges in the region	Implement access management strategies	X	X		\$ 46,200,000	2004-09
8025	Region	TriMet/SMART	Transit Center Upgrades	Region-wide	New or improved transit centers at various locations in the region			X	\$ 20,002,273	2004-25
8026	Region	Tri-Met/SMART	Transit Center Upgrades	Region-wide	New or improved transit centers at various locations in the region	X			\$ 65,938,435	2004-25
8027	Region	TriMet/SMART	Transit Center Upgrades	Region-wide	New or improved transit centers at various locations in the region		X		\$ 104,702,638	2004-25
8028	Region	TriMet	Vehicle Purchases	1.5% per year expansion	Vehicle purchases to provide for expanded service			X	\$ 169,785,000	2004-25
8030	Region	Tri-Met	Vehicle Purchases	3.8% per year expansion	Vehicle purchases to provide for expanded service	X			\$ 546,000,000	2004-25
8031	Region	TriMet	Vehicle Purchases	4.5% per year expansion	Vehicle purchases to provide for expanded service		X		\$ 802,725,000	2004-25
8032	Region	TriMet/SMART	Bus Operating Facilities	Region-wide	Bus operating facilities			X	\$ 75,000,000	2004-25
8033	Region	Tri-Met/SMART	Bus Operating Facilities	Region-wide	Bus operating facilities	X			\$ 152,062,401	2004-25
8034	Region	TriMet/SMART	Bus Operating Facilities	Region-wide	Bus operating facilities		X		\$ 213,835,281	2004-25
8035	Region	TriMet/SMART	Frequent/Rapid Bus Improvements	Baseline Network	Transit stations, improved passenger amenities, bus priority and reliability improvements			X	\$ 26,297,000	2016-25
8037	Region	TriMet/SMART	Frequent/Rapid Bus Improvements	Preferredand Priority Network	Transit stations, improved passenger amenities, bus priority and reliability improvements	X	X		\$ 152,337,945	2004-25
8038	Region	TriMet	Tri-Met Park and Ride Lots	Baseline Network	Park-and-ride facilities to serve bus and light rail stops and stations			X	\$ 5,782,970	2004-25
8040	Region	Tri-Met	Tri-Met Park and Ride Lots	Strategic Network	Park-and-ride facilities to serve bus and light rail stops and stations	X			\$ 33,940,100	2004-25
8041	Region	TriMet	Tri-Met Park and Ride Lots	Preferred Network	Park-and-ride facilities to serve bus and light rail stops and stations		X		\$ 89,620,839	2004-25

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8042	Region	SMART	SMART Park and Ride Lots	SMART district	Park-and-ride facilities to serve bus and commuter rail station	X	X	X	\$ 3,927,000	2004-25
8043	Region	TriMet/SMART	Bus Stop Improvements	Region-wide	Bus stop improvements region-wide			X	\$ 7,939,181	2004-25
8045	Region	TriMet/SMART	Bus Stop Improvements	Region-wide	Bus stop improvements region-wide	X	X		\$ 13,211,756	2004-25
8046	Region	TriMet/SMART	Bus Priority Treatments	Region-wide	Bus Priority Treatments			X	\$ 19,891,988	2016-25
8048	Region	TriMet/SMART	Bus Priority Treatments	Region-wide	Bus Priority Treatments	X	X		\$ 83,746,163	2004-25
8049	Region	TriMet	Priority Pedestrian Access to Transit Improvements	Region-wide	Construct improvements that enhance pedestrian access to transit - sidewalks, crosswalks, ADA improvements	X	X	X	\$ 20,000,000	2004-25
8050	Region	Metro/SMART	SMART TDM Program	SMART district	Regional employer outreach, transit marketing, vanpool and carpool, station cars and car sharing programs	X	X	X	\$ 1,500,000	2004-25
8051	Region	Metro/TriMet	Regional Travel Options TDM Program	Preferred Network	Regional employer outreach, transit marketing, vanpool and carpool, station cars and car sharing programs	X	X		\$ 47,124,000	2004-25
8052	Region	Metro/TriMet	Regional Travel Options TDM Program	Financially Constrained	Regional employer outreach, transit marketing, vanpool and carpool, station cars and car sharing programs			X	\$ 16,978,500	2004-25
8053	Region	Metro/TriMet	Region 2040 Initiatives	Region-wide	Implementation of innovative transportation solutions in locations with high regional significance	X	X	X	\$ 6,063,750	2004-25
8054	Region	Metro/DEQ	ECO Clearinghouse	Region-wide	Continue provision of ECO information clearinghouse services	X	X	X	\$ 1,212,750	2004-25
8055	Region	Metro/TriMet	Transportation Management Associations Innovative Programs	Region-wide	Implementation of innovative transportation solutions in locations with high regional significance	X	X	X	\$ 3,000,000	2004-25
8056	Region	Metro/TriMet	Future Transportation Management Associations Start-Up and Sustainability	Region-wide	Future implementation and sustainability of TMA's with employers	X	X	X	\$ 4,000,000	2004-25
8057	Region	TriMet	LIFT Vehicle Purchases	Region-wide	4 percent per year expansion	X	X	X	\$ 16,890,000	2004-09
8058	Region	TriMet	Ride Connection Vehicle Purchases	Region-wide	Purchase five vehicles per year	X	X	X	\$ 4,767,600	2004-09
				Total Capital Costs for each Network in Billions of 2003 Dollars		\$7.895	\$10.428	\$4.231		



Appendix 1.2

Regional Transportation Plan - Round 4 Modeling

System Performance Measures for Total Region Trips (includes Clark, Clackamas, Multnomah and Washington counties)

(Numbers subject to change due to model refinement)

	Round 4 1994	Round 4 - 2020 Financially Constrained	Round 4 2020 Strategic	Round 4 2020 Preferred
Network Data				
1. Population	1,552,673	2,348,945	2,348,945	2,348,945
2. Households	599,698	986,207	986,207	986,207
3. Employment	947,647	1,610,956	1,610,956	1,610,956
4. Person Trips	6,507,036	10,471,236	10,437,204	10,431,745
Motor Vehicle Data				
1. Total Lane Miles	6,945	7,419	7,784	7,869
Freeway	1,007	1,108	1,224	1,249
Arterial	5,938	6,311	6,560	6,620
2. Total Lane Miles Added (from 1994)	N / A	474	839	924
3. AWD Total Auto Person Trips	5,762,679	8,977,723	8,797,074	8,762,048
4. AWD Total VMT (no trucks or externals)	24,685,960	38,543,020	38,708,316	39,011,648
5. AWD VMT /Capita (no trucks or externals)	15.90	16.41	16.48	16.61
6. AWD VMT /Capita change from 1994	N / A	3.21%	3.65%	4.46%
7. AWD VMT /Employee (no trucks or externals)	26.05	23.93	24.03	24.22
8. AWD VMT /Employee change from 1994	N / A	-8.15%	-7.76%	-7.04%
9. Single Occupant Vehicle (SOV) Percent of Person Trips	61.96%	61.79%	60.56%	60.26%
10. Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)	38.04%	38.21%	39.44%	39.74%
11. AWD Motor Vehicle Average Trip Length (miles)	5.05	5.00	5.13	5.20
12. Home-Based-Work Average Trip Length (miles)	7.43	7.31	7.52	7.63
13. Auto Occupancy	1.20	1.19	1.19	1.19
14. PM 2-HR Motor Vehicle Average Travel Time (minutes)	12.32	14.75	14.17	14.11
15. PM 2-HR Average Motor Vehicle Travel Speed (miles per hour)	28.06	22.59	24.12	24.51
16. Total Miles in Network	6,168	6,331	6,462	6,488
Freeway Miles	429	450	488	499
Arterial Miles	5,739	5,881	5,974	5,989
17. PM 2-HR Total Congested miles (v / c > 0.9) (percentage of total miles in network)	244(3.96%)	862(13.62%)	687(10.63%)	649(10.00%)
Freeway (percentage of freeway miles in network)	35(8.16%)	104(23.11%)	89(18.24%)	94(18.84%)
Arterial (percentage of arterial miles in network)	209(3.64%)	758(12.89%)	598(10.01%)	555(9.27%)
18. PM 2-HR Motor Vehicle Hours	163,404	321,088	300,658	298,155
19. PM 2-HR Motor Vehicle Hours of Delay (time accrued above v / c > 0.9)	9,073	60,065	44,487	41,204
20. PM 2-HR Percent Motor Vehicle Hours of Delay	5.55%	18.71%	14.80%	13.82%
Freeway (percentage of total motor vehicle hours)	2,416(1.48%)	16,107(5.02%)	12,572(4.18%)	11,714(3.93%)
Arterial (percentage of total motor vehicle hours)	6,657(4.07%)	43,958(13.69%)	31,915(10.62%)	29,490(9.89%)
21. Total Roadway Capacity-Miles	7,225,986	7,730,245	8,168,178	8,269,457
Freeway / Highway	1,881,845	2,050,321	2,263,749	2,311,401
Arterial	5,344,141	5,679,924	5,904,429	5,958,056
Freight Data				
1. AWD Total Truck Trips	54,598	72,118	72,118	72,118
2. AWD Truck Average Trip Length (miles)	22.64	23.95	23.91	23.90
3. PM 2-HR Truck Average Travel Time (minutes)	36.53	45.90	43.53	42.86
4. PM 2-HR Truck Hours	3,001	5,943	5,617	5,536
5. PM 2-HR Truck Vehicle Hours of Delay (time accrued above v / c > 0.9)	132	1,026	791	713
6. PM 2-HR Percent Truck Hours of Delay	4.40%	17.26%	14.08%	12.88%
7. Lane Miles Added to Freight Network (from 1994)	N / A	12	38	39
8. Freight Network Miles	1,175	1,187	1,213	1,214
9. PM 2-HR Congested Freight Network Miles	106	298	246	237
10. PM 2-HR Percent Congested Freight Network Miles	9.02%	25.11%	20.28%	19.52%



Appendix 1.2

Regional Transportation Plan - Round 4 Modeling

System Performance Measures for Total Region Trips (includes Clark, Clackamas, Multnomah and Washington counties)

(Numbers subject to change due to model refinement)

	Round 4 1994	Round 4 - 2020 Financially Constrained	Round 4 2020 Strategic	Round 4 2020 Preferred
Transit Data				
1. AWD Total Transit Trips (originating riders)	192,266	450,070	593,778	624,128
2. AWD Transit Revenue Hours *	4,729	7,360	13,968	14,882
3. Transit Percent of Person Trips	2.95%	4.30%	5.69%	5.98%
4. AWD Originating Riders Per Revenue Hour *	40.66	61.15	42.51	41.94
5. Percent Covered Households (w/in 1/4 mile)	69.12%	64.05%	72.47%	72.56%
6. Percent Covered Employment (w/in 1/4 mile)	82.45%	78.69%	83.58%	83.99%
Pedestrian Data				
1. Total Walk Trips** (does not include walk trips to transit)	311,515	621,488	620,478	618,250
2. Walk Percent of Person Trips	4.79%	5.94%	5.94%	5.93%
Bicycle Data				
1. Total Bike Trips***	58,020	106,509	110,420	111,881
2. Bike Percent of Person Trips	0.89%	1.02%	1.06%	1.07%

8/9/00

* AWD Transit Revenue Hours were calculated using existing daily peak and off-peak expansion factors.

** Walk trips are consistently understated between systems because they represent only trips 6 blocks or longer in length and improvement in the pedestrian environment is not accounted for.

*** Bike trips are consistently understated between systems due to the broad area of coverage and sample size of the 1994 Metro Travel Behavior Survey.



Appendix 1.2 OFF-PEAK

Regional Transportation Plan - Round 4 Modeling

System Performance Measures for Total Region Trips (includes Clark, Clackamas, Multnomah and Washington counties)

(Numbers subject to change due to model refinement)

	Round 4 1994	Round 4 - 2020 Financially Constrained	Round 4 2020 Strategic	Round 4 2020 Preferred
Network Data				
1. Population				
2. Households				
3. Employment				
4. Person Trips				
Motor Vehicle Data				
1. Total Lane Miles				
Freeway				
Arterial				
2. Total Lane Miles Added (from 1994)				
3. AWD Total Auto Person Trips				
4. AWD Total VMT (no trucks or externals)				
5. AWD VMT/Capita (no trucks or externals)				
6. AWD VMT/Capita change from 1994				
7. AWD VMT/Employee (no trucks or externals)				
8. AWD VMT/Employee change from 1994				
9. Single Occupant Vehicle (SOV) Percent of Person Trips				
10. Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)				
11. AWD Motor Vehicle Average Trip Length (miles)				
12. Home-Based-Work Average Trip Length (miles)				
13. Auto Occupancy				
14. Off-Peak 1-HR Motor Vehicle Average Travel Time (minutes)	10.56	11.03	11.01	11.09
15. Off-Peak 1-HR Average Motor Vehicle Travel Speed (miles per hour)	31.98	29.51	30.36	30.52
16. Total Miles in Network	6,168	6,331	6,462	6,488
Freeway Miles	429	450	488	499
Arterial Miles	5,739	5,881	5,974	5,989
17. Off-Peak 1-HR Total Congested miles (v/c > 0.9) (percentage of total miles in network)	47(0.76%)	176(2.78%)	119(1.84%)	108(1.66%)
Freeway (percentage of freeway miles in network)	2(0.47%)	35(7.78%)	21(4.30%)	16(3.21%)
Arterial (percentage of arterial miles in network)	45(0.78%)	141(2.40%)	98(1.64%)	92(1.54%)
18. Off-Peak 1-HR Motor Vehicle Hours	49,089	82,116	80,552	80,864
19. Off-Peak 1-HR Motor Vehicle Hours of Delay (time accrued above v/c > 0.9)	317	2,262	1,541	1,485
20. Off-Peak 1-HR Percent Motor Vehicle Hours of Delay	0.65%	2.75%	1.91%	1.84%
Freeway (percentage of total motor vehicle hours)	17(0.04%)	743(0.90%)	443(0.55%)	365(0.45%)
Arterial (percentage of total motor vehicle hours)	300(0.61%)	1,519(1.85%)	1,098(1.36%)	1,120(1.39%)
21. Total Roadway Capacity-Miles				
Freeway / Highway				
Arterial				
Freight Data				
1. AWD Total Truck Trips				
2. AWD Truck Average Trip Length (miles)				
3. Off-Peak 1-HR Truck Average Travel Time (minutes)	33.54	38.26	37.17	36.86
4. Off-Peak 1-HR Truck Hours	2,012	3,693	3,586	3,554
5. Off-Peak 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)	7	130	83	72
6. Off-Peak 1-HR Percent Truck Hours of Delay	0.35%	3.52%	2.31%	2.03%
7. Lane Miles Added to Freight Network (from 1994)	N/A	12	38	39
8. Freight Network Miles	1,175	1,187	1,213	1,214
9. Off-Peak 1-HR Congested Freight Network Miles	27	92	56	50
10. Off-Peak 1-HR Percent Congested Freight Network Miles	2.30%	7.75%	4.62%	4.12%

OFF-PEAK 1-HOUR PERFORMANCE MEASURES



Appendix 1.2 Regional Transportation Plan - Round 4 Modeling

System Performance Measures for Intra-UGB Trips (within Metro UGB, excludes Clark County, Washington)

(Numbers subject to change due to model refinement)

	Round 4 1994	Round 4 - 2020 Financially Constrained	Round 4 2020 Strategic	Round 4 2020 Preferred
Network Data				
1. Population	1,142,463	1,666,636	1,666,636	1,666,636
2. Households	453,283	716,150	716,150	716,150
3. Employment	791,410	1,327,939	1,327,939	1,327,939
4. Person Trips	4,864,738	7,590,847	7,548,706	7,534,953
Motor Vehicle Data				
1. Total Lane Miles	3,805	4,140	4,439	4,529
Freeway	572	611	687	712
Arterial	3,233	3,529	3,752	3,817
2. Total Lane Miles Added (from 1994)	N / A	335	634	724
3. AWD Total Auto Person Trips	4,267,806	6,388,322	6,207,400	6,165,176
4. AWD Total VMT (no trucks or externals)	16,112,462	24,041,362	23,929,548	24,049,650
5. AWD VMT / Capita (no trucks or externals)	14.10	14.43	14.36	14.43
6. AWD VMT / Capita change from 1994	N / A	2.28%	1.81%	2.32%
7. AWD VMT / Employee (no trucks or externals)	20.36	18.10	18.02	18.11
8. AWD VMT / Employee change from 1994	N / A	-11.08%	-11.49%	-11.05%
9. Single Occupant Vehicle (SOV) Percent of Person Trips	61.48%	60.74%	59.11%	58.69%
10. Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)	38.52%	39.26%	40.89%	41.31%
11. AWD Motor Vehicle Average Trip Length (miles)	4.46	4.38	4.50	4.56
12. Home-Based-Work Average Trip Length (miles)	6.45	6.34	6.52	6.62
13. Auto Occupancy	1.20	1.19	1.19	1.19
14. PM 2-HR Motor Vehicle Average Travel Time (minutes)	10.89	13.14	12.41	12.38
15. PM 2-HR Average Motor Vehicle Travel Speed (miles per hour)	25.29	20.18	22.18	22.22
16. Total Miles in Network	3,053	3,169	3,263	3,301
Freeway Miles	215	220	243	254
Arterial Miles	2,838	2,949	3,020	3,047
17. PM 2-HR Congested miles (v / c > 0.9) (percentage of total miles in network)	198(6.49%)	684(21.58%)	523(16.03%)	490(14.84%)
Freeway (percentage of freeway miles in network)	32(14.88%)	86(38.86%)	68(27.98%)	73(28.74%)
Arterial (percentage of arterial miles in network)	167(5.88%)	598(20.28%)	455(15.07%)	417(13.69%)
18. PM 2-HR Motor Vehicle Hours	126,698	245,074	225,082	222,070
19. PM 2-HR Motor Vehicle Hours of Delay (time accrued above v / c > 0.9)	7,764	51,496	36,304	33,102
20. PM 2-HR Percent Motor Vehicle Hours of Delay	6.13%	21.01%	16.13%	14.91%
Freeway (percentage of total motor vehicle hours)	2,325(1.84%)	13,746(5.61%)	10,322(4.59%)	9,684(4.36%)
Arterial (percentage of total motor vehicle hours)	5,439(4.29%)	37,750(15.40%)	25,982(11.54%)	23,418(10.55%)
21. Total Highway Capacity-Miles	3,967,354	4,305,351	4,648,343	4,752,628
Freeway	1,057,543	1,129,589	1,271,535	1,317,747
Arterial	2,909,811	3,175,762	3,376,808	3,434,881
Freight Data				
1. AWD Total Truck Trips	17,167	18,353	18,353	18,353
2. AWD Truck Average Trip Length (miles)	11.29	11.05	11.04	11.03
3. PM 2-HR Truck Average Travel Time (minutes)	23.29	28.13	26.69	26.44
4. PM 2-HR Truck Hours	2,128	4,355	4,018	3,940
5. PM 2-HR Truck Vehicle Hours of Delay (time accrued above v / c > 0.9)	118	887	659	591
6. PM 2-HR Percent Truck Hours of Delay	5.55%	20.37%	16.40%	15.00%
7. Lane Miles Added to Freight Network (from 1994)	N / A	14	34	34
8. Freight Network Miles	619	633	653	653
9. PM 2-HR Congested Freight Network Miles	84	227	175	166
10. PM 2-HR Percent Congested Freight Network Miles	13.57%	35.86%	26.80%	25.42%



Appendix 1.2

Regional Transportation Plan - Round 4 Modeling

System Performance Measures for Intra-UGB Trips

(within Metro UGB, excludes Clark County, Washington)

(Numbers subject to change due to model refinement)

	Round 4 1994	Round 4 - 2020 Financially Constrained	Round 4 2020 Strategic	Round 4 2020 Preferred
Transit Data (intra-Oregon)				
1. AWD Total Transit Trips (originating rides)	172,464	387,527	522,700	551,757
2. AWD Transit Revenue Hours *	4,400	6,402	12,950	13,836
3. Transit Percent of Person Trips	3.55%	5.11%	6.92%	7.32%
4. AWD Originating Riders Per Revenue Hour *	39.20	60.53	40.36	39.88
5. Percent Covered Households (w/in 1/4 mile)	78.10%	72.57%	83.13%	83.25%
6. Percent Covered Employment (w/in 1/4 mile)	85.56%	82.05%	88.02%	88.51%
Pedestrian Data				
1. Total Walk Trips** (does not include walk trips to transit)	251,926	514,897	514,717	512,838
2. Walk Percent of Person Trips	5.18%	6.78%	6.82%	6.81%
Bicycle Data				
1. Total Bike Trips***	47,237	88,474	92,443	93,947
2. Bike Percent of Person Trips	0.97%	1.17%	1.22%	1.25%

8/9/00

* AWD Transit Revenue Hours were calculated using existing daily peak and off-peak expansion factors.

** Walk trips are consistently understated between systems because they represent only trips 6 blocks or longer in length and improvement in the pedestrian environment is not accounted for.

*** Bike trips are consistently understated between systems due to the broad area of coverage and sample size of the 1994 Metro Travel Behavior Survey.

Appendix 1.2



OFF-PEAK

Regional Transportation Plan - Round 4 Modeling

System Performance Measures for Intra-UGB Trips (within Metro UGB, excludes Clark County, Washington)

(Numbers subject to change due to model refinement)

	Round 4 1994	Round 4 - 2020 Financially Constrained	Round 4 2020 Strategic	Round 4 2020 Preferred
Network Data				
1. Population				
2. Households				
3. Employment				
4. Person Trips				
Motor Vehicle Data				
1. Total Lane Miles				
Freeway				
Arterial				
2. Total Lane Miles Added (from 1994)				
3. AWD Total Auto Person Trips				
4. AWD Total VMT (no trucks or externals)				
5. AWD VMT/Capita (no trucks or externals)				
6. AWD VMT/Capita change from 1994				
7. AWD VMT/Employee (no trucks or externals)				
8. AWD VMT/Employee change from 1994				
9. Single Occupant Vehicle (SOV) Percent of Person Trips				
10. Non-SOV Percent of Person Trips (shared ride, walk, bike, transit)				
11. AWD Motor Vehicle Average Trip Length (miles)				
12. Home-Based-Work Average Trip Length (miles)				
13. Auto Occupancy				
14. Off-Peak 1-HR Motor Vehicle Average Travel Time (minutes)	9.06	9.42	9.33	9.44
15. Off-Peak 1-HR Average Motor Vehicle Travel Speed (miles per hour)	28.76	26.34	27.61	27.38
16. Total Miles in Network	3,053	3,169	3,263	3,301
Freeway Miles	215	220	243	254
Arterial Miles	2,838	2,949	3,020	3,047
17. Off-Peak 1-HR Congested miles (v/c > 0.9) (percentage of total miles in network)	34(1.11%)	145(4.58%)	89(2.73%)	80(2.42%)
Freeway (percentage of freeway miles in network)	2(0.93%)	33(15.00%)	20(8.23%)	15(5.91%)
Arterial (percentage of arterial miles in network)	32(1.13%)	112(3.80%)	69(2.28%)	65(2.13%)
18. Off-Peak 1-HR Motor Vehicle Hours	37,444	60,740	59,089	59,159
19. Off-Peak 1-HR Motor Vehicle Hours of Delay (time accrued above v/c > 0.9)	232	1,910	1,225	1,135
20. Off-Peak 1-HR Percent Motor Vehicle Hours of Delay	0.62%	3.14%	2.07%	1.92%
Freeway (percentage of total motor vehicle hours)	17(0.05%)	677(1.11%)	410(0.69%)	359(0.61%)
Arterial (percentage of total motor vehicle hours)	215(0.57%)	1,233(2.03%)	815(1.38%)	776(1.31%)
21. Total Highway Capacity-Miles				
Freeway				
Arterial				
Freight Data				
1. AWD Total Truck Trips				
2. AWD Truck Average Trip Length (miles)				
3. Off-Peak 1-HR Truck Average Travel Time (minutes)	20.31	22.16	21.55	21.52
4. Off-Peak 1-HR Truck Hours	1,365	2,547	2,430	2,401
5. Off-Peak 1-HR Truck Vehicle Hours of Delay (time accrued above v/c > 0.9)	4	112	68	58
6. Off-Peak 1-HR Percent Truck Hours of Delay	0.29%	4.40%	2.80%	2.42%
7. Lane Miles Added to Freight Network (from 1994)	N/A	14	34	34
8. Freight Network Miles	619	633	653	653
9. Off-Peak 1-HR Congested Freight Network Miles	14	77	40	35
10. Off-Peak 1-HR Percent Congested Freight Network Miles	2.26%	12.16%	6.13%	5.36%

OFF-PEAK 1-HOUR PERFORMANCE MEASURES



METRO
Regional Transportation Plan

System Design Principles

	PREFERRED	STRATEGIC	EXISTING RESOURCES
VISION What do we want?	<ol style="list-style-type: none"> 1. Implements all Primary Growth Concept Components 2. Preserves UGMFP "Regional Highway" Function 3. Addresses most Secondary Growth Concept Components 4. Addresses many needs for other Growth Concept Components 5. Meets all 20 year benchmarks for Growth Concept implementation 	<ol style="list-style-type: none"> 1. Implements the most significant Primary Growth Concept Components 2. Substantially preserves Regional Highway Function 3. Addresses many Secondary Growth Concept Components 4. Addresses some needs for other Growth Concept Components 5. Meets many 20 year benchmarks for Growth Concept implementation 	<ol style="list-style-type: none"> 1. Implements only the most critical Primary Growth Concept Components 2. Preserves Regional Highway Function on the most critical segments 3. Addresses selected Secondary Growth Concept Components 4. Addresses few needs for other Growth Concept Components 5. Meets few, if any 20 year benchmarks for Growth Concept implementation
ELEMENTS How do we build it?	<ul style="list-style-type: none"> <input type="checkbox"/> Central City and Regional Centers served by light rail, direct access to regional highway system, arterial capacity improvements and major pedestrian and bicycle system improvements. <input type="checkbox"/> Industrial Areas have strong connections to regional highway system and intermodal facilities. <input type="checkbox"/> Town Centers, Corridors and Main Streets are served by primary transit, improved arterial streets and significant improvements to the pedestrian and bicycle system. <input type="checkbox"/> Neighborhoods and Employment Areas are served by secondary transit, improved arterial streets and have some improvements to the pedestrian and bicycle system. 	<ul style="list-style-type: none"> <input type="checkbox"/> Central City and most Regional Centers served by light rail, direct access to regional highway system, arterial capacity improvements and major pedestrian and bicycle system improvements. <input type="checkbox"/> Most Industrial Areas have strong connections to regional highway system and intermodal facilities. <input type="checkbox"/> Most Town Centers, Corridors and Main Streets are served by primary transit, improved arterial streets and significant improvements to the pedestrian and bicycle system. <input type="checkbox"/> Many Neighborhoods and Employment Areas are served by secondary transit, improved arterial streets and have some improvements to the pedestrian and bicycle system. 	<ul style="list-style-type: none"> <input type="checkbox"/> Central City and some Regional Centers served by light rail, commuter rail, direct access to regional highway system, arterial capacity improvements and major pedestrian and bicycle system improvements. <input type="checkbox"/> Some Industrial Areas have strong connections to regional highway system and intermodal facilities. <input type="checkbox"/> Few Town Centers, Corridors and Main Streets are served by primary transit, improved arterial streets and significant improvements to the pedestrian and bicycle system. <input type="checkbox"/> Few Neighborhoods and Employment Areas are served by secondary transit, improved arterial streets and have some improvements to the pedestrian and bicycle system.
FINANCE What can we afford?	<ul style="list-style-type: none"> <input type="checkbox"/> Includes all currently identified revenue sources <input type="checkbox"/> Identifies specific new federal, state and regional revenue sources <input type="checkbox"/> Assumes unspecified new revenue sources <input type="checkbox"/> Assumes some new local revenue sources 	<ul style="list-style-type: none"> <input type="checkbox"/> Includes all currently identified revenue sources <input type="checkbox"/> Identifies specific new federal, state and regional revenue sources <input type="checkbox"/> Assumes some new local revenue sources <input type="checkbox"/> Assumes more revenue than existing resource system 	<ul style="list-style-type: none"> <input type="checkbox"/> Includes all currently identified revenue sources <input type="checkbox"/> Assumes continuation of special levies and other local revenue sources <input type="checkbox"/> Assumes no new revenue sources or tax increases
PERFORMANCE How does it work?	<ul style="list-style-type: none"> <input type="checkbox"/> Serves as "best" system for implementing 2040 Growth Concept <input type="checkbox"/> Meets most non-SOV targets <input type="checkbox"/> Meets most RTP motor vehicle performance measures (Table 1.1) <input type="checkbox"/> Meets Regional Framework Plan policies and requirements <input type="checkbox"/> Meets O+M+P system needs 	<ul style="list-style-type: none"> <input type="checkbox"/> Serves as "adequate" system for implementing 2040 Growth Concept, and is basis for plan amendments <input type="checkbox"/> Meets many RTP non-SOV targets <input type="checkbox"/> Meets many RTP motor vehicle performance measures (Table 1.1) <input type="checkbox"/> Meets State TPR requirements <input type="checkbox"/> Maintains current O+M+P levels 	<ul style="list-style-type: none"> <input type="checkbox"/> Meets few RTP non-SOV targets <input type="checkbox"/> Meets few RTP motor vehicle performance measures <input type="checkbox"/> Does not meet intent of State TPR requirements <input type="checkbox"/> O+M+P levels decline significantly



Principles for Shaping the 2025 Financially Constrained System

1. Promote 2040 Growth Concept

- Emphasize 2040 priority areas (central city, regional centers, industrial areas & intermodal facilities)
- Seed projects in new urban areas
- Achieve geographic balance

2. Set Stage for Regional Funding Initiative

- Emphasize projects that support Transportation Task Force recommendations

3. Preserve AQ Conformity Status

- No net growth in non-exempt share of Financially Constraint projects
- Encourage exempt projects
- Meet TCMs as established in maintenance plan



Guidelines for Developing the 2025 Financially Constrained System

2040 Emphasis	2000 RTP	2040 Component	2004 RTP
	40%	Central City Regional Centers	
	35%	Industrial Areas Intermodal Facilities	
	15%	Town Centers Station Communities Main Streets Corridors	
	10%	Other Areas	

Modal Balance	2000 RTP	Project Category	2004 RTP
	9%	Highway	
	24%	Road/ITS	
	55%	Transit	
	2%	Bridge	
	5%	Pedestrian	
	3%	Bicycle	
	3%	Boulevard	
	2%	TDM	



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Appendix 1.4 2020 No-Build System Assumptions

The purpose the 2020 No-Build System is to establish a baseline for analysis of the other RTP networks (e.g., preferred, strategic and existing resource systems). The No-Build System is described in the context of Chapter 2 of the RTP, which provides an overview of expected growth in the region, and how it will affect the region's transportation system. In this context, the No-Build System identified the region's transportation system needs and demonstrates that projected growth alone makes most of the improvements proposed in the 1999 RTP necessary.

The following network assumptions were used to develop the 2020 No-Build System for the purpose of RTP analysis:

- **Roadways** - This network includes 1994 base road network, plus projects awarded funding in the Priorities 2000 MTIP process.
- **Transit** - This network includes eastside and westside MAX, the 1998 bus network and the extension of airport LRT. Though operation of the airport line assumes a portion of the projected 1.5% annual service expansion would be dedicated to operating the new line, the project is under construction, and thus best approximates a "no build" condition. Interstate MAX was not included, because at the time of RTP analysis the project had not received funding commitments.
- **Zone Assumptions** - The existing resources system zone assumptions for intersection density, parking factors, transit pass factors and fareless areas would be the best fit for the no-build scenario. See Appendix 1.8 for additional information on the transportation analysis zone assumptions for the existing resources system.



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Appendix 1.5

2000 Regional Transportation Plan

2020 Existing Resource System

(for analysis purposes only)

The existing resource system is a 20-year transportation scenario that assumes no new sources or major increases in revenue. The purpose of defining an existing resource system is to provide a benchmark transportation scenario that will be compared with the 2020 strategic and preferred systems as part of the RTP analysis. This system represents just one example of how limited revenues might be spent in this region for the purposes of analyzing the impact of no new revenue on operation of the regional transportation system over the next 20 years. It is important to note that the existing resource scenario is not intended to represent a regional policy statement of where transportation improvements should be directed if no new revenue sources are identified. Likewise, this scenario does not reflect local discussions of local priorities and should not be used to make a determination of local priorities.

During the 20-year plan period, approximately \$950 million in revenue for road-related capital improvements are forecast from the sources shown in Table 1.

Table 1. Revenue Projected Through 2020 for the Existing Resources System

Traditional Transportation Funds

- Federal funds for Metro region - \$279.1 million:
 - Regional STP - \$185.2 million
 - Bridge - \$14.1 million
 - CMAQ - \$68.6 million
 - Enhancement - \$7.1 million
 - Safety - \$4.1 million
- ODOT funds for Metro region - \$177.9 million

Property Based Funds

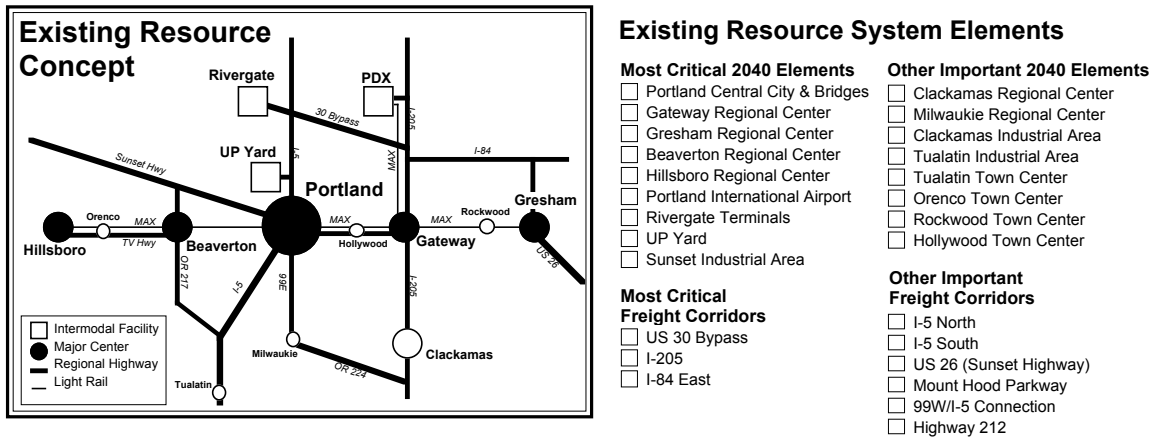
- Port of Portland - \$138 million
- Clackamas County SDC - \$19 million
- City of Portland SDC - \$32.1 million
- Portland URD - \$66.5 million
- Gresham TIF - \$17.1 million
- Clackamas County URD - \$79.6 million
- Washington County TIF - \$74.8 million

Special Funds/Levies

- Washington County MSTIP - \$74 million

Because this amount represents a major shortfall compared to identified long-term needs, the system does not attempt to address all current deficiencies -- in effect, allocating 20 years of revenue toward immediate needs. Instead, this existing resource system attempts to focus this revenue in areas that already have substantial transportation infrastructure in anticipation that future growth will be best accommodated in these places. These are generally areas with excellent freeway and arterial street access and major transit investments. Figure 1 shows the areas targeted with transportation investments.

Figure 1
2020 Existing Resources System



Source: Metro

As shown in Figure 1, this area is defined as the east/west corridor stretching from Hillsboro to Gresham. Figure 1 identifies a number of centers, industrial areas and intermodal facilities within this area that will be critical to accommodating compact growth while minimizing the expansion of the urban area. In this corridor, regional centers and the central city are already served by light rail, and most centers have good highway access. Most of the region's industry and intermodal facilities are also located in this corridor, and are equally well served by existing transportation infrastructure. The existing resource system includes projects and programs that would support the ability of these areas to absorb continued growth and maintain their economic vitality.

However, focusing limited resources in this east/west corridor comes at the expense of other growing areas in the region. The implication of focused spending is that other areas will be less able to accommodate compact growth, and existing transportation facilities in these other areas will be heavily impacted by increased travel demand.

Table 2 identifies road-related capital projects and their estimated cost by 2040 design type. In some instances, major transit capital projects and service enhancements are also indicated. In general, the transit service assumed for this system will remain at today's level with some new primary and frequent bus service along major transit corridors. This assumes a 1.5 percent increase per year in service hours.

Table 2. Road-related Capital Projects in Existing Resource System for Round 2 RTP Analysis

Target road-related capital costs	Existing Resource System Project List (RTP project number and name are indicated)
\$110 million	Portland Central City 1005/1006 Willamette River Bridges 1007 Broadway Bridge improvements 1014 Central City street car from Good Sam to PSU 1028 Kerby Street interchange 1031 I-405/US 26 Connector 1032 Southern triangle improvements 1039 Belmont Avenue ramps 1051 E/W Burnside reconstruction/ITS 1052 N. Macadam street improvements 1053 Naito Parkway ITS/boulevard design 1054 Broadway/Weidler boulevard/ITS 1079 Steel Bridge pedestrian improvements 1119 Sandy/Burnside/12th intersection improvements 8035 S/N rapid bus via 224/99/I-5
\$60 million	Gateway Regional Center 2010 Halsey/Weidler boulevard design/ITS 2011 Glisan Street boulevard design/ITS 2012 Stark/Washington Street safety/boulevard design/ITS 2016/2017/2019 Bikeway improvements 2020 Gateway regional center pedestrian improvements 2022 Gateway regional center traffic management 2023 Gateway TMA startup 8005 TOD program in regional center
\$60 million	Gresham Regional Center 2025 Improvements to enhance frequent bus along Division to downtown Portland 2027 Civic neighborhood LRT station/plaza 2028 Powell Blvd. widen to five lanes 2041 257th Avenue improvements 2044 Orient Drive improvements 2047 Division Street boulevard improvements 2048 Burnside Street boulevard improvements 2049 Powell Blvd. boulevard improvements 2053 Gresham/Fairview trail 2057 Gresham regional center pedestrian and Ped-to-MAX improvements 2058 Springwater Trail access improvements 2062 Gresham TMA startup 2065 Signal optimization county-wide 2108 Halsey Street improvements 2111 207th Avenue connector 2123 Stark Street improvements 8005 TOD program in regional center

Target road-related capital costs	Existing Resource System Project List (RTP project number and name are indicated)
\$60 million	Beaverton Regional Center 3019 Downtown Beaverton connectivity, phase 1 3020 Downtown Beaverton connectivity, phase 2 3026 Milikan extension 3027 Davis Road multi-modal improvements 3028 Hart Road multi-modal improvements 3029 Lombard Road multi-modal improvements 3041 Hall/Watson boulevard improvements 3049 Downtown pedestrian improvements 3061 TV Highway system management 3063 Murray Boulevard signal coordination 3046/3047/3052/3053/3056 bike/pedestrian improvements 6000 Commuter rail service to Tigard and Wilsonville 8005 TOD program in regional center
\$60 million	Hillsboro Regional Center 3110 Jackson School Road lane channelization @ US 26 3111/3112 First Avenue improvements 3102 Baseline Road improvements 3128 Cornell Road improvements 3119 TV Highway boulevard improvements 3123 TMA Startup 3127 Hillsboro regional center pedestrian improvements 3113/3115/3116 10th Avenue improvements 3124 TV Highway System Management 3106 229th/231st/234th Collector/Connector 8005 TOD program in regional center
\$60 million	Clackamas Regional Center 8035 South/North rapid bus via 224/99/I-5 (CRC to Vancouver, Wash.) 5064 Improvements to enhance frequent bus service along I-205 to Oregon City 5065 TMA Startup 5069 Harmony Road widening 5067 I-205/JCB interchange improvements 5068 Johnson Creek Boulevard improvements 5072 West Monterey extension 5074 Causey Avenue extension 5080/5100 Fuller Road improvements 5082 82nd Avenue multi-modal improvements 5085 RC Bike/pedestrian improvements 5086 82nd Avenue boulevard design 5094 CTC Connector 5101 RC pedestrian improvements 5103 Clackamas County ITS 8005 TOD program in regional center

Target road-related capital costs	Existing Resource System Project List (RTP project number and name are indicated)
\$10 million	Milwaukie Town Center 8035 South/North rapid bus via 224/99/I-5 (CRC to Vancouver, Wash.) 5035 Improvements to enhance frequent bus service on McLoughlin Blvd. to Oregon City 5036 King Road/34th Avenue Extension 5038 Johnson Creek Boulevard Phase 2 improvements 5049 McLoughlin Boulevard improvements 5040/5050/5051 Bike/pedestrian improvements 5045 Linwood/Harmony/Lake Road improvements 5046 Railroad Crossing improvements
\$10 million	Tualatin Town Center 6072 Tualatin Road improvements
\$6 million	Rockwood Town Center 2102 Stark Street boulevard design 2123 Stark Street improvements
\$10 million	Hollywood Town Center 1120/1122 Sandy Boulevard Multi-modal improvements 1130 Hollywood town center pedestrian district
	Orengo Town Center No improvements included
\$1 million	St. Johns Town Center 1150 St. Johns pedestrian district improvements
\$2 million	Lents Town Center 1158 Lents town center pedestrian district improvements
\$5 million	West Portland Town Center 1201 West Portland pedestrian district improvements
\$2 million	Hillsdale Town Center 1181 Beaverton-Hillsdale Highway ITS 1176 Beaverton-Hillsdale Highway bike and pedestrian improvements

Target road-related capital costs	Existing Resource System Project List (RTP project number and name are indicated)
\$8 million	Columbia South Shore Industrial Area 2081 223rd Avenue railroad crossing improvements at I-84 and north of I-84
\$10 million	Portland Main Streets 1214 Division Street pedestrian access to transit 1233 SE Hawthorne Boulevard improvements for transit 8036 SE Foster Road improvements for transit
\$100 million	Portland International Airport 4000 Airport light rail 4019 Airport light rail station construction 4020 Airport Way widening, East 4021 Airport Way widening, West 2070 I-205 SB Ramp improvements 2071 I-205 auxiliary lane 4040 47th Avenue improvements 4028 82nd Avenue/Airport Way overcrossing 4032 Terminal entrance relocation 4033 Airport Way (east) access improvements 4031 Airport Way return/exit improvements 4058 Airport Way ITS
\$64 million	Rivergate Terminals 4061 West Hayden Island bridge crossing 4062 Marine Drive improvements, Phase 1 4065 South Rivergate Overcrossing
\$10 million	UP Yards 1034 Lower Albina Overcrossing 1109 Going Street Overcrossing 1103 Going Street ITS
\$43 million	Sunset Industrial Area 3130 Evergreen Road improvements 3134 Cornelius Pass Road improvements 3136 Brookwood Road improvements 3141 170/173rd Avenue improvements
\$19 million	Clackamas Industrial Area 5008 Highway 212/I-205 interchange improvement
\$5 million	Tualatin Industrial Area 6066 I-5/Nyberg Road interchange improvements

Target road-related capital costs	Existing Resource System Project List (RTP project number and name are indicated)
\$22 million	US 30 Bypass 4022 East End Connector (Columbia to US 30 Bypass) 4012/4056 Columbia/Lombard/Killingsworth ITS 2068 I-205 direct ramp
\$88 million	I-205 2068 I-205 direct ramp 5027 I-205 South Corridor study 5014 I-205 auxiliary lanes from 224 to 82nd Drive 5013 I-205 climbing lanes from Willamette to West Linn 5011 I-205 bridge improvements – widen to six lanes
\$70 million	I-5 North 4004 I-5 North reconstruction - Greeley to I-84
\$20 million	I-5 South 6027 I-5/217 interchange improvement (Phase 2)
\$30 million	US 26 3006 Camelot/Sylvan Phases 2 and 3 3007 Widen EB US 26 from Highway 217 to Camelot Court 3008 Widen US 26 from Highway 217 to Murray Boulevard
\$30 million	Mt. Hood Parkway 2001 New I-84 interchange 2003 Construct new four-lane facility from Palmquist Road to US 26
	I-84 East No improvements included
	99W/I-5 Connector No improvements included (I-5/Nyberg project included in lieu of this improvement under "Tualatin Industrial Area.")
Target road- related capital costs (TOTAL)	
\$975 million	



METRO

Appendix 1.6

Highway Capacity Manual Level of Service Table
Level-of-Service (LOS) Definitions for Freeways, Arterials and Signalized Intersections

LOS	Freeways (average travel speed assuming 70 mph design speed)	Arterials (average travel speed assuming a typical free flow speed of 40 mph)	Signalized Intersections (stopped delay per vehicle)	Traffic Flow Characteristics
A	Greater than 60 mph Average spacing: 22 car-lengths	Greater than 35 mph	Less than 5 seconds; most vehicles do not stop at all	Virtually free flow; completely unimpeded Volume/capacity ratio less than or equal to .60
B	57 to 60 mph Average spacing: 13 car-lengths	28 to 35 mph	5.1 to 15 seconds; more vehicles stop than for LOS A	Stable flow with slight delays; reasonably unimpeded Volume/capacity ratio .61 to .70
C	54 to 57 mph Average spacing: 9 car-lengths	22 to 28 mph	15.1 to 25 seconds; individual cycle failures may begin to appear	Stable flow with delays; less freedom to maneuver Volume/capacity ratio of .71 to .80
D	46 to 54 mph Average spacing: 6 car-lengths	17 to 22 mph	25.1 to 40 seconds; individual cycle failures are noticeable	High density, but stable flow Volume/capacity ratio of .81 to .90
E	30 to 46 mph Average spacing: 4 car-lengths	13 to 17 mph	40.1 to 60 seconds; individual cycle failures are frequent; poor progression	Operating conditions at or near capacity; unstable flow Volume/capacity ratio of .91 to 1.00
F	Less than 30 mph Average spacing: bumper-to-bumper	Less than 13 mph	Greater than 60 seconds; not acceptable for most drivers	Forced flow, breakdown conditions Volume/capacity ratio of greater than 1.00
>F	Demand exceeds roadway capacity, limiting volume that can be carried and forcing excess demand onto parallel routes and extending the peak period			Demand/capacity ratios of greater than 1.10

Source: 1985 Highway Capacity Manual (A through F descriptions)
Metro (>F description)

Appendix 1.7 2020 Population and Employment Forecast

LANDUSE COMPARISON BY RTP SUBAREAS ROUND 3 RTP ASSUMPTIONS

<u>HOUSEHOLDS</u>				<u>POPULATION</u>			
Subarea Zone	1994	2020	% Change 1994-2020	Subarea Zone	1994	2020	% Change 1994-2020
1	4,299	8,936	107.86%	1	9,465	18,899	99.67%
2	164,567	198,874	20.85%	2	376,495	428,309	13.76%
3	70,667	102,604	45.19%	3	188,734	258,694	37.07%
4	4,307	39,813	824.38%	4	13,425	125,397	834.06%
5	50,548	85,906	69.95%	5	133,322	207,615	55.72%
6	75,696	120,358	59.00%	6	195,111	264,772	35.70%
7	84,889	162,106	90.96%	7	229,807	368,064	60.16%
8	102,664	192,290	87.30%	8	282,437	480,387	70.09%
9	42,061	75,319	79.07%	9	123,868	196,806	58.88%
Total	599,698	986,206	64.45%	Total	1,552,664	2,348,943	51.28%

<u>RETAIL EMPLOYMENT</u>			
Subarea Zone	1994	2020	% Change 1994-2020
1	5,620	7,864	39.93%
2	44,968	69,510	54.58%
3	18,534	28,575	54.18%
4	337	2,467	632.05%
5	18,293	40,564	121.75%
6	21,066	35,519	68.61%
7	22,482	48,249	114.61%
8	21,954	45,050	105.20%
9	3,052	5,691	86.47%
Total	156,306	283,489	81.37%

Subarea Zones
 Zone 1 is West Columbia Corridor
 Zone 2 is Portland Central City and Neighborhoods
 Zone 3 is East Multnomah County
 Zone 4 is Damascus
 Zone 5 is Urban Clackamas County
 Zone 6 is South Washington County
 Zone 7 is North Washington County
 Zone 8 is Clark County, Wa.
 Zone 9 is Rural land (outside UGB)

<u>OTHER EMPLOYMENT</u>			
Subarea Zone	1994	2020	% Change 1994-2020
1	45,390	90,633	99.68%
2	289,914	380,038	31.09%
3	49,661	79,035	59.15%
4	3,571	30,617	757.38%
5	59,398	102,936	73.30%
6	101,090	167,354	65.55%
7	111,608	245,228	119.72%
8	101,805	183,473	80.22%
9	28,904	48,153	66.60%
Total	791,341	1,327,467	67.75%

<u>TOTAL EMPLOYMENT</u>			
Subarea Zone	1994	2020	% Change 1994-2020
1	51,010	98,497	93.09%
2	334,882	449,548	34.24%
3	68,195	107,610	57.80%
4	3,908	33,084	746.57%
5	77,691	143,500	84.71%
6	122,156	202,873	66.08%
7	134,090	293,477	118.87%
8	123,759	228,523	84.65%
9	31,956	53,844	68.49%
Total	947,647	1,610,956	70.00%

Appendix 1.7

LANDUSE COMPARISON BY RTP SUBAREAS 2004 RTP Update

HOUSEHOLDS

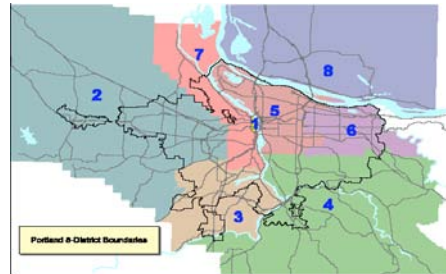
Subarea Zone	2000	2025	% Change 2000-2025
1	7,257	23,032	217.40%
2	131,302	179,268	36.53%
3	66,939	108,287	61.77%
4	92,514	178,323	92.75%
5	138,790	169,270	21.96%
6	77,332	115,065	48.79%
7	50,015	70,471	40.90%
8	138,575	199,529	43.99%
Total	702,723	1,043,245	48.46%

POPULATION

Subarea Zone	2000	2025	% Change 2000-2025
1	8,598	58,198	576.88%
2	360,797	441,629	22.40%
3	189,686	281,573	48.44%
4	249,486	472,083	89.22%
5	312,114	409,372	31.16%
6	204,766	292,516	42.85%
7	106,424	184,663	73.52%
8	379,725	505,701	33.18%
Total	1,811,595	2,645,735	46.04%

RETAIL EMPLOYMENT

Subarea Zone	2000	2025	% Change 2000-2025
1	12,369	13,581	9.80%
2	38,447	62,654	62.96%
3	17,854	29,333	64.30%
4	27,661	45,778	65.49%
5	44,168	56,507	27.94%
6	21,906	39,490	80.27%
7	11,724	14,889	27.00%
8	28,865	60,665	110.17%
Total	202,993	322,897	59.07%



OTHER EMPLOYMENT

Subarea Zone	2000	2025	% Change 2000-2025
1	110,263	148,197	34.40%
2	161,792	293,471	81.39%
3	104,431	175,247	67.81%
4	94,425	158,366	67.72%
5	203,811	288,421	41.51%
6	62,691	118,253	88.63%
7	94,168	139,437	48.07%
8	119,282	261,913	119.57%
Total	950,863	1,583,305	66.51%

TOTAL EMPLOYMENT

Subarea Zone	2000	2025	% Change 2000-2025
1	122,632	161,778	31.92%
2	200,239	356,125	77.85%
3	122,285	204,580	67.30%
4	122,086	204,144	67.21%
5	247,979	344,928	39.10%
6	84,597	157,743	86.46%
7	105,891	154,326	45.74%
8	148,147	322,578	117.74%
Total	1,153,856	1,906,202	65.20%



Appendix 1.8

Transportation Analysis Zone Assumptions and Non-SOV Modal Performance

The attached tables were developed in order to reflect 2040 land use assumptions for certain transportation modeling factors. They were not used for the purpose of allocating population and employment to individual traffic analysis zones (TAZ). Rather, they were developed to allow transportation variables, such as parking costs, transit subsidies and ease of pedestrian travel, be adjusted to closely reflect planned land uses at the TAZ level. The net result is a model exercise that better predicts how mode share will respond to different land use types and mixes. See Appendix 2.2 for more information on the 2040 Non-SOV modal targets.

The following is a summary of the methodology used to develop the transportation analysis zone (TAZ) assumptions for RTP modeling:

2040 Grouping & Group Characteristics

To simplify the modeling assumptions, the 2040 design types have been grouped according to shared land use and transportation characteristics. The left column groups the 2040 design types by location, and the second column provides a brief rationale for the groupings. These groupings will define a set of TAZs in the modeling process. TAZs were assigned to each grouping.

Intersection Density

The intersection density represents the expected number of street intersections per mile for each 2040 grouping in 2020. Intersection density affects mode choice and trip length for all modes.

Parking Factors

Parking factors for the Central City and for Tier 1 Regional Centers are based on the South/North DEIS parking costs developed from survey data. Parking factors for the remaining regional centers, station communities, town centers and mainstreets are scaled from these costs. The strategic factors reflect 75% of the preferred costs while the financially constrained factors reflect 50% of preferred costs. No parking factors are assumed for corridors, neighborhoods, employment areas, industrial areas, greenspaces and rural reserves.

Transit Pass Factor

The transit pass factor represents the percentage of the full transit fare that transit riders in each 2040 design type will pay. The Central City transit pass factor is based on the average non-auto mode split for central city employers under the Employee Commute Options (ECO) rule and discounted to reflect the highest level of transit service in the downtown. Transit pass factors for the remaining design types are scaled relative to the central city costs.

Fareless Areas

The fareless square concept (zero transit fair) will be in the “preferred,” “priority,” and “financially constrained” systems in the Central City, Tier 1 Regional Centers and Tier 1 Station Communities. For the Tier 2 Regional Centers and the Tier 2 Station Communities, only the “preferred” and the “strategic” systems receive this incentive.

Transportation Analysis Zone Assumptions and Non-SOV Modal Performance

2040 Grouping	2040 Group Characteristics	2020 and 2025 Intersection Density (connections per mile)			2020 and 2025 Parking Factors (indexed to CBD in '94 dollars)			2020 and 2025 Transit Pass Factor (% of Full Fare)			2020 and 2025 Fareless Areas (for internal trips)			Non-SOV Modal Performance (combined share of non-SOV trips to, from and within 2040 grouping)		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Central City 1 Downtown Business District	Highest planned employment and housing density in the region, with highest level of access by all modes. LRT exists and current land uses reflect planned mix and densities.	20	20	20	6.08	6.08	6.08	60%	60%	60%	X	X	X	48%	67%	67%
Central City 2 Lloyd District	Highest planned employment and housing density in the region, with highest level of access by all modes. LRT exists and current land uses reflect planned mix and densities.	20	20	20	3.94	3.94	3.94	60%	60%	60%	X	X	X	34%	46%	46%
Central City 3 Central Eastside Industrial District	and housing density, with highest es. LRT exists. Current land uses sities.	20	20	20	2.96	2.96	2.96	65%	65%	65%	X	X		32%	43%	42%

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

2040 Grouping	Group Characteristics	Intersection Density			Parking Factors			Transit Pass Factor			Fareless Areas			Non-SOV Modal Performance (combined share of non-SOV trips to, from and within 2040 grouping)		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Central City 4 River District and Northwest	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses approach planned mix and densities.	20	20	20	3.94	3.94	3.94	65%	65%	65%	X	X		37%	57%	57%
Central City 5 North Macadam District	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses do not reflect planned mix and densities.	18	18	18	3.04	3.04	3.04	65%	65%	65%	X	X		22%	42%	42%
Regional Centers - Tier 1 Gresham Gateway Beaverton Hillsboro	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses approach planned mix and densities.	>16	>16	>14	1.60	1.20	0.80	70%	75%	80%	X	X	X	32%	40%	39%
Regional Centers - Tier 2 Washington Square Milwaukie Clackamas Oregon City	Planned high employment and housing density, with highest level of access by all modes; planned LRT. Current land uses do not reflect planned mix and densities.	>12	>12	>10	1.22	0.92	0.60	85%	90%	95%	X	X		31%	34%	34%

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

2040 Grouping	Group Characteristics	2020 and 2025 Intersection Density			2020 and 2025 Parking Factors			2020 and 2025 Transit Pass Factor			2020 and 2025 Fareless Areas			Non-SOV Modal Performance (combined share of non-SOV trips to, from and within 2040 grouping)		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Station Communities Tier 1 Banfield Corridor Westside Corridor	High housing density mixed with commercial services; highest level of access for transit, bike and walk; existing LRT.	>16	>14	>12	1.60	1.20	0.80	70%	75%	80%				35%	42%	41%
Station Communities Tier 2 South/North Corridor	Planned high housing density mixed with commercial services, with high level of transit, bike and walk; planned LRT. Current land uses do not reflect planned mix and densities.	>12	>12	>10	1.22	0.92	0.60	85%	90%	95%				36%	42%	42%
Town Centers - Tier 1 St. Johns Hollywood Lents Rockwood Lake Oswego Tualatin Forest Grove	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>16	>16	>16	0.90	0.68	0.45	75%	80%	85%				35%	40%	40%
Town Centers - Tier 2 West Portland Raleigh Hills Hillsdale Gladstone West Linn Sherwood Sunset Wilsonville Cornelius Orencia	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderately connected street system and some transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>12	>12	>10	0.72	0.54	0.36	90%	95%	100%				32%	37%	37%

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

2040 Grouping	Group Characteristics	2020 and 2025 Intersection Density			2020 and 2025 Parking Factors			2020 and 2025 Transit Pass Factor			2020 and 2025 Fareless Areas			Non-SOV Modal Performance <i>(combined share of non-SOV trips to, from and within 2040 grouping)</i>		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Town Centers - Tier 3 Fairview/Wood Village Troutdale Happy Valley Lake Grove Farmington Cedar Mill Tannasbourne	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, poorly connected street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>10	>10	>8	0.55	0.41	0.28	100%	100%	100%				34%	37%	36%
Town Centers - Tier 4 Pleasant Valley Damascus Bethany Murrayhill	Moderate housing and employment density planned, with high level of access by all modes. Currently undeveloped or developing urban uses, with skeletal street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>8	>8	>8	0.36	0.27	0.18	100%	100%	100%				37%	40%	39%
Mainstreets - Tier 1 Eastside Portland to 60th	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>16	>16	>14	0.90	0.68	0.45	100%	100%	100%				40%	45%	45%

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

2040 Grouping	Group Characteristics	2020 and 2025 Intersection Density			2020 and 2025 Parking Factors			2020 and 2025 Transit Pass Factor			2020 and 2025 Fareless Areas			Non-SOV Modal Performance (combined share of non-SOV trips to, from and within 2040 grouping)		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Mainstreets - Tier 2 Remaining Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderate connectivity and some transit.	>12	>10	>8	0.72	0.54	0.36	100%	100%	100%				38%	43%	43%
Corridors Full Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, moderate connectivity and some transit.	>10	>10	>10	None	None	None	100%	100%	100%				36%	39%	39%
Inner Neighborhoods Full Region	Low density housing planned, with moderate level of access by all modes. Currently has moderate connectivity and some transit.	>10	>10	>10	None	None	None	100%	100%	100%				39%	42%	42%
Outer Neighborhoods - Tier 1 Current Urban Areas	Low density housing planned, with moderate level of access by all modes. Currently has poorly connected street system and little transit.	>8	>8	>8	None	None	None	100%	100%	100%				37%	40%	39%
Outer Neighborhoods - Tier 2 Urban Reserve Areas	Low density housing planned, with moderate level of access by all modes. Currently has skeletal street system and no transit.	>6	>6	>6	None	None	None	100%	100%	100%				36%	39%	38%

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

2040 Grouping	Group Characteristics	2020 and 2025 Intersection Density			2020 and 2025 Parking Factors			2020 and 2025 Transit Pass Factor			2020 and 2025 Fareless Areas			Non-SOV Modal Performance <i>(combined share of non-SOV trips to, from and within 2040 grouping)</i>		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Employment Areas Full Region	Low density employment planned, with moderate level of access by all modes. Currently has poorly connected street system and limited transit.	>8	>8	>8	None	None	None	100%	100%	100%				28%	30%	29%
Industrial Areas - Tier 1 Rivergate Swan Island Airport	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has somewhat connected street system and some transit.	>10	>10	>10	None	None	None	100%	100%	100%				26%	27%	27%
Industrial Areas - Tier 2 South Shore Clackamas Tualatin Beaverton Sunset	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has developing street system and poor transit.	>8	>8	>8	None	None	None	100%	100%	100%				28%	28%	28%
Greenspaces Same as Tier 2 Outer Neighborhoods.	Recreational uses are planned, with moderate level of access by all modes	>6	>6	>6	None	None	None	100%	100%	100%				n/a	n/a	n/a
Rural Reserves Same as Tier 2 Outer Neighborhoods.	Urban uses are not planned in the foreseeable future. Currently has skeletal street system and no transit.	>6	>6	>6	None	None	None	100%	100%	100%				34%	37%	37%

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

2040 Grouping	Group Characteristics	2020 and 2025 Intersection Density			2020 and 2025 Parking Factors			2020 and 2025 Transit Pass Factor			2020 and 2025 Fareless Areas			Non-SOV Modal Performance <i>(combined share of non-SOV trips to, from and within 2040 grouping)</i>		
		P	PT	FC	P	PT	FC	P	PT	FC	P	PT	FC	1994	2020 Preferred System	2020 Priority System
Special Area 1 Portland International Airport		*	*	*	6.14	6.14	6.14	60%	60%	60%				<i>These places are relatively small geographic areas with special characteristics that make it difficult to determine actual non-SOV modal performance based on analysis of the regional model.</i>		
Special Area 2 Oregon Health Sciences University		*	*	*	1.86	1.86	1.86	60%	60%	60%						
Special Area 3 Oregon Zoo		*	*	*	1.86	1.86	1.86	100%	100%	100%						
Special Area 4 SMART (Wilsonville)		*	*	*	*	*	*	*	*	*	X	X	X		*	*

* Use parent zone values.

(P) 2020 and 2025 Preferred and illustrative System

(PT) 2020 Priority System

(FC) 2020 and 2025 Financially Constrained System

Appendix 2.0

RTP System Planning



2004 RTP



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Appendix 2.1

Bicycle Travel Demand Model Enhancement

Bicycle use is an important component of the region's strategy to provide a multi-modal, balanced transportation system. Metro's 2000 Regional Transportation Plan (RTP) includes policy language calling for bicycle mobility and accessibility to and within the central city, regional centers, light rail station communities and other mixed-use activity centers. The RTP includes a regional system map of bikeways planned for the next twenty years.

The existing regional transportation demand model probably underestimates bicycle and pedestrian trips, and does not predict bicycle travel according to the transportation network. Instead, the current model predicts bicycle and pedestrian trips as part of the "mode choice" step of the modeling process, but does not assign these trips to a network to predict how they might be distributed. While pedestrian trips are generally short enough to make a network assignment impractical, bicycle trips are of sufficient length to be assigned to a network and evaluated at this level.

Developing a travel demand model for bicycles is an important step in developing a quantitative evaluation method to allocate funding for bicycle project and improve the region's ability to plan for bicycle travel. As part of a future update to the RTP or the Regional Bicycle Plan, Metro will develop a bicycle travel demand model that can help determine what factors influence the decision to use a bicycle for trips and how bicyclists choose their route of travel. The additional data will allow Metro to improve its modeling capability to include travel demand forecasting for bicycles. The modeling results will assist planners in identifying needs and predicting future use of bikeway facilities, testing planned networks, and evaluating specific projects.

Main Features

Developing a bicycle travel demand forecasting model requires an extensive analysis of the dynamics involved in selecting the bicycle as a travel mode. Since passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and most recently the Transportation Equity Act for the 21st Century (TEA-21) by the U.S. Congress, there has been increased theoretical discussion of the factors that influence bicycle travel. Work by Landis (1996) on a latent demand score model, Ridgeway (1994) on applying travel demand modeling techniques to bicycles, and Goldsmith (1994) on estimating the effect of bicycle facilities on VMT and emissions has added to the base of knowledge. However, there are relatively few comprehensive analyses of the bicycle mode choice process. As a result, estimating the number of current bicyclists and projecting future bicycle ridership continues to be a challenge. Building on the limited analysis to date, Metro identified five main components to be used to develop a bicycle travel demand model:

1. A focus group of current bicyclists to determine their perception of needs as experienced users, and to determine how they make decisions in route selection.
2. A stated preference survey applied to a stratified random set of potential bicyclists to determine their responses to a set of hypothetical improvements and incentives.

3. The development of calibrated forecasting models based on a combination of the stated preference results and the 1994 household travel behavior survey. Calibration confirms that the model is providing an accurate representation of current trip making. This is essential to assure that the model will provide a reasonably accurate forecast of future bicycle trip activity.
4. The development of bicycle accessibility measures and travel speed estimation. Travel speeds are an important element of the travel demand forecasting model because of speed's relationship to accessibility. Bicycle travel times can be estimated for each non-freeway link in the transportation network by importing the elevation at each node from a geographic information system. The resulting link elevation changes can then be related to a speed/grade relationship equation developed by Navin (ITE Journal, March 1994). With improved bicycle speed data it is possible that a statistically valid travel time measure can be developed for bicycle trip links.
5. The utilization of Metro's geographic information systems (GIS) software to quantify and illustrate factors that affect route selection and travel speed, including land use, topography and presence of bikeway facilities.



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Appendix 2.2 2040 Modal Targets

2040 Modal Targets

The 2040 Growth Concept serves as the integrated land use and transportation plan for the Portland metropolitan region, pursuant to Section 660-12-0035(5)(c) of the Oregon Transportation Planning Rule (TPR). A basic construct of the 2040 Growth Concept is to reduce the region's reliance on the automobile by focusing growth in centers and along major transportation corridors where transportation infrastructure is concentrated. This concept was fundamental to the development of the Regional Transportation Plan (RTP).

For the purpose of TPR compliance, the Regional Transportation Plan (RTP) includes 2040 modal targets as the primary "alternative" standard for evaluating the region's progress in reducing reliance on the automobile. Table 1.3 in Chapter 1 summarizes the modal targets and represents an aggressive long-term goal for the Portland metropolitan region to reduce non-single occupancy vehicle (non-SOV) travel in the region. The 2040 modal targets are also based on observed travel behavior collected as part of Metro's 1994-1995 survey of more than 7,500 households in the Portland metropolitan region.

1994 Travel Behavior/Activity Survey

In 1994, Metro also conducted a travel behavior survey within the four-county boundary of Clackamas, Multnomah and Washington Counties in Oregon and Clark County, Washington. As part of this survey, more than 7,500 households kept a diary of activities performed during a two-day period, including identification of how individuals traveled to those activities. The study was designed to focus on the relationship between an activity type and the need for travel and highlighted the importance of all activities, whether "big" or "small." Results from the study are summarized in Table 1.

Table 1. Summary of 1994 Metro Travel Behavior/Activity Survey Results (for all trip purposes)

Land Use Type	Mode Share					Vehicle Miles per Capita	Auto Ownership per Household
	% Auto	% Walk	% Transit	% Bike	% Other		
Areas with Good Transit/ Mixed Use In Multnomah County	58.1%	27.0%	11.5%	1.9%	1.5%	9.80	0.93
Areas With Good Transit Only In Multnomah County	74.4%	15.2%	7.9%	1.4%	1.1%	13.28	1.50
Remainder of Multnomah County	81.5%	9.7%	3.5%	1.6%	3.7%	17.34	1.74
Remainder of Region	87.3%	6.1%	1.2%	0.8%	4.6%	21.79	1.93

Source: Metro Travel Forecasting Department

Areas with good transit service and a good mix of land uses showed the highest percentage of alternative mode use (41.9 percent combined). Conversely, the remainder of the region showed the highest percentage of auto use (87.3 percent). This indicates that individuals are likely to use the automobile when no other choices exist, but may choose other alternatives when they are available. The results of this study support this region's effort to link land use and transportation planning as a means to provide a balanced, multi-modal transportation system.

Relationship of 2040 Modal Targets to RTP Modeling Assumptions

Appendix 1.8 identifies specific modeling assumptions by transportation analysis zone (TAZ) that are intended to mirror the expected improvements proposed in the RTP and their impact on mode choice. The following section summarizes how the modeling assumptions relate to transit, walking, bicycling and shared ride.

Transit

Transit ridership is highly dependent on convenient, affordable, frequent service. For transit, the RTP modeling assumes nearly tripling current transit service levels, fareless squares in all regional centers, as well as the central city, and varying levels of parking cost in most centers. The RTP also assumes reduced fare programs for all trips destined for the central city, regional centers and other areas that are currently targeted for transportation demand management (TDM) programs. Finally, the RTP identifies improvements to enhance bicycle and pedestrian access to transit.

Walking

For pedestrian improvements, the RTP uses a modeling surrogate of intersection density (e.g., street connectivity) that the travel survey has demonstrated to be a reliable predictor of pedestrian travel. Using this surrogate, the RTP modeling has assumed a broad range of pedestrian improvements, including full-street “boulevard” retrofits, and improved street connectivity in the central city, regional and town centers, station communities and main streets.

Bicycling

For bicycle travel, the RTP focuses on providing improved bicycle facilities with the recognition that additional information is needed to better quantify the factors that affect the propensity to choose bicycling as a mode of travel, including accessibility to type of land use, presence of bikeway facilities and topography (see Appendix 2.1 for more information).

Shared ride

The travel behavior survey data suggest that the shared ride alternative to driving alone is less responsive to integrated land use and transportation planning than transit, walking and bicycling. For shared ride travel, this is largely due to the complexity of trip-making and social factors that limit the potential for non-family shared ride arrangements. As a result, modeling assumptions were not developed to specifically to reflect this mode choice.

Implementation of the 2040 Modal Targets

Section 6.4.6 of the RTP requires local governments to demonstrate progress toward the 2040 modal targets and to identify actions that will result in progress toward achieving the targets. The targets are for the year 2040. The “progress toward” language is critical in this regard. Some jurisdictions have already met the targets in the most developed areas of the region, while emerging centers are many years from approaching the targets, and development in these areas will likely occur unevenly. Though the modeling assumptions in Appendix 1.8 are tailored to such differences by establishing varying tiers among land use types based on degree of urbanization, there are still significant differences within tiers. Also, the RTP already places a number of very specific requirements on the local TSPs that are part of the effort to work toward meeting the modal targets.

Metro's primary goal is to ensure that the planning programs be adopted, and that on-the-ground progress be demonstrated over time. However, progress toward the non-SOV modal targets is an output of the regional travel demand model, but cannot be generated by local jurisdictions. Therefore, Metro uses the modeling assumptions described shown in Appendix 1.8 as a “checklist” to ensure that the actions called for in local TSPs are generally consistent with the model assumptions made to reach the modal targets. Progress would be periodically evaluated as part of RTP updates.

At a minimum, local transportation system plans are expected to include the following elements to demonstrate consistency with Section 6.4.7 of the RTP:

1. Adoption of 2040 modal targets in TSP policies
2. Adoption of street connectivity plans and implementing ordinances (consistent with RTP Section 6.4.5) as a surrogate for “intersection density.”
3. Adoption of maximum parking ratios to implement the parking requirements of Title 2 of the Urban Growth Management Functional Plan as a surrogate for the “parking factors.”
4. Formation/existence of transportation management association (TMA) as a surrogate for “Transit Pass Factor.”
5. Adoption of fareless area transit policies in regional centers as a surrogate for the “Fareless Area.”
6. Adoption of transit strategies consistent with RTP Section 6.4.10

Other potential actions/strategies that must be considered, and included as appropriate, as local transportation system plans and implementing ordinances are developed include:

1. Land use Strategies
 - Mixed use/concept area and pedestrian district plans and implementing ordinances
 - Transit oriented development district plans and implementing ordinances
2. Shared Ride Strategies
 - Carpooling + matching services
 - Vanpooling
 - HOV Lanes
 - Preferential parking for Carpool/Vanpoolers
3. Non-SOV Mode Strategies
 - Bicycle facilities
 - Pedestrian facilities
 - Bicycle and pedestrian plans and projects
 - Transit:
 - Group/free transit passes
 - Express bus service / frequent bus service
 - Park and ride lots
 - Demand responsive transit service
 - Custom shuttle service (e.g., OHSU shuttle)
 - Bus bypass lanes
 - Projects to improve bike/ped access to transit
 - Carsharing
 - Alternative mode friendly street design

4. Parking Strategies
 - Parking pricing/parking meters
 - Timed parking
 - Subsidized parking structures in mixed use areas
 - Preferential parking for carpools/vanpools/bicycles
 - Shared Parking
 - Parking lot placement / building orientation
5. Employer-based strategies
 - Trip reduction ordinances
 - Compressed or staggered work schedules
 - Flex-time
 - Telecommuting/telework
 - Telecommunications (e.g., internet based strategies like video conferencing)
 - Guaranteed Ride Home program
 - Monetary Incentives (free or reduced transit passes, bike/walk certificates)
 - Participation in TMA
 - Vanpool operation/subsidy
 - Provision of on-site facilities supporting alternative modes, e.g. showers, bike parking
 - Preferential parking for carpools/vanpools/bicycles
6. Pricing Strategies
 - Congestion Pricing
 - Parking Pricing
 - Gas Tax Increase
 - Vehicle Miles Traveled Tax
 - Vehicle Miles Traveled Insurance

Appendix 3.0

Area and Corridor Planning Priorities



2004 RTP



Appendix 3.1

Corridor Planning Priorities

This appendix prioritizes completion of Corridor Plans and Corridor Refinements called for in Chapter 6 of the 2000 Regional Transportation Plan (RTP). Section 6.7.4 of the 2000 RTP describes the planning scope and responsibilities for refinement planning. Sections 6.7.5 and 6.7.6, respectively, specifically list Corridor Refinements and Corridor Planning studies.

Due to the number of corridor planning needs and the lack of available resources, Metro initiated the Corridor Initiatives Process in December 2000 to establish regional corridor planning priorities. This effort resulted in the attached work program for completion of these studies. The work program is monitored and updated annually as part of the Unified Work Program process.

The Corridor Initiatives Process

Representatives from the Multnomah, Clackamas, Washington and Clark counties, ODOT, cities in the metropolitan area, the Port of Portland and Tri-Met participated in technical and project management committees. These committees guided the process and formulated recommendations with respect to corridor refinement planning. A technical evaluation was completed, with each corridor evaluated on several criteria and a number of measures related to mobility, 2040 land use relationships, expected 2040 travel modes, reliability and safety. A scoring system was established and points allocated for each technical measure.

In addition to the technical evaluation, the advisory committees considered non-technical factors such as relation to other planning efforts, community interest and available resources for each corridor. Meetings were held with groups of elected officials from around the region to gather further input on the rankings. A public meeting was also held where information was provided and public input solicited.

A resolution describing this process and resulting recommendations for completing the corridor studies was presented to TPAC, JPACT and the Metro Council in the summer of 2001. A final report documenting the entire process was prepared in the Spring of 2002, along with amendments to the RTP necessary to incorporate the recommendations in RTP procedural and project-level plan provisions.

Work Program Description

Based on this process, those corridors that demonstrated the more urgent planning needs and a level of jurisdictional interest considered sufficient to support a successful project were reviewed in more detail. Many of these corridors already had planning activities taking place or planned. Proposed actions were developed for the remaining corridors.

The following work program summarizes the planning activities for each of the 18 corridors by RTP planning time period (e.g. 2001-2005, 2006-2010 and 2011-2020). The corridors are organized into three groups depending on the status of planning efforts. The first group includes six corridors where work was ongoing in 2001. The second group highlights two corridors (Powell/Foster and Highway 217 Corridors) where major new corridor refinements are recommended in the first planning period. The third group lists the ten other corridors where no major planning work was ongoing in 2001. The "Other Corridor" group includes some corridors where significant planning work had already been completed or was planned. It also includes corridors for which no major work was anticipated in the near term.

Appendix 3.1 - Work Program for Corridor Refinement Planning Through 2020

Corridor and Key Facilities Corridor Planning On-Going		First Planning Period (2001 - 2005)	Second Planning Period (2006 - 2010)	Third Planning Period (2011 - 2020)
I-5 (North) Corridor - I-5 from I-84 to Vancouver		I - 5 Trade Corridor Study	Financial Plan/EIS/Preliminary Engineering	
NE Portland Highway Corridor - Columbia Blvd. from Burgard to Killingsworth, Lombard from I - 5 to Killingsworth, and Killingsworth from Lombard to I - 205.		East End Connector Environmental Assessment; Begin Refinement Planning through I-5 Trade Corridor; Adopt St Johns Truck Access Study	Implement St Johns Truck Access Study Recommendations; Environmental Assessment and Engineering on I-5 Trade Corridor Recommendations	
I-205 (North) Corridor - I - 205 from Hwy. 224 to Vancouver.		South Transit Corridor Study and I-5 Trade Corridor Study (transit only)	Corridor Planning for Interchange Improvements	Corridor Planning for Roadway Widening
Banfield (I-84) Corridor - I - 84 from I - 5 to Troutdale.		Light Rail Capacity Analysis	Corridor Planning for Interchange Improvements	Transit Improvements and/or Transportation System Management Projects
McLoughlin and Hwy. 224 Corridor - Hwy. 99E from Hawthorne Blvd to Oregon City. Hwy. 224 from McLoughlin Blvd. To I - 205.		South Transit Corridor EIS and Preliminary Engineering	Transit, Transportation System Management Corridor Plan	Corridor Planning for Highway Improvements
I-5 to Highway 99W Connector - Tualatin-Sherwood Road from I-5 to Hwy. 99W. Hwy. 99W from Tualatin-Sherwood Road to Bell Road.		Southern Alignment Study; Complete Exceptions; Right-of-Way Preservation Analysis		Complete Corridor Planning
New Major Corridor Refinements Recommended in the First Period				
Powell/Foster Corridor - Powell Blvd. from the west end of Ross Island Bridge to Gresham. Foster Road from Powell to Hwy. 212 Damascus.		Corridor Planning	Environmental Impact Study and Preliminary Engineering	
Highway 217 Corridor - Hwy. 217 from Sunset Hwy. to I - 5.		Corridor Planning	Environmental Impact Study and Preliminary Engineering	
Other Corridors				
North Willamette Crossing Corridor - Study new crossing near St. Johns Bridge (Hwy. 30 from NW Newberry Road to BN Railroad Bridge).		Adopt Signage and Truck Control Recommendations of St Johns Study; St Johns Town Center Study	Implement Signage and Truck Control Recommendations of St Johns Studies	Corridor Planning
I-84 to US 26 Connector Corridor - 238th/242nd from I - 84 to Burnside, and US 26/Burnside from Hogan Road to 282nd.		National Highway System Truck Study	Corridor Planning for Preservation of Right-of-Way and Arterial Improvements	Complete Corridor Planning
Sunrise Corridor - Hwy. 212/224 from I-205 to US 26.		Complete Refinement Planning and EIS for Unit 1 and Engineering for Phase One; Complete Exceptions		Begin Unit Two Environmental Assessment or Environment Impact Statement Process
Highway 213 Corridor - Hwy. 213 from I-205 to Leland Road.		Construct Southbound Turning lane on Highway 213	Implement Funded Recommendations of Highway 213 Design Study	Corridor Planning
I-205 (South) Corridor I 205 from I-5 to Hwy. 224.		Interchange Ramp Access Study	Corridor Planning for Freeway Improvements	
Macadam/Highway 43 Corridor - Hwy. 43 from Ross Island Bridge to West Linn.		Transit/Pedestrian/Bike Transportation Demand Management Study	Environmental Assessment/DEIS/and Preliminary Engineering	Corridor Planning
I-5 (South) Corridor - I-5 from Hwy. 99W in Tigard to Wilsonville.		Boeckman Road Interchange Study		Begin Environmental Assessment/Environmental Impact Statement Process
Barbur Blvd./I-5 Corridor - Hwy. 99W and I-5 from I - 405 to Tigard.		Implement Transit Service Improvements and Elements of the Barbur Streetscape Plan	Initiate Corridor Planning	Corridor Planning (if required)
TV Highway Corridor - Tualatin Valley Hwy. from Hwy. 217 to downtown Hillsboro.		System Planning for Access Management and Right-of-Way		
Sunset Highway Corridor - US 26 from I-405 to Jackson School Road.		Refinement and Environmental Assessment of US Hwy. 26 Widening. Barnes Road Design and Construction	Engineering of US 26 Widening west of Murray Boulevard	



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Appendix 3.2

Western Bypass Study Recommendations

- In 1995, the Oregon Department of Transportation completed the Western Bypass Study, which evaluated five alternatives for addressing travel needs in the southwest portion of the Metro region, including the urban portion of Washington County and westernmost portions of the City of Portland and Clackamas County. The study also included portions of rural Washington County.
- The recommended alternative from this study was a combination of improvements to the existing transportation system in conjunction with construction of new arterial and collector road improvements and expanded transit service in the study area. One of the new facilities recommended by the Western Bypass Study was a limited-access highway (expressway) connecting Interstate 5 and Highway 99W in the vicinity of Tualatin and Sherwood. Freight movement is accommodated through expansion of the state highway system, including I-5, US 26, 99W, Highway 217 and a new I-5/99W connector limited-access facility.
- In 1997, the Metro Council and JPACT adopted Ordinance No. 97-689A and Resolution No. 97-2497, approving the region's strategy for the Western Bypass corridor. This action specifically deleted a full bypass from I-5 to the Sunset Highway from further consideration and recommended a series of other freeway, arterial and collector road improvements in addition to transit service expansion and implementation of TSM and TDM actions.
- The strategy adopted by the Metro Council in 1997 was reaffirmed by the 2000 RTP. The following project list identifies the Western Bypass Study Recommendations adopted in 1997 by Resolution No. 97-2497 and the corresponding RTP project numbers.

**Excerpt from RTP Project List -
Western Bypass Study Recommendations adopted in 1997 by Resolution No. 97-2497
August 10, 2000**

RTP #	Western Bypass Study #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	RTP Preferred System	RTP Priority System	RTP Financially Constrained System	Estimated Project Cost in 1998 dollars	RTP Program Years
3027	116	Beaverton RC	Beaverton/WashCo	Davis Improvements	160th Avenue to 170th Avenue	Three lane improvement to add bike and pedestrian facilities	X	X	X	\$ 1,600,000	2000-05
3028	118	Beaverton RC	Beaverton	Hart Improvements	Murray to 165th	Three lane improvement with sidewalks, bikeways and signal at 155th Avenue	X	X	X	\$ 7,100,000	2000-05
3029	119	Beaverton RC	Beaverton	Lombard Improvements	Broadway to Farmington	Three lane improvement to realign road with segment to the north with pedestrian facilities	X	X	X	\$ 1,600,000	2000-05
3061	144	Beaverton RC	ODOT/WashCo	TV Highway System Management	TV Highway from Highway 217 to 209th	Interconnect signals on TV Highway from 209th Avenue to Highway 217	X	X	X	\$ 1,500,000	* 2006-10
3069	145	Beaverton Corridor	Washington Co.	Scholls Ferry Road Improvements	Hamilton to Garden Home Road	Widen to three lanes with bikeways and sidewalks	X	X		\$ 8,000,000	2011-20
3103	110	Hillsboro RC	Washington Co.	Baseline Road Improvements	Murray Boulevard to Brookwood Road	Widen to five lanes with bike lanes and sidewalks	X			\$ 6,000,000	
3124	144	Hillsboro RC	ODOT	TV Highway System Management	209th Avenue to 10th Avenue	Interconnect signals	X	X		\$ 1,500,000	2000-05
3126	127	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 5,000,000	2006-10
3134	127	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to three lanes including sidewalks, bike lanes and signals at Johnson and Francis	X	X	X	\$ 9,000,000	2000-05
3135	127	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	Baseline Road to Alocle Drive	Widen to five lanes including sidewalks and bike lanes	X	X	X	\$ 15,000,000	2000-05
3141	124	Sunset IA	Washington Co.	170th/173rd Improvements	Baseline to Walker	Improve to 3 lanes	X	X	X	\$ 5,500,000	2006-10
3224	108/117	Farmington TC	Washington Co.	Farmington Road Improvements	Cedar Hills to Kinnamon Road	Widen to seven lanes with sidewalks and bike lanes	X			\$ 25,000,000	
6017	121	Washington Sq. RC	Washington Co.	Taylor's Ferry Road Extension	Washington Drive to Oleson Road	Three lane extension with bikeway and sidewalks	X	X		\$ 1,900,000	2011-20
6019	107	Washington Sq. RC	Washington Co.	Oak Street Improvements	Hall Boulevard to 80th Avenue	Signal improvement, bikeway and sidewalks	X	X	X	\$ 800,000	2000-05
6021	146	Washington Sq. RC	Beaverton/WashCo	Scholls Ferry Road Improvements	Highway 217 to 125th Avenue	Widen to seven lanes with access management	X			\$ 15,760,000	
6031	112	Tigard TC	Tigard	Greenburg Road Improvements	Tiedeman Avenue to 99W	Widen to 5 lanes	X			\$ 4,800,000	
6035	126	Tigard TC	Tigard	Gaarde Street Improvements	110th Avenue to Walnut Street	Widen to three lanes with bikeways and sidewalks	X			\$ 4,000,000	
6036	113	Tigard TC	Tigard	Bonita Road Improvements	Hall Boulevard to Bangy Road	Widen to four lanes	X	X		\$ 8,000,000	2006-10
6039	147	Tigard TC	ODOT	99W Improvements	I-5 to Greenburg Road	Widen to seven lanes	X	X		\$ 25,000,000	2011-20
6055	147	Tigard TC	ODOT	Highway 99W System Management	99W from I-5 to Durham Road	Signal interconnect on 99W from I-5 to Durham Road	X	X		\$ 2,000,000	2006-10
6059	109	King City TC	Washington Co.	Beef Bend Improvements	King Arthur to 131st	Improve to three lanes with sidewalks	X	X	X	\$ 5,000,000	2000-05
6121	125	Murray/Scholls TC	Beaverton/WashCo/Tigard	Murray Boulevard Extension	Scholls Ferry Road to Barrows Road at Walnut Street	Four lane extension with bikeways and sidewalks	X	X	X	\$ 7,120,000	2000-05
6133	113	Lake Grove TC	Clackamas Co.	Bonita Road Improvements	SE Bangy Road to SE Carmen Drive	Reconstruct and widen to three lanes	X	X		\$ 3,300,000	2006-10
Other major projects included in RTP related to this corridor											
3000		Region	ODOT	Highway 217 Improvements	I-5 to US 26	Add capacity to existing highway	X	X		\$100,000,000	2011-20
3001		Region	ODOT	Highway 217 Improvements	NB - TV Highway/Canyon Road to US 26	Widen NB to three lanes; ramp improvements	X	X	X	\$ 21,000,000	2006-10
3002		Region	ODOT	US 26/217 Interchange Improvement	EB US 26/SB Highway 217 Interchange	Braided ramps	X	X		\$ 50,000,000	2006-10
3003		Region	ODOT	US 26/Jackson School Road interchange	US 26 at Jackson School Road	Construct new interchange	X	X	X	\$ 25,000,000	2000-05
3005		Region	ODOT	US 26 Refinement and EA Study	Sylvan interchange to 185th Avenue	Complete planning and environmental work for improvements in corridor	X	X		\$ 500,000	2000-05
3006		Region	ODOT	US 26 Improvements	US 26 between Sylvan and Highway 217	Complete interchange improvements by adding third through-lane and collector distributor system from Camelot Court to Sylvan Road (Phase 2 and 3)	X	X		\$ 22,000,000	2000-05
3007		Region	ODOT	US 26 Improvements	EB from Highway 217 to Camelot Court	Widen EB US 26 to three lanes	X	X	X	\$ 12,000,000	2006-10
3009		Region	ODOT	US 26 Improvements	Murray Boulevard to 185th Avenue	Widen US 26 to six lanes	X	X	X	\$ 26,000,000	2011-20
3023		Beaverton RC	WashCo/Beav/ODOT	Highway 217 Interchange Improvements	NB/SB at Walker Road, SB at TV Highway, NB/SB at BH Highway and at Allen Boulevard	Improve Highway 217 interchanges	X	X		\$ 3,600,000	2000-05
3025		Beaverton RC	ODOT/WashCo	TV Highway Improvements	Cedar Hills Boulevard to 10th Avenue	Widen to seven lanes Cedar Hills to Murray; six lanes limited access from Murray to Brookwood and five lanes from Brookwood to 10th	X	X		\$ 33,200,000	2011-20
6000		Region	Metro/ODOT	Beaverton-Wilsonville Commuter Rail	Wilsonville to Beaverton	Peak-hour service only with 30-minute frequency		X	X	\$ 71,500,000	2000-05
6004		Region	ODOT	Tualatin-Sherwood Highway Corridor Study	I-5 to 99W	Conduct study and complete environmental design work for I-5 to 99W Connector	X	X	X	\$ 1,500,000	2000-05
6005		Region	ODOT	Tualatin-Sherwood Highway	I-5 to 99W	Construct four-lane tollway with access control on 99W in Sherwood area	X	X		\$ 250,000,000	2006-10
6010		Washington Sq. RC	ODOT/WashCo	Highway 217 Interchange Imp. - Denney Road	Denney Road at the Highway 217 on and off-ramps	Improve Denney Road at the Highway 217 on and off-ramps, including lights and covered culverts	X	X		\$ 500,000	2011-20

Shading indicates project is included in 2020 Financially Constrained System.

**Excerpt from RTP Project List -
Western Bypass Study Recommendations adopted in 1997 by Resolution No. 97-2497
August 10, 2000**

RTP #	Western Bypass Study #	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	RTP Preferred System	RTP Priority System	Financially Constrained System	Estimated Project Cost in 1998 dollars	RTP Program Years
6025		Washington Sq. RC	Washington Co.	Scholls Ferry Road TSM Improvements	Highway 217 to 125th Avenue	Implement appropriate TSM strategies such as signal interconnects, signal re-timing and channelization to improve traffic flows	X	X	X	\$ 500,000	2000-05
6027		Tigard TC	ODOT	I-5/217 Interchange Phase 2	Highway 217 and I-5	Complete interchange reconstruction	X	X	X	\$ 39,000,000	2006-10
6028		Tigard TC	ODOT	I-5/217 Interchange Phase 3	Highway 217 and I-5	Complete interchange reconstruction with new southbound Highway 217 to I-5 flyover ramp	X	X		\$ 15,000,000	2006-10
Total Cost of Projects in Millions (\$98)										\$ 835,780,000	

Shading indicates project is included in 2020 Financially Constrained System.

Appendix 3.3

Beaverton Regional Center Area of Special Concern Findings



Beaverton has historically been defined as a crossroads of transportation, with both the advantages and limitations that heavy through traffic brings. While the level of access has helped make the Beaverton regional center a focus of commerce in Washington County, it also presents barriers to local circulation where congested through-streets isolate some parts of the area. These congestion problems persisted in the 2020 Preferred System analysis, despite an aggressive strategy to improve connectivity in the Beaverton regional center as identified in Beaverton's updated 2015 Transportation System Plan.

In particular, Beaverton-Hillsdale Highway from Highway 217 to Cedar Hills Boulevard, Canyon Road from Highway 217 to Cedar Hills Boulevard and Farmington Road from 170th Avenue to Cedar Hills Boulevard are expected to exceed the RTP level of service standard, and act as barriers to local travel in the district. Sections of Murray Boulevard are also expected to exceed the LOS standard from Allen Boulevard to Cornell Road. The Beaverton TSP should include a specific action plan and benchmarks for these facilities to ensure that traffic growth is managed in a way that is consistent with overall regional center goals. Findings in Chapter 3 provide details of the 2040 actions Beaverton is implementing, which respond to 660-012-060.

As local TSPs are developed, this information will be expanded to provide more detailed findings to support the Area of Special Concern designation, consistent with the provisions in Section 6.7.7.

Portland Central City Area of Special Concern Findings



The Portland central city area east of the Willamette River and generally within the I-405 freeway ring has an extensive grid of well-connected arterial, collector and local streets. The Willamette River bridges are a key part of the transportation system, connecting the central city and adjacent neighborhoods to the region. The hilly topography has constrained much of the transportation system in the Northwest and Southwest portions of the central city. Despite these limitations, this area is expected to continue to be served by high-quality transit and be conducive to bicycle and pedestrian travel.

As local TSPs are developed, this information will be expanded to provide more detailed findings to support the Area of Special Concern designation, consistent with the provisions in Section 6.7.7.

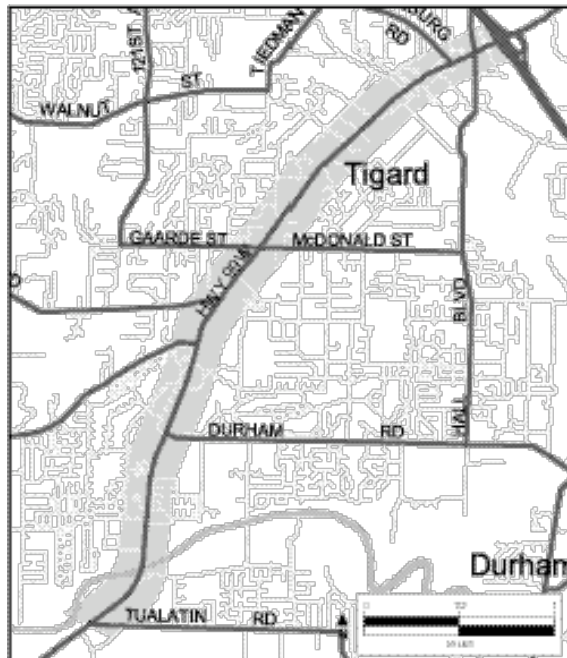
Gateway Regional Center Area of Special Concern Findings



Gateway regional center is defined as a major crossroads of transportation that is impacted by through traffic that is not destined for the regional center such and which presents barriers to local circulation where congested through-streets isolate some parts of the regional center. The Preferred System analysis shows that from the perspective of employers looking at labor markets, the Gateway area is the most accessible place in the Metro region. At the same time, spillover traffic from the Banfield Freeway corridor exceeds the LOS policy established in Table 1.2 on a number of east/ west corridors in the Gateway area, including Halsey, Glisan, Burnside, Stark and Division streets.

As local TSPs are developed, this information will be expanded to provide more detailed findings to support the Area of Special Concern designation, consistent with the provisions in Section 6.7.7.

Highway 99W Area of Special Concern Findings



The Highway 99W corridor between Highway 217 and Durham Road is designated as a mixed-used corridor in the 2040 Growth Concept, and connects the Tigard and King City town centers. This route also experiences heavy travel demand. The City of Tigard has already examined a wide range of improvements that would address the strong travel demand in this corridor. The RTP establishes the proposed I-5 to 99W connector as the principal route connecting the Metro region to the 99W corridor outside the region. This emphasis changes the function of 99W, north of Sherwood, to a major arterial classification, with less need to accommodate longer, through trips.

However, for much of Washington County, Highway 99W will still be a major connection, linking Sherwood and Tigard to the rest of the County and linking the rest of the County to the Highway 99W corridor outside of the region. A number of alternatives for relieving congestion have been tested as part of the RTP update, and by the City of Tigard in earlier planning efforts. These efforts led to the common conclusion that latent travel demand in the Highway 99W corridor is too great to be reasonably offset by capacity projects alone. While the RTP proposed new capacity on 99W between I-5 and Greenburg Road, no specific capacity projects are proposed south of Greenburg Road, due to latent demand and the impacts that a major road expansion would have on existing development. As a result, this section of Highway 99W is not expected to meet the region's motor vehicle level of service policies during mid-day and peak demand periods in the future, and an alternative approach to managing traffic in the corridor is needed.

As local TSPs are developed, this information will be expanded to provide more detailed findings to support the Area of Special Concern designation, consistent with the provisions in Section 6.7.7.

Appendix 4.0

Compliance with Federal Transportation Planning Requirements



2004 RTP

Findings of Compliance with TEA-21

TITLE 23 - UNITED STATES CODE SECTION 134 - METROPOLITAN PLANNING

The following findings are intended to explain how the 2004 Federal Update to the Regional Transportation Plan (“RTP”) complies with applicable requirements of Section 134 in general. These findings are a roadmap to the decision record for this update effort. Inapplicable subsections of Section 134 are not cited in these findings.

134(d)(2)(A-B) Interstate Compacts

“The consent of Congress is granted to any 2 or more States to enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under this section as the activities pertain to inter-state areas and localities within the States and to establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective.”

Metro has entered into an intergovernmental agreement with the Regional Transportation Commission (“RTC”), the MPO for Clark County, Washington. The RTC is represented on Metro’s Transportation Policy Alternatives Committee (“TPAC”) and Joint Policy Advisory Committee on Transportation (“JPACT”). Likewise, Metro is represented on RTC technical and policy advisory committees. The function of Metro’s interagency coordinating committees is described in Section 1.3.1 of the 2000 Regional Transportation Plan (“RTP”), which remains unchanged and continues to apply under the 2004 Federal Update.

134(e)(2) Project Located in Multiple MPOs

“If a project is located within the boundaries of more than 1 metropolitan planning organization, the metropolitan planning organizations shall coordinate plans regarding the project.”

Based on a recommendation from the I-5 Partnership Governors Task Force, the Bi-State Transportation Committee became the Bi-State Coordination Committee in early 2003. This joint committee advises the region, state and local jurisdictions on transportation and land use issues of bi-state significance. The intergovernmental agreement between the RTC and Metro states that JPACT and the RTC Board “shall take no action on an issue of bi-state significance without first referring the issue to the Bi-State Coordination Committee for their consideration and recommendation.”

Several projects in the I-205 and I-5 highway corridors, including transit improvement, are near the Metropolitan Planning Organization (MPO) boundary, or span the Metro and RTC MPOs. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP. Metro has coordinated these projects with the RTC through the membership of TPAC and JPACT.

2004 Federal Update to the Regional Transportation Plan

Appendix 4.1

134(f)(1) Metropolitan Planning Factors

This section requires that the metropolitan transportation planning process for a metropolitan area under this section shall provide for consideration of projects and strategies that will satisfy the planning factors (A) through (G), below.

134(f)(1)(A) Plan Supports Economic Viability

“Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.”

The policy component of the RTP is structured around the implementation of the Region 2040 Growth Concept through strategic transportation improvements. As the economic engines of the region’s economy, the Portland central city, six regional centers, the region’s industrial areas and intermodal facilities are identified as the primary areas for transportation investments (2000 RTP Section 1.2.1). All of these policies continue to apply under the 2004 Federal Update to the RTP.

In addition, the 2004 Federal Update included amendments to 2000 RTP Section 1.2.1 to provide clear, immediate prioritization of Regionally Significant Industrial Areas (RSIAs) for transportation planning and funding decisions. The amendment will help support efforts to focus future transportation investments to those parts of the region that are most critical to the region’s economy and successful implementation of the 2040 Growth Concept. These changes are identified in the Policy Amendments section of the 2004 Federal Update document.

Transportation improvements in these primary components of the 2040 Growth Concept are also guided by a set of functional maps that establish a series of efficient, high-quality motor vehicle, freight, transit, bicycle and pedestrian systems that are similarly designed to reinforce the growth concept (2000 RTP Section 1.3.5). The 2004 Federal Update included Section 1.3.5 amendments to update the system maps to reflect classifications changes recommended through transportation plans adopted by local cities and counties since the last RTP update in August 2000. These changes are identified in the Policy Amendments section of the 2004 Federal Update document.

The 2004 Federal Update included an updated population and employment forecast that was extended from 2020 to 2025. The new forecast was used to define the scale, location and timing of individual projects needed to implement the 2040 Growth Concept during the 20-year plan period of the updated plan. In addition, nearly all city and county transportation plans in the Metro region have been updated since the last RTP update to be consistent with the 2000 RTP. In the process of completing this update, many local plans identified new transportation projects of regional significance that have been included in the 2004 Federal Update as amendments. Several corridor studies have also been completed since 2000, such as the I-5 Trade Partnership Study, and project recommendations have been included in the 2004 Federal Update to address the movement of freight in the region. Among the projects aimed at maintaining a robust economy are a number of highway corridor improvements, freight and passenger terminal access improvements, bridge improvements, rail crossing upgrades and channel deepening of the Columbia River. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

2004 Federal Update to the Regional Transportation Plan

Page 2 of 11 –Findings of Compliance with Federal Planning Requirements

Appendix 4.1

134(f)(1)(B) Plan Increases Safety

“Increase the safety and security of the transportation system for motorized and non-motorized users.”

The policy component of the RTP calls for a three-pronged implementation strategy that focuses on system preservation, 2040 implementation and safety projects as the most pressing needs for improving the regional transportation system (2000 RTP Section 1.3.7). This policy remains unchanged and continues to apply under the 2004 Federal Update to the RTP. The safety policy resulted in a number of safety improvements in the recommended projects and programs in the updated plan. The projects are listed in Project Amendments section of the 2004 Federal Update to the RTP. This emphasis on safety is also mirrored in Metro’s MTIP funding process, where safety improvements are given a priority.

134(f)(1)(C) Plan Increases Accessibility and Mobility

“Increase the accessibility and mobility options available to people and for freight.”

The transportation vision that guides the RTP (2000 RTP Section 1.1) is based on the premise that the system must become more multi-modal in design and function in order to fully implement the 2040 Growth Concept, and reduce dependency on the automobile as a sole mode of travel. The vision is translated into motor vehicle, transit, freight, bicycle and pedestrian policies that emphasis mobility and access to 2040 centers (2000 RTP Section 1.3.5). These policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP. The policies resulted in a multi-modal set of recommended projects and programs to increase access and mobility options to people and for freight. The projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(f)(1)(D) Plan Protects Environment

“Protect and enhance the environment, promote energy conservation, and improve quality of life.”

The policy component of the RTP seeks to protect sensitive environmental areas and resources from the potentially negative effects of transportation improvements (2000 RTP Section 1.3.4). The transit, bicycle and pedestrian systems envisioned in the plan (2000 RTP Section 1.3.5) and corresponding projects that implement these systems, promote energy conservation and enhance air quality by reducing the use of motor vehicles. The region’s parking policies (Title 2 of the Urban Growth Management Functional Plan) are also designed to encourage the use of alternative modes, and reduce reliance on the automobile, thus promoting energy conservation and reducing air quality impacts. All of these policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP.

134(f)(1)(E) Plan is Multi-modal

“Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.”

The regional street design classifications (2000 RTP Section 1.3.5) link transportation and 2040 land use considerations for all portions of the regional transportation system. The design classifications

2004 Federal Update to the Regional Transportation Plan

Page 3 of 11 –Findings of Compliance with Federal Planning Requirements

Appendix 4.1

establish a modal-orientation on detailed segments of the major street system, reflecting future travel demand that is expected for individual 2040 land use components. In compact, mixed-use areas, the street design classifications emphasize transit, bicycle and pedestrian elements, as well as calmed motor vehicle travel speeds and on-street parking that supports storefront development. In industrial and employment areas, the street design classifications emphasize motor vehicle travel, including freight, with an emphasis on motor-vehicle mobility.

However, all of these classifications are multi-modal in design, and embrace the principle that all streets should serve all modes of travel in some manner. The exception to this strategy are limited-access freeway and highway facilities, that are not intended to include pedestrian and bicycle access, due to safety concerns.

The 2004 Federal Update included amendments to update the regional street design classification map to reflect classifications changes recommended through transportation plans adopted by local cities and counties since the last RTP update in August, 2000. These changes are identified in the Policy Amendments section of the 2004 Federal Update document.

134(f)(1)(F) Plan Promotes System Management

“Promote efficient system management and operation.”

The policy component of the 2000 RTP includes specific provisions for efficient system management and operation (2000 RTP Section 1.3.6), with an emphasis on TSM, ATMS and the use of non-auto modal targets intended to discourage overbuilding of roadway improvements. The regional congestion management system also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2000 RTP Section 6.6.3).

All of these policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP. These provisions are implemented through a number of projects and programs recommended in the updated plan. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(f)(1)(G) Plan Emphasizes System Preservation

“Emphasize the preservation of the existing transportation system.”

The implementation policies of the RTP call for a three-pronged approach that focuses on system preservation, 2040 implementation and safety projects as the most pressing needs for improving the regional transportation system (2000 RTP Section 1.3.7). All of these policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP. The system preservation policy resulted in a number of major reconstruction and preservation improvements in the recommended projects and programs in the plan. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

In addition, Metro’s MTIP process provides funding for reconstruction and preservation improvements that are included in the RTP financially constrained system.

2004 Federal Update to the Regional Transportation Plan

Appendix 4.1

134(g)(1) Long Range Plan Required

“Each metropolitan planning organization shall prepare, and update periodically, according to a schedule that the Secretary determines to be appropriate, a long-range transportation plan for its metropolitan area in accordance with the requirements of this subsection.”

The 2000 RTP and the 2004 Federal Update to the RTP serve as the long-range transportation plan for the purposes of this section.

134(g)(2) Long Range Plan Required

“A long-range transportation plan under this section shall be in a form that the Secretary determines to be appropriate and shall contain, at a minimum, (A) through (D), below.”

134(g)(2)(A) Identify Integrated System

“An identification of transportation facilities (including but not necessarily limited to major roadways, transit, and multi-modal and intermodal facilities) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions. In formulating the long-range transportation plan, the metropolitan planning organization shall consider factors described in subsection (f) as such factors relate to a 20-year forecast period”

The RTP establishes integrated modal systems for motor vehicles, transit, freight, bicycles and pedestrians through a series of functional classification maps and accompanying narrative (2000 RTP Section 1.3.5). The street design classifications (2000 RTP Section 1.3.5) serve as the policy tool for integrating these modal systems, and linking them to the 2040 land use components. These modal systems and design classifications emphasize regional travel, as they apply only to the regional transportation system, which includes regional, statewide and interstate travel routes.

The previously established findings of compliance with the seven planning factors in subsection (f) were based on a 20-year planning period, and were considered during the formulation of the 2004 Federal Update to the RTP policies, projects and implementation measures.

134(g)(2)(B) Develop a Financial Plan

“A financial plan that demonstrates how the adopted long-range transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted long-range transportation plan if reasonable additional re-sources beyond those identified in the financial plan were available. For the purpose of developing the long-range transportation plan, the metropolitan planning organization and State shall cooperatively

2004 Federal Update to the Regional Transportation Plan

Appendix 4.1

develop estimates of funds that will be available to support plan implementation.”

The financially constrained system described in the Project Amendments section of the 2004 Federal Update to the RTP was specifically developed to comply with TEA-21 planning requirements. The system was developed based on a forecast of expected revenues that was formulated in partnership with the Oregon Department of Transportation. The projects and programs recommended in the financially constrained system were developed cooperatively with local jurisdictions and through workshops sponsored by TPAC. The financially constrained system is intended as the “federal” system for purposes of demonstrating air quality conformity, and allocating federal funds through the MTIP process (2000 RTP Sections 6.1 and 6.5). Development of the financially constrained system followed the basic principles of (a) maintaining the Region 2040 Plan policy emphasis of the 2000 RTP by focusing improvements in areas that serve as the economic engines for the region, including centers, ports and industrial areas, and (b) maintaining a similar project balance among travel modes, including road, transit, bikeways, pedestrian improvements and other project categories.

The total reasonably expected revenue base assumed in the 2004 RTP for the road system is approximately \$ 4.3 billion, with \$2.16 billion for freeways, highways and roads, \$1.67 billion for transit and the balance for planning, bike, pedestrian, transportation demand management, system management and other similar programs.

In addition to the financially constrained system, the 2004 Federal Update to the RTP identifies a larger set of projects and programs for the “Illustrative System,” which is nearly double the scale and cost of the financially constrained system. The illustrative system represents the region’s objective for implementing the Region 2040 Plan.

134(g)(2)(C) Plan for System Preservation

“Assess capital investment and other measures necessary to —

(i) ensure the preservation of the existing metropolitan transportation system, including requirements for operational improvements, resurfacing, restoration, and rehabilitation of existing and future major road-ways, as well as operations, maintenance, modernization, and rehabilitation of existing and future transit facilities; and

(ii) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods.”

The 2000 RTP revenue forecast and financial analysis for operations and maintenance was based on a thorough evaluation of city and county, ODOT and TriMet cost projections (2000 RTP Sections 4.1 through 4.3). The 2004 Federal Update to the RTP revenue forecast and financial analysis relied on a continuation of the 2000 RTP assumptions for estimate of operation and maintenance costs without change.

The system management policies in the RTP (2000 RTP Section 1.3.6) and resulting projects and programs are intended to maximize the use of existing facilities. The regional congestion management system also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2000 RTP 6.6.3). These policies remain unchanged and continue to apply

2004 Federal Update to the Regional Transportation Plan

Page 6 of 11 –Findings of Compliance with Federal Planning Requirements

Appendix 4.1

under the 2004 Federal Update to the RTP. These provisions are implemented through a number of projects and programs recommended in the updated plan, and are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(g)(2)(D) Transportation Enhancement Activities

“Indicate as appropriate proposed transportation enhancement activities.”

Transportation enhancement activities have been conducted within the MTIP process. As a funding issue these activities are addressed in the MTIP, not in the 2000 RTP or the 2004 Federal Update to the RTP.

134(g)(3) Clean Air Act Coordination

“In metropolitan areas which are in non-attainment for ozone or carbon monoxide under the Clean Air Act, the metropolitan planning organization shall coordinate the development of a long-range transportation plan with the process for development of the transportation control measures of the State implementation plan required by the Clean Air Act.”

The Portland Area Carbon Monoxide Maintenance Plan and Portland Area Ozone Maintenance Plan were prepared in 1996 and received Federal approvals on September 2, 1997 and May 19, 1997 (including corrections made April 17, 1996 which included slightly revised CO budgets) respectively based on attainment with Clean Air Act standards for ozone and CO emissions. The CO maintenance plan is scheduled to be updated in 2004.

134(g)(4) Plan Participation

“Before approving a long-range transportation plan, each metropolitan planning organization shall provide citizens, affected public agencies, representatives of transportation agency employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested parties with a reasonable opportunity to comment on the long-range transportation plan, in a manner that the Secretary deems appropriate.”

The 2004 Federal Update to the RTP provided several public comment opportunities for the community, affected public agencies, representatives of transportation agency employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested persons. Public involvement opportunities and key decision points were published in the Oregonian, posted on Metro’s web site, e-mailed via the Planning Department E-News to more than 5,000 individuals, mailed via postcard to the RTP interested parties mailing list and advertised through Metro’s transportation hotline, where citizens could leave comments as well as receive information. All plan documents were simultaneously published (and regularly updated) on the Metro web site, including draft plan amendments, the update schedule, other explanatory materials and summaries of public comments received.

2004 Federal Update to the Regional Transportation Plan

Page 7 of 11 –Findings of Compliance with Federal Planning Requirements

Appendix 4.1

In October, 2003, Metro staff worked with members of the Transportation Policy Alternatives Committee (TPAC), representatives of transportation agency employees, including the Oregon Department of Transportation (ODOT), TriMet, South Metro Area Rapid Transit (SMART), the Port of Portland and other interested parties to develop a comprehensive inventory of regional transportation projects identified in local plans and special studies adopted since the 2000 RTP was completed. This inventory includes:

- new projects or studies that are not currently in the 2000 Regional Transportation Plan, but that have been adopted in local transportation system plans (TSPs) and regional corridor studies through a public process
- updates to existing 2000 RTP projects or studies to reflect changes in project location, description, cost and recommended timing

In a series of four half-day workshops, this effort focused on incorporating all "housekeeping" amendments generated by local plans that have been adopted since the RTP was approved in August 2000. Since Metro commented separately on all of these local plans during their respective adoption activities, friendly amendments that were consistent with RTP policies had already been identified for most projects.

Proposed amendments to the 2000 RTP were organized into four discussion packets: policy amendments, project amendments, technical amendments and the air quality conformity determination. The proposed amendments were posted on Metro's website and available upon request during the public comment period that began on October 31, 2003 and ended on December 10, 2003. The Metro Council held a public hearing on December 4 on the proposed amendments, and extended the public comment period in response to testimony provided at the hearing. The Regional Freight Advisory Committee was also provided with copies of the proposed amendments for review and comment. A summary of the public comments received on the 2004 RTP discussion packets and the Metro Council and Joint Policy Advisory Committee on Transportation (JPACT) recommendations related to those comments was posted on Metro's website on December 5 and updated on December 10. The summary includes all written comments received between October 3, 2003 and December 10, 2003 and public testimony provided at the December 4 public hearing.

Approval of the 2004 Federal Update to the RTP, Resolution No. 03-3380A, followed JPACT and Metro Council consideration of more than 130 comments received during the public comment period.

The comment period for the Air Quality Conformity Determination packet, to be approved by a separate Resolution No. 03-3382, was extended to 5 p.m. on January 13, 2004 to allow public review and comment of the air quality conformity results, which were posted on Metro's website.

134(g)(5) Plan Publication

"Each long-range transportation plan prepared by a metropolitan planning organization shall be:

(i) published or otherwise made readily available for public review; and

(ii) submitted for information purposes to the Governor at such times and in such manner as the Secretary shall establish"

2004 Federal Update to the Regional Transportation Plan

Page 8 of 11 –Findings of Compliance with Federal Planning Requirements

Appendix 4.1

Proposed amendments to the 2000 RTP were organized into four discussion packets: policy amendments, project amendments, technical amendments and the air quality conformity determination. The proposed amendments were posted on Metro's website and available upon request during the public comment period. The 2000 RTP and the 2004 Federal Update to the RTP are available on Metro's website and available upon request.

The 2004 Federal Update to the RTP and Air Quality Conformity Determination for the RTP and the 2004-07 Metropolitan Transportation Improvement Program will be submitted to the Governor for approval.

134(g)(6) Selection of Projects

"Notwithstanding paragraph (2)(B), a State or metropolitan planning organization shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (2)(B)."

The implementation provisions of the RTP require the MTIP to select projects for federal funding exclusively from the federally-recognized financially constrained system (2000 RTP Section 6.5.1). The 2004 Federal Update to the RTP provides an updated set of financially constrained projects and programs for future MTIP funding allocations.

134(i)(1)(A) Designation of Transportation Management Areas

"The Secretary shall designate as a transportation management area each urbanized area with a population of over 200,000 individuals."

The Portland region exceeds this population threshold, and is designated as a Transportation Management Area.

134(i)(2) Transportation Plans in Management Areas

"Within a transportation management area, transportation plans and programs shall be based on a continuing and comprehensive transportation planning process carried out by the metropolitan planning organization in cooperation with the State and transit operators."

Metro is the designated metropolitan planning organization for the Portland region, and prepares the regional transportation plan in cooperation with the Oregon departments of Transportation, Environmental Quality and Land Conservation and Development, TriMet, SMART and other transit operators in the region, the Port of Portland, three counties and 24 cities.

134(i)(3) Congestion Management System

"Within a transportation management area, the transportation planning process under this section shall include a congestion management system that provides for effective management of new and existing transportation facilities eligible for funding under this title and chapter 53 of title 49 through the use of travel demand reduction and operational management strategies. The Secretary shall

2004 Federal Update to the Regional Transportation Plan

Appendix 4.1

establish an appropriate phase-in schedule for compliance with the requirements of this section.”

The RTP includes a congestion management system (2000 RTP Sections 6.4.7 and 6.6.3) that was developed in response to the federal ISTEA, and certified as part of Title 6 of the Urban Growth Management Functional Plan in 1996. This section of the RTP remains unchanged and continues to apply under the 2004 Federal Update to the RTP.

134(i)(4)(A) Selection of Projects

“All federally funded projects carried out within the boundaries of a transportation management area under this title (excluding projects carried out on the National Highway System and projects carried out under the bridge program or the Interstate maintenance program) or under chapter 53 of title 49 shall be selected for implementation from the approved transportation improvement program by the metropolitan planning organization designated for the area in consultation with the State and any affected public transit operator.”

All federal funds allocated through Metro are granted through the MTIP, the approved transportation improvement program for the Portland area MPO, and recognized as such by the State and TriMet (2000 RTP Section 6.5). Projects and programs funded with federal revenue through the MTIP process must be identified as part of the financially constrained system in the RTP. The 2004 Federal Update to the RTP provides an updated set of financially constrained projects and programs for future MTIP funding allocations.

134(i)(4)(B) National Highway System Projects

“Projects carried out within the boundaries of a transportation management area on the National Highway System and projects carried out within such boundaries under the bridge program or the Interstate maintenance program shall be selected for implementation from the approved transportation improvement program by the State in co-operation with the metropolitan planning organization designated for the area.”

The MTIP funding decisions are developed in coordination with the Oregon Department of Transportation. Projects funded in the MTIP are incorporated into the State Transportation Improvement Program, to ensure consistency between regional and state improvement programs.

134(i)(5)(A) Certification Required

“The Secretary shall:

(i) ensure that the metropolitan planning process in each transportation management area is being carried out in accordance with applicable provisions of Federal law; and

2004 Federal Update to the Regional Transportation Plan

Page 10 of 11 –Findings of Compliance with Federal Planning Requirements

Appendix 4.1

(ii) subject to subparagraph (B), certify, not less often than once every 3 years, that the requirements of this paragraph are met with respect to the transportation management area.”

Metro’s planning process is certified annually based on the adoption of the Unified Work Program (“UWP”), through the federal self-certification process. Metro last completed the self-certification process on March 20, 2003 through Resolution 03-3289. The next scheduled certification review will occur in October 2004.

134(i)(5)(B) Certification Requirements

“The Secretary may make the certification under subparagraph (A) if:

(i) the transportation planning process complies with the requirements of this section and other applicable requirements of Federal law; and

(ii) there is a transportation improvement program for the area that has been approved by the metropolitan planning organization and the Governor.”

The 2001 Unified Work Program self-certification process confirmed that the 2000 RTP complied with the requirements of this section, and other applicable requirements of federal law, and that Metro’s MTIP had been approved by JPACT, the Metro Council and the Oregon Transportation Commission (OTC), on behalf of the Governor.

In Fall 2004, the 2004 Federal Update to the RTP and the 2004-07 MTIP will be reviewed for compliance with the requirements of this section as part of the next scheduled certification review.



2004 Federal Update to the Regional Transportation Plan/ 2004-07 Metropolitan Transportation Improvement Program

Air Quality Conformity Determination

February 12, 2004
Revised February 27,
2004



METRO
PEOPLE PLACES
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Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. The regional government provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and owns the Oregon Zoo. It also oversees operation of the Oregon Convention Center, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition Recreation Commission.

Your Metro representatives

Metro Council President – David Bragdon

Metro Councilors – Rod Park, District 1; Brian Newman, District 2; Carl Hosticka, District 3; Susan McLain, District 4; Rex Burkholder, District 5; Rod Monroe, District 6.

Auditor – Alexis Dow, CPA

Metro's web site: www.metro-region.org

Note: The February 27, 2004 revisions are based on Metro responses to comments received from the Oregon Department of Environmental Quality (DEQ) as noted in Appendix 10 to this document. The revisions are incorporated on pages 36 through 42.

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2004-11006-PLN



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2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program

Conformity Determination Report Table of Contents

A. Introduction	2
1. Background	2
2. Reason for Determination	5
B. Overview of 2004 RTP and Major Changes in Network Assumptions	6
1. Unchanged Network Assumptions Carried Over from 2000 RTP	7
2. New 2004 RTP Network Assumptions	7
C. Summary of Relevant Conformity Requirements & Findings of Compliance	8
1. Consistency with the latest planning assumptions (OAR 340-252-0110)	8
2. Latest emissions model (OAR 340-252-0120)	27
3. Consultation (OAR 340-252-0130)	27
4. Timely implementation of TCMs (OAR 340-252-0140)	32
5. Support achievement of NAAQS	32
6. Quantitative analysis (OAR 340-252-0190)	33
Emission Credits	39

Appendices

- Appendix 1: Financially Constrained System Project List
- Appendix 2: 2004 RTP Public Involvement
- Appendix 3: 2004 RTP and 2004-07 Metropolitan Transportation Improvement Program Conformity Analysis Protocol
- Appendix 4: Transportation Analysis Zone (TAZ) Assumptions
- Appendix 5: 2004-07 MTIP Public Involvement
- Appendix 6: Published notice, other notices
- Appendix 7: Evaluation of emissions analysis for transportation activities which cross borders of MPOs
- Appendix 8: Evidence of Compliance with Metro Interim Land Use Measures
- Appendix 9: Summary of Public Comments and Responses (October 31, 2003 through January 13, 2004)
- Appendix 10: Public comments and Responses (February 13, 2004 through February 27, 2004)



METRO

2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program Conformity Determination

A. Introduction

Background

The federal Clean Air Act provides the main framework for national, state and local efforts to protect air quality. Under the Clean Air Act, the Environmental Protection Agency (EPA) is responsible for setting standards, known as national ambient air quality standards (NAAQS), for pollutants considered harmful to people and the environment. These standards are set at levels that are meant to protect the health of the most sensitive population groups, including the elderly, children and people with respiratory diseases. Air quality planning in this region is focused on meeting the NAAQS and deadlines set by the federal Environmental Protection Agency and state Department of Environmental Quality for meeting the standards. Further, the United States Department of Transportation has established regulations which make failure to conform with these standards result in a loss of transportation funding from state and federal sources.

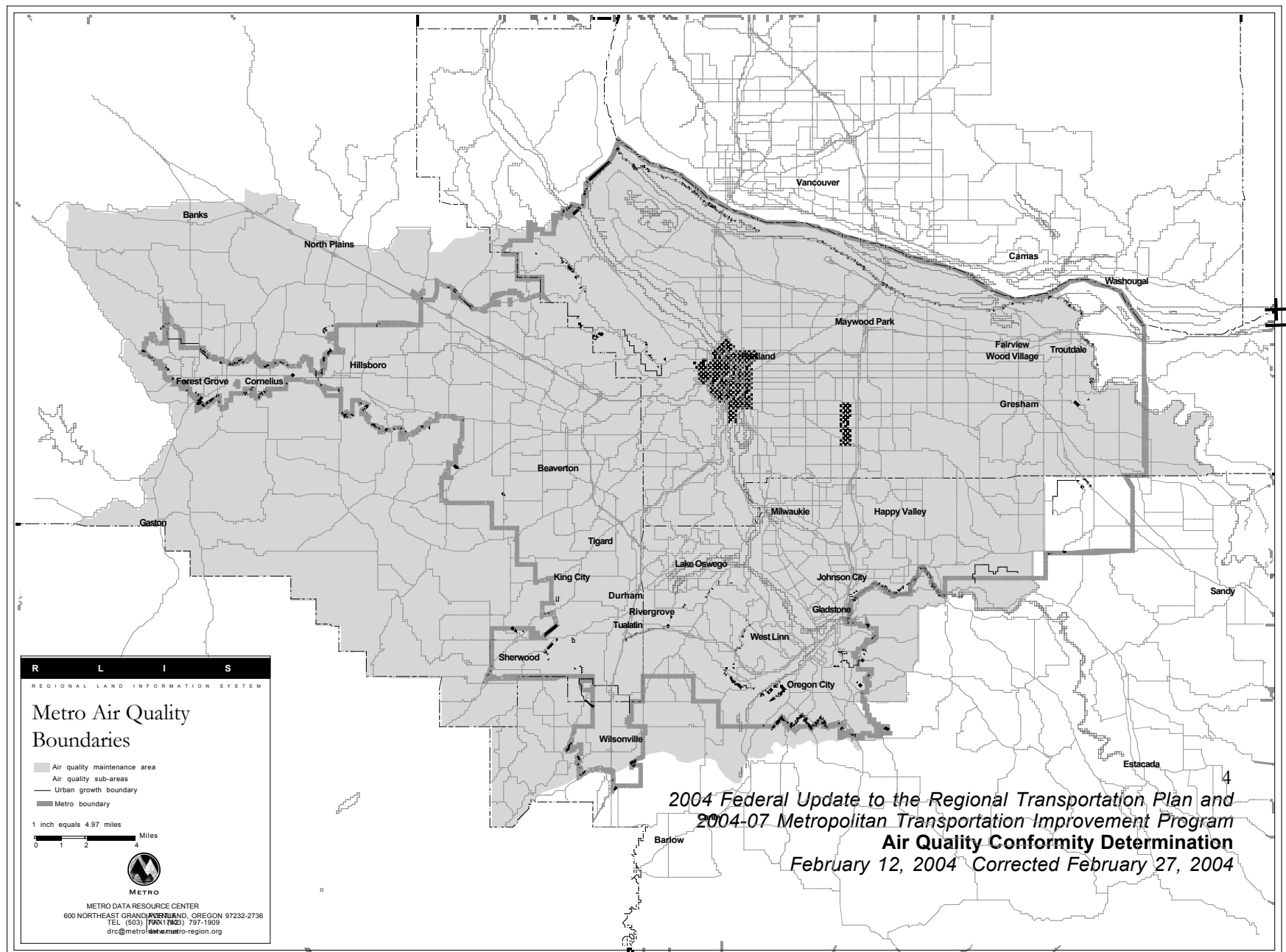
The 2004 Regional Transportation Plan (RTP) and 2004-07 Metropolitan Transportation Improvement Program are subject to an air quality conformity determination under federal regulation (40 CFR Parts 51 and 93) and state rule (OAR 340 Division 252). Metro, as the federally designated Metropolitan Planning Organization (MPO) for the Oregon portion of the Portland-Vancouver air shed, is the lead agency for the conformity determination. In addition, the Transportation Policy Alternatives Committee (TPAC) is called out under the state rule as the standing committee designated for "interagency consultation" as required by the rule. In order to demonstrate that the 2004 Regional Transportation Plan (RTP) and the 2004-07 MTIP meet federal and state air quality planning requirements, Metro must complete a technical analysis, consult with relevant agencies and provide for public comment that, in total, is known as air quality conformity. The need for this analysis came from the integration of requirements in the Clean Air Act Amendments of 1990 and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. These requirements were also included in the Transportation Equity Act for the 21st Century (TEA21) in 1998. Conformity is a regulation requiring that all transportation plans and programs in air quality non-attainment or maintenance areas conform to the State's air quality plan, known as the State Implementation Plan (SIP). Transportation plans and programs such as the 2004 RTP and the 2004-07 MTIP must be found consistent with the SIP.

The Portland/Vancouver area has one interconnected airshed. However, given the State boundary along the Columbia River and the differing jurisdictions and state laws, the Federal government approved each side of the airshed taking responsibility for its area. For the Oregon side a Portland Area Airshed was established. However, as there are several types of pollutants of concern in the Portland Area, several geographic areas were established for differing air pollutants.

For Carbon monoxide, the Metro jurisdictional boundary was established as the geographic extent of concern for which emission budgets (maximum pollutant levels) were created. Within that area, there were sub-areas established with their own emission budgets. These sub-areas were the Portland Central City sub-area and the 82nd Avenue subarea.

For precursors of ozone, commonly called smog, geographic boundaries were set that pertained to the level of hydrocarbons (also known as volatile organic compounds) and nitrogen oxide. The Portland Air Quality Maintenance Area was established for addressing ozone and the emission budgets for this area.

The following map shows these boundaries.



Reason for Determination

Metro is the Portland area's designated Metropolitan Planning Organization (MPO). As the MPO, Metro is the lead agency for development of regional transportation plans and the scheduling of federal transportation funds in the Portland urban area. Regulations of the United States Department of Transportation (USDOT) require the MPO to develop a 20-year Regional Transportation Plan (RTP). The Plan must identify revenue that can be reasonably anticipated over a 20-year period for transportation purposes. It must also state the region's transportation goals and policies and identify the range of multi-modal transportation projects that are needed to implement them. Just as Metro is required to develop an RTP, it is also mandated to develop a Metropolitan Transportation Improvement Program (MTIP) for the Portland urban area. The MTIP "program" process is used to determine which projects included in the Plan will be given funding priority year by year.

The U.S. DOT, after consultation with the U.S. Environmental Protection Agency (EPA), approved and acknowledged the 2000 RTP air quality conformity determination on January 26, 2001. Under federal regulations, the RTP must be updated every three years to ensure that the plan adequately addresses future travel needs and is consistent with the federal Clean Air Act. As a result, an update to the 2000 RTP began in September 2003.

On June 19, 2003, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved Resolution No. 03-3335, approving a regional allocation of federal funds for the years 2006 and 2007, pending an air quality conformity analysis for the 2004-07 MTIP. The 2004-07 Metropolitan Transportation Improvement Program (MTIP) schedules spending of federal transportation funds in coordination with significant state and local funds in the Portland metropolitan region for the federal fiscal years 2004 through 2007. It also demonstrates how these projects relate to federal regulations regarding project eligibility, air quality impacts, environmental justice and public involvement.

On August 11, 2003 the U.S. DOT recommended that the 2004 RTP air quality conformity analysis and determination be completed jointly with the conformity analysis for the 2004-07 Metropolitan Transportation Improvement Program (MTIP).

On December 11, 2003, the Metro Council approved the 2004 Regional Transportation Plan (RTP) and the 2004-07 MTIP. In order to ensure that the 2004 RTP is in compliance with air quality requirements, this Conformity Determination has been prepared for the financially constrained system of the 2004 Regional Transportation Plan (RTP) which also includes projects identified in the 2004-07 MTIP.¹ It has been

¹ Defined in Appendix 1 to this document, the financially constrained system responds to federal planning requirements. This system of projects and programs is limited to current funding sources, and those new sources that can be reasonably expected to be available during the 20-year plan period. As the federally recognized system, the financially constrained system is also the source of transportation projects that may be funded through the Metropolitan Transportation Improvement Program (MTIP). The MTIP allocates federal funds in the region. The 2004 RTP not only provides an updated set of financially constrained projects and programs for future MTIP allocations, but also establishes more formal procedures and objectives for implementing long-range regional transportation policies through incremental funding decisions. These new MTIP provisions are set forth in Chapter 6 of the 2004 RTP.

prepared because the RTP and the MTIP must be conformed every three years, as described in OAR Chapter 340, Division 252, section 50. A new plan and MTIP demonstrating conformity with the Clean Air Act must approved and acknowledged by US DOT and US EPA in a formal conformity determination.

Section B of this conformity determination provides an overview of the 2004 RTP and major changes to road and transit network assumptions. The State Transportation Conformity Rule requires that the air quality conformity determination comply with several subsections of OAR Chapter 340, Division 252, including:

1. OAR 340-252-0110 – Use of the Latest Planning Assumptions
2. OAR 340-252-0120 – Use of Latest Emissions Model
3. OAR 340-252-0130 – Consultation
4. OAR 340-252-0140 – Timely Implementation of Transportation Control Measures (TCMs)
5. OAR 340-252-0190 – Motor Vehicle Emissions Budget

Section C discusses the relevant conformity determination requirements and demonstrates that this Determination complies with each requirement. Metro's technical analysis indicates that regional emissions will remain within established budgets in all analysis and budget years (i.e., 2006, 2007, 2010, 2015, 2020 and 2025). The following analysis demonstrates how the conformity determination for the 2004 Regional Transportation Plan complies with applicable requirements of OAR Chapter 340, Division 252. Inapplicable subsections of Division 252 are not cited in this conformity determination.

B. OVERVIEW OF THE 2004 RTP AND MAJOR CHANGES IN NETWORK ASSUMPTIONS

The 2004 RTP Update represents a minor update to the 2000 RTP that focuses on meeting state and federal requirements, and incorporated new policy direction set by JPACT and the Metro Council as part of various corridor and special studies conducted since 2000. The update also incorporates a number of "friendly amendments" proposed as part of local transportation plans being adopted over the past three years. This update builds on the extensive planning work and analysis that was completed for the 2000 RTP. The 2004 RTP continues to implement the 2040 Growth Concept, the region's long-range plan for addressing expected growth while preserving the region's livability. The 2004 RTP represents a nearly 20-year evolution from a mostly road-oriented plan to a more balanced multi-modal plan that is closely tied to land use and the 2040 Growth Concept. The 2004 plan remains relatively unchanged in terms of the mix of projects, and continues to rely on greater emphasis on a multi-modal transportation system that enhances opportunities for walking, bicycling and use of transit, transportation demand management, street connectivity, and a 2040-based level of service policy that tolerates some congestion, particularly during two-hour peak period in select locations based on availability of other modes of travel such as walking, biking and transit.

The total reasonably expected revenue base assumed in the 2004 RTP for the road system is about \$ 4.3 Billion with about \$2.16 Billion for freeways, highways and roads, \$1.67 Billion for transit and the balance for planning, bike, pedestrian, TDM and other similar programs.

The following section summarizes some of the more important similarities and distinctions between the two networks.

1. Network Assumptions Carried Over the from 2000 RTP:

- ❖ Annual average transit service increase of 1.5 percent through 2006;
- ❖ LRT extended along Interstate Avenue LRT alignment from the Rose Quarter to the Expo Center (though the opening day for Interstate MAX has changed from September 2004 to May 2004);
- ❖ LRT extended from Gateway Regional Center to Clackamas Regional Center and LRT extended along the Portland Transit Mall from the Steel Bridge to PSU along 5th and 6th Avenues.
- ❖ Early implementation of an interim "Rapid Bus" system in the 99E corridor on McLoughlin from downtown Portland to Milwaukie.
- ❖ Wilsonville/Beaverton Commuter Rail;
- ❖ Added freeway lanes:
 - I-5 from Greeley to Interstate Bridge;
 - US 26 from Highway 217 to Murray Boulevard;
 - Highway 217 from Tualatin Valley Highway to 72nd Avenue Interchange.
- ❖ Signal system interconnection on significant regional arterial streets.
- ❖ Implementation of the central city streetcar from NW Portland to the Macadam district in two phases.
- ❖ Improved bus headways and occupancy on numerous priority routes due to implementation of amenities and structural improvements (e.g., "coach-style" buses, dedicated transit lanes, queue jump lanes, signal priority systems, "real-time" on-street bus arrival information displays, etc.)
- ❖ Slightly reduced geographic coverage of bus service to emphasize service on the most productive routes;
- ❖ Phase 1 construction of the Sunrise Highway from I-205 to Rock Creek;
- ❖ Hogan Interchange construction at I-84 to Stark Street.
- ❖ Construction of 34 additional arterial lane miles and 108 more freeway lane miles than assumed in the 1995 RTP (which froze road construction at 2015 levels).

2. New 2004 RTP Network Assumptions:

The 2004 RTP Network Assumptions for roads and transit may be found in Appendix 1 of this Determination.

The 2004 RTP builds on the policy direction established in the 2000 RTP, which was to use transportation investment as a means to implement and reinforce the region's land use goals, and more fully defines the methods and projects that will effect this purpose. Extensive interagency consultation was conducted to develop and refine the current financially constrained system project list. The resultant network continues to rely extensively on auto trip making 61.3 percent of daily trips are single-occupant auto trips in 2025 and therefore continues to reflect significant investment in maintenance and expansion of the region's freeway and street facilities.

However, a more refined multi-modal approach is also exhibited in the 2004 RTP's specification of precise pedestrian and bike system improvements, and the identification of "boulevard-design" locations where the intent is to retrofit designated streets for walking, biking and transit. The retrofits of major streets include wider sidewalks, safer street crossings, bike lanes and improved bus stops and shelters along streets that serve the central city, regional centers, town centers and other areas. The 2004 RTP congestion level of service standards reflect a policy that the associated impacts of wider, faster streets and freeways needed to achieve the traditional service level are too often accompanied by unacceptable impacts on costs, surrounding neighborhoods and alternative travel modes. Some funds previously dedicated to attempts to meet the traditional level of service standard have been freed up to pursue more balanced system investment that is more reliant on system and demand management, walking, bicycling and transit to meet regional trip demand. And as the comparative data above, and in Section C.1(b), below, suggest, this approach yields meaningful reductions of auto trip dependency.

C. Relevant Conformity Requirements and Findings of Compliance

1. Consistency with the Latest Planning Assumptions (OAR 340-252-0110).

a. **Requirement:** *The State Rule requires that Conformity Determinations be based "on the most recent planning assumptions" derived from Metro's approved "estimates of current and future population, employment, travel and congestion."*

Finding of compliance: The *quantitative* analysis (see Section C.6) employs the transportation system planning assumptions completed for the 2004 RTP, and population, employment and development assumptions that reflect Metro adoption of the Regional Framework Plan and its implementing ordinances. The 2000 base year reflects Metro's official estimates of population and employment calibrated to 2000 Census data. Metro has completed a population/employment projection for 2025. The 2025 population/employment projection, along with the 2000 base year using 2000 Census data are the foundation for all analysis years used in this Conformity Determination.

Travel and congestion forecasts in the analysis years of 2000, 2010 and 2025 are derived from the population/employment data using Metro's regional travel demand model and the EMME/2 transportation planning software. Within subroutines of the regional travel demand model, Metro calculates the transit/bike/walk mode split for calculated travel

demand based on a variety of factors, including trip distance, car per worker relationship, transit headways, total employment within one mile, intersection density and a zone-based mixed-use index of the ratio of total employment to total population (see Appendix 4). Both the population and employment estimates and the methodology employed by the EMME/2 model have been the subject of extensive interagency consultation and agreement (discussed further in Section C.3).

The resulting estimates of future year travel and motor vehicle congestion are then used with the outputs of the EPA approved MOBILE 5a-h emissions model to determine regional emissions. In all respects, the model outputs reflect input of the latest approved planning assumptions and estimates of population, employment, travel and congestion.

- b. **Requirement:** *The State Rule requires that changes in transit policies and ridership estimates assumed in the previous conformity determination must be discussed.*

Finding of compliance: Changes in transit policies and ridership estimates are discussed below for each type of transit service assumed in the 2004 RTP transit network: light rail, commuter rail, rapid bus, frequent bus, regional bus and community bus.

LRT Extension. The transit policies which guide modeled implementation of light rail transit (LRT) service in the South/North corridor are consistent with previous Conformity modeling of the Westside and Hillsboro LRT service starts. Bus resources providing downtown radial service are replaced with LRT service. Previous short-haul service between former radial trunk routes is reconfigured to support new LRT stations and surrounding neighborhoods. This represents continuation of *existing transit policy* and its extension to the expanded LRT system. The same principles are further extended to implementation of planned commuter rail in South Washington County.

Previous conformity determinations have reflected policy changes that call for the construction of the South Corridor LRT Project in two phases. The first phase to include I-205 LRT from Gateway Regional Center to Clackamas Regional Center and LRT on the downtown Portland Transit Mall by 2008. A second phase is assumed that would include LRT from downtown Portland to Milwaukie town center. A new assumption is more rapid implementation of the Interstate MAX from downtown Portland to the Expo Center to the Expo Center. LRT service extension from Expo Center to Vancouver, Washington continues to be assumed to be part of the Preferred System, but is now not included in the Financially Constrained RTP and is therefore not included in this conformity analysis although it was included in previous conformity determinations.

Commuter Rail. A previous Determination has assessed introduction of commuter rail into the regional transit service strategy. The 2004 RTP makes no changes to the assumptions previously modeled. Only one alignment and service parameter is identified: Wilsonville to

Beaverton in Washington County during the a.m. and p.m. peak periods with supporting park and ride facilities and a slight increase and realignment of supporting feeder bus service. If other alignments should be determined to be feasible, amendment of the regionally defined system would be needed.

Bus Transit. The 2004 RTP carries forward a hierarchy of regional bus transit service described in the 2000 RTP. From a modeling perspective, one of the most significant factors effecting transit ridership is transit service headways. The 2000 RTP identified four gradations of bus service: Rapid bus, Frequent bus, Regional bus and Community bus which are continued in the 2004 RTP. Rapid bus service would most closely emulate LRT in speed, frequency and comfort serving major transit routes with limited stops. Rapid bus service is characterized by some dedicated rights-of-way, signal preemption capability, 15-minute headways and high quality station and passenger amenities. Passenger amenities are concentrated at transit centers such as schedule information, ticket machines, bicycle parking and covered shelters. The 2004 RTP continues with an approach of deploying a limited number of Rapid bus lines in high demand commuter corridors.

Frequent bus service is characterized by 10-minute headways, wider geographic coverage, utilization of some dedicated right-of-way (e.g., queue jumps, dedicated turn lanes, etc.), signal preemption capabilities, and enhanced passenger amenities that include covered bus shelters, special lighting. Some overlap of Rapid and Frequent bus service is conceivable. However, bus stops (rather than stations) would characterize the frequent bus system and much more frequent stops would occur. The vehicles would be typical transit buses.

Regional bus service would represent the majority of planned regional bus service. Radial trunk service would be provided on major arterials. Stops would be located every two to three blocks, and amenities would be prioritized to high ridership locations. Headways would not be more than 15-minutes during regular operating hours. The 2004 RTP continues the 2000 RTP approach which assumed expansion of the system to provide not only central city radial service but also to interconnect emerging regional and town centers, main streets and corridors with the central city and with one another.

The Community transit network is an innovation of the 2000 RTP that grew from Tri-Met's Transit Choices for Livability program. In addition to local bus service to neighborhoods and employment areas, community bus service includes decentralization of some transit services to a multitude of community-based transit providers dedicated to providing localized, "shuttle-like" service to destinations within a very limited geography. Vehicle types are expected to vary from traditional buses to van-type shuttles and taxi and car-share programs. The service is focused on more accessibility, frequency along the route and coverage to a wide range of land use options rather than on speed between two points. Community bus service generally is designed to serve travel with one trip end occurring within the 2040 Growth Concept town centers, main streets, station communities and corridors.

Transit Ridership. The broadest measure of ridership assumptions is revenue hours. The previous network, used to conform the 2000 RTP, as amended, reflected changes to the

South/North alignment and timing. Also, it included introduction of Commuter Rail in Washington County.

The following data points highlight the practical effect of changed system configuration and funding assumed in the 2004 RTP relative to previous assumptions used in the 2000 RTP:

- ❖ Total projected revenue hours projected for the 2004 RTP is 6,639.
- ❖ The 2004 RTP projects Average Weekday (AWD) transit trips in 2025 is 520,248.
- ❖ The 2004 RTP projects that the percent of regional daily trips that are transit is 6.28 percent
- ❖ The 2004 RTP projects that, the percent of households and employment within 1/4-mile of transit service in 2025 to be 70.99 and 83.15 percent respectively
- ❖ AWD originating riders per revenue hour are 76.94.

- c. **Requirement:** *The State Conformity Regulations require that reasonable assumptions be used regarding transit service, and increases in fares and road and bridge tolls over time.*

Finding of compliance: There are no road or bridge tolls in place in the Portland metropolitan area, and none are assumed in the 2004 RTP or proposed in the MTIP. No decision to deploy such a project has been made and this Determination does not model evaluation of such a program. However, in the future some of the projects included in the Financially Constrained System Project List may include value pricing considered during individual project evaluation and alternative selection.

Auto operating costs are factored into the mode choice subroutines of the regional travel model. These costs are held constant to 1985 dollars. Parking costs for the Central City and for Tier 1 regional centers are based on the South/North DEIS parking costs developed from survey data to reflect parking control strategies. Parking factors for the remaining regional centers, station communities, town centers and mainstreets are scaled back by 50 percent from these costs. No parking factors are assumed for corridors, neighborhoods, employment areas, industrial areas, greenspaces and areas outside the urban growth boundary. The three-zone transit fare structure adopted in 1992 is held constant through 2025. User costs (for both automobile and transit) are assumed to keep pace with inflation and are calculated in 1985 dollars. Free transit areas are assumed for the central business and Lloyd districts and Tier 1 regional centers and within Wilsonville town center.

Service assumptions (i.e., transit vehicle headways) also affect trip assignment to transit.

The South Corridor LRT Project Locally Preferred Alternative has selected the I-205 LRT segment and the downtown Portland Transit Mall LRT segment as a first phase recommended for completion by 2007 and a downtown Portland to Milwaukie LRT segment as a second phase.

LRT along Interstate Avenue from the Rose Quarter to the Expo Center is ahead of schedule with startup now planned for May 2004. These service assumptions were previously modeled in the FY 02-05 Metropolitan Transportation Improvement Program (MTIP) Conformity Determination, approved January 20, 2000 and as amended August 14, 2003.

The 2000 RTP assumed a 1.5 percent annual service hour increase for regional bus service through 2006. The bulk of the increase was allocated to building a service base along the Interstate Avenue corridor. At 2007, these bus resources were assumed to be reallocated throughout the region and feeder service within the LRT Corridor was reinforced.

The 2004 RTP continues these early program assumptions. However, with added regional support in the FY 2002 – 2005 MTIP, earlier attention has been focused on building service in two of four newly identified priority rapid bus corridors: the Barbur/99W and McLoughlin corridors, which link downtown with southeast Washington County and west Clackamas County, respectively. Rather than general reallocation of the Interstate LRT service hours, service in these corridors will be expanded. In addition, the 2004 RTP (as did the 2000 RTP) extends the 1.5 percent increase through 2025. Finally, rapid bus service is extended to the McLoughlin Boulevard/Highway 224 corridor and on Division Street to Gresham regional center in east Multnomah County.

- d. **Requirement:** The State Conformity Regulations require that the latest existing information be used regarding the effectiveness of TCMs that have already been implemented. It must also be demonstrated that the Plan does not delay or impede the implementation of TCMs

The Portland area maintenance plans for ozone and carbon monoxide include TCMS that are identical, except as otherwise noted for section 2 of the non-funding based TCMs. Following are the TCM quoted verbatim (shown in *italics*) from the air quality maintenance plans and unless noted, are the same in each maintenance plan. Each section of the maintenance plan TCMs is followed by a description of actions taken by the region to comply:

"Non-funding based Transportation Control Measures

1. Metro 2040 Growth Concept

Metro's 2040 Growth Concept is included because it changes typical growth patterns to be less reliant on motor vehicle travel, thereby reducing motor vehicle emissions. Two elements of the land use plan (the Interim Measures and the Urban Growth Boundary) provide appropriate implementation mechanisms to meet FCAA enforceability requirements for control strategies."

Compliance Actions - Metro 2040 Growth Concept

Since its adoption in 1995, the Metro Growth Concept has continued to serve as a means of coordinating land use and transportation, emphasizing a compact urban form, mixed uses where high quality transit service is provided or planned, a balanced transportation system that serves the Growth Concept and providing for transportation choices. Both the Metro 2000 RTP and 2004 RTP use the transportation system to implement the 2040 Growth Concept. This includes using a 2040 land use hierarchy to guide transportation plans and MTIP criteria that direct transportation investment decisions with 2040 Growth Concept implementation in mind. The MTIP includes incentives for serving 2040 centers (mixed use areas) and reducing vehicle miles traveled. As a result, during the period 1990 to 2000, while total vehicle miles increased by 35 percent, TriMet ridership increased 49 percent. Further, from the local adoption of the air quality maintenance plan requirements (1996) to the year 2000 (the latest data available), vehicle miles per capita (vmt/c) decreased from 21.7 vmt/c (vmt/c) to 20 vmt/c - an 8% decrease.

"a. Metro Interim Land Use Measures relating to:

- *Requirements for Accommodation of Growth;*
- *Regional Parking Policy; and*
- *Retail in Employment and Industrial Areas.*

The text of the interim land-use measures is included in Appendix D1-17 (for Ozone, Appendix D2-10 for CO)."

Compliance Actions - Metro Interim Land Use Measures

In 1996, the Metro Council adopted the Urban Growth Management Functional Plan, which was a set of recommendations and requirements for the twenty-four cities and the urban portions of three counties for implementing the 2040 Growth Concept. These regulations are not interim measures, rather, they provide lasting measures to address land use/transportation coordination. The Functional Plan set targets for cities and counties within the region for new jobs and housing as a means of encouraging land use patterns that are supportive of transit, walking and biking as well as setting standards for street connectivity and reducing the amount of land devoted to surface parking. As of January 2003, the Metro Council concluded (See appendix 8, which includes Metro Resolution No. 03-3299, compliance tables and the Functional Plan recommendations and requirements) that 25 of the 27 jurisdictions complied with the minimum density

standards, all jurisdictions complied with land partitioning standards, all but one complied with accessory dwelling unit standards. The total residential capacity demonstrated by the local jurisdictions was 94 percent of the total envisioned by the targets, without counting the capacity of the City of Wilsonville or unincorporated Multnomah County. With Wilsonville, unincorporated Multnomah County targets met and including the total capacity of the City of Portland using its Comprehensive Plan, the total would be 99 percent of the total envisioned by the targets. The regional total for accommodating jobs was 107percent of the regional targets.

With regard to parking, all but one jurisdiction (the City of Durham with a population in the 2000 Census of 1,382 people, 1 percent of the 1,305,574 people within the Metro jurisdictional boundary and with very little non-residential land uses or vacant buildable land for non single family use) , had complied with reviewing parking space sizes and ratios and lowering the total amount of land devoted to surface parking.

Finally, for Title 4, Retail in Employment and Industrial Areas, every city or county with employment or industrially zoned lands complied. In addition, Metro is currently looking at further protection of encroachment on employment and industrial lands with additional regulations now being discussed by the Metro Council.

All of these land use measures were intended to encourage land use patterns which , in part, promoted a more balanced transportation system. In addition, Metro adopted a Title 6, which pertained to transportation accessibility and connectivity. While not included as a land use measure in the air quality maintenance plans, these regional requirements for local government implementation encouraged street systems that connected more frequently which, in turn, encourages walking, biking and transit use - all contributing to better air quality. All 27 jurisdictions complied with connectivity standards.

*"b **Urban Growth Boundary.***

The Urban Growth Boundary (UGB) as currently adopted or amended before EPA approval of the maintenance plan, assuming an amendment does not significantly affect the air quality plan's transportation emission projections."

Compliance Actions - Urban Growth Boundary

As noted above, the 2040 Growth Concept was envisioned to encourage a more compact urban form and to provide for land use patterns that encourage transportation choice. The urban growth boundary was not intended to be static. Since the late 1970s, the boundary has been moved about three dozen times. Most of those moves were small - 20 acres or less. There were two times that Metro authorized more substantial additions:

- in 1998 about 3,500 acres were added to make room for approximately 23,000 housing units and 14,000 jobs. Acreage included areas around the Dammasch state

hospital site near Wilsonville, the Pleasant Valley area in east Multnomah, the Sunnyside Road area in Clackamas County, and a parcel of land south of Tualatin.

- in 1999 another 380 acres were added based on the concept of "subregional need." An example of "subregional need" would occur when a community needed land to balance the number of homes with the number of jobs available in that area.

These expansions represented an increase of only about 2 percent, even though the Metro region's population has increased by about 17 percent since 1990.

In early 2002, the voters of the region approved Ballot Measure 26-29, which prohibits Metro from requiring higher densities within existing neighborhoods. Metro's goal is to locate higher density housing, such as townhouses and apartments, within "centers" such as the downtowns of Portland, Beaverton and Gresham, or along transportation corridors, particularly where there is a light-rail line.

Further, in 2002, the Metro Council completed a two-year process reviewing the region's capacity for housing and jobs by expanding the UGB by an additional 18,638 acres, with 2,851 acres dedicated to employment purposes. This expansion amounts to an 8 percent increase in the Metro urban growth boundary. However, the UGB expansion is sized to accommodate the next twenty years of growth. The new UGB, including the expansion will accommodate a 40 percent increase over the forecast period ².

As part of the 2002 UGB decision, the Metro Council adopted new policies that address the protection of existing neighborhoods and additional job land, and the improvement of downtown commercial centers and main streets. Accordingly, transportation and air quality modeling have assumed urban land use consistent with population, housing and job forecasts. In turn, transportation system improvements have also been assumed to serve the area. The air quality conformity determination results, demonstrate that even with these changes in land use and transportation system, the estimated future air quality results still meet state and federal air quality standards.

"2. **Central City Parking Requirements** (Carbon Monoxide only)

The Portland City Council adopted the Central City Transportation Management Plan, Plan and Policy, and other supporting documents on December 6, 1995. The Central City Transportation Management Plan (CCTMP) was adopted by Ordinance No. 169535, Resolution 35472. The Ordinance became effective January 8, 1996. A key supporting document was the Zoning Code Amendments, containing the maximum parking ratios for new development, the requirements for providing structured parking to serve older historic buildings and other regulations on parking. Key elements of the Zoning Code Amendments related to CO air quality projections are incorporated into this document as given below.

² Sources: Metro *Urban Growth Report*, Table 1, line 1a and *Metro Council Regional Forecast*, September, 2002 and 2000 US Census.

The CCTMP replaced the former Downtown Parking and Circulation Policy, first adopted in 1975 and updated in 1980 and 1985. The 1980 update of the parking policy served as a foundation for the 1982 Portland area CO attainment plan. The CCTMP is designed to minimize new vehicle traffic in the Central City and encourage alternative travel modes by extending the downtown maximum parking ratio concept to the entire Central City area. The CCTMP provided for the lifting of the downtown parking lid upon EPA approval of the maintenance plan and the request" for attainment redesignation. However, until EPA approval, the CCTMP retains the parking lid.

The parking offset program (OAR 340-020-0400 through OAR 340-020-0430), designed to allow the city to increase the parking lid by up to a maximum of 1,370 spaces, was also retained until after EPA approval of the maintenance plan. The DEQ's emission projection figures for the CCTMP emissions inventory area include an estimate for the emissions associated with 827 parking spaces, as documented in Appendix D2-4-4. These are the parking spaces yet to be developed, but which were authorized by the parking offset program.

The following is a list of zoning code amendments that were incorporated directly into the Portland Carbon Monoxide Maintenance Plan. The text of critical code provisions (such as maximum parking ratios for new development and parking provisions for existing buildings) is contained in Appendix D2-8. A list of other zoning code amendments used as supporting documents for the maintenance plan is contained in Appendix D2-13 of Volume 3 of the Oregon State Implementation Plan.

Items in Volume 3 of the SIP are federally enforceable. With regard to Volume 3 items, EPA has allowed DEQ to make changes which are merely administrative, without requiring public process. DEQ and EPA make a determination as to whether a proposed change by the City of Portland is merely administrative rather than substantive.

Section 1: *Incorporated Amendments to Chapter 33.510, Central City Plan District*

<u>Code Number</u>	<u>Code Title</u>
33.510.261 - 33.510.261.E (33.510.261.E.1.a(1)-(2),b,E.2.a(1)-(2),b)	Parking Site split by subdistrict or parking sector boundaries
33.510.263 - 33.510.263.A (33.510.263.A.1.a-c(1)-(4),A.2-4.a-b(1)-(3),A.5-7.a-d)	Parking in the Core Area Growth Parking
33.510.263.B - (33.510.263.B.1.a-c(1)-(2),B.2-4.a)	Preservation Parking
33.510.263.E - (33.510.263.E.1.a-b,E.3.a-c)	Residential/Hotel Parking
33.510.263.G -	All Parking
33.510.263.G.4 -	Surface parking lots.

(33.510.263. G .4.a. (1)-(2), G .4.d(1)-(3»)

33.510.264

Parking in Lloyd District

33.510.264.A

Growth Parking

(33.510.264.A.1.a-c(1)-(4),A.2.a,A.4.a)

33.510.264.B

Preservation Parking

33.510.264.B.1.a-c(1)-(2),B.2.a-c,B.4.a-c)

33.510.264.F

All Parking

33.510.264.F.4

Surface parking lots

(33.510.264.F .4.e.(1)-(3)

33.510.265

*Parking in the Goose Hollow Subdistrict
and Central Eastside Sectors 2 and 3*

33.510.265.A

Growth Parking

(33.510.265.A.1.a-c,A.2.a,A.4.a)

33.510.265.B

Preservation Parking

(33.510.265.B.1.a-c(1)-(4),B.2.a,b) (33.510.265.B.4.a-c)

Section 2: Incorporated Portion of New Chapter 33.808, Central City Parking Review

Code Number

Code Title

33.808.050

*Loss of Central City Parking Review
Status*

33.808.100

*General
Approval Criteria for Central City
Parking Review*

33.808.100.G

33.808.100.J

If the site is in the Core Area:

33.808.100.J.2.a

33.808.100.M

Section 3: Incorporated Maps

Section 4: Incorporated Portion of CCTMP Administration Section

VI.D.1.a.(1)-(5)

Administration Section:
Preservation Parking

Unless it is a substitution of a Transportation Control Measure producing equivalent emission reduction, any change in the Portland Metro Area CO Maintenance Plan language will require adoption of a formal amendment by the EQC and approval by EP A. The City of Portland may make changes to City policies and regulations which are included in the Portland Metro Area CO Maintenance Plan provided they do not relax the stringency of the air quality control strategies. DEQ will work with the City to notify EPA of such changes. These changes will be incorporated into the Portland Metro Area CO Maintenance Plan at a future convenient time.

Changes to documents supporting the Portland Metro Area CO Maintenance Plan' (zoning code amendments not directly incorporated into the Portland Metro Area CO Maintenance Plan, but listed in Appendix D2-13 of Volume 3 of the Oregon State Implementation Plan) which do not affect the stringency of the air quality control strategies will not require adoption of a formal amendment by the EQC and approval by EP A. DEQ and the City of Portland will review potential changes to the supporting documents to determine whether they affect the stringency of the air quality strategies. If it is determined that stringency will not be affected, DEQ will submit those changes to EPA for concurrence and administrative incorporation into the Portland Metro Area CO Maintenance Plan."

Compliance Actions - Central City Parking Requirements

As noted in the State Conformity Regulations, these regulations were adopted by the City of Portland in 1995 and became effective January 8, 1996. These parking regulations are still in force and remain a part of City regulations pertaining to the Central City.

2 "DEQ Employee Commute Options Program (ozone only)

A 10% trip reduction target is required for employers who employ more than 50 employees at the same work site. See discussion above and Appendix D1-13."

Compliance Actions - DEQ Employee Commute Options Program

The ECO rule (OAR 340-242-0100 through 0290), applies to employers in the Portland area with *more than 50 employees* reporting to a single work site. Affected employers must provide incentives for employee use of alternative commute options. The incentives must have the potential to reduce commute trips to the work site by ten percent within three years. Annual employee surveys measure progress toward this goal.

Popular programs include transit subsidies, carpool matching and preferential parking for carpools, compressed work weeks (4/10's for example), telecommuting, and bike/walk programs. Most companies offer a guaranteed ride home for personal emergencies for commuters.

Failure to comply with the ECO rule is a Class II environmental violation and carries penalties that typically range from \$500 - \$2,000 for each day of violation.

According to the 2002 ECO Rule Information Clearinghouse, the following ECO Rule facts were found:

Total number of ECO-affected employers in the Portland metro region = 1142
Total number of ECO-affected employers with baseline surveys = 936
Total number of ECO-affected employers with Trip Reduction Plans ~ 400
Total number ECO-affected employers performing Annual Follow-up Surveys ~ 704
Total number of ECO-affected employers who have met the 10 percent trip reduction target or other compliance option = 585
ECO is getting 86 percent of its trip reduction from its 319 largest employers (those with more than 150 employees).
Total annual VMT reduction: 49,542,360
Annual VMT reduction from employers with more than 200 employees: 42,548,613

According to the *2002 Regional Transportation Demand Management Program Evaluation Report*, the auto-trip reduction number translates to a reduction of 852,014 vehicle-miles traveled per workweek, which, in turn, leads to reduction in the following air pollutants:

Hydrocarbons 6,276 lbs.

Nitrogen oxides 3,233 lbs.

Carbon monoxide 48,496 lbs.

Carbon dioxide 852,014 lbs.

This DEQ required program is implemented by 1.7 FTE DEQ staff members and progress has been documented for the latest year for data (2002) as follows:

- Fielded approximately 750 phone calls with questions about all facets of the ECO program.
- Initiated approximately 250 phone calls and letters to employers informing them that they were subject to the rules or helping them catch up if they were behind in complying.
- Identified businesses that were unaware of the ECO requirements, but were subject to the ECO rules through informal and formal methods. Accomplished this by purchasing mailing lists, browsing periodicals like Oregon Business magazine and The Oregonian, contacting chambers of commerce, getting

lists from TriMet, or identifying employers while in the field.

- Compiled approximately 200 ECO employee survey reports.
- Developed and implemented postcard system to remind employers when annual ECO survey was due.
- Developed and maintained ECO website and posted new information including DEQ's Variable Work Hours Handbook, Parking Management Handbook, End-of-trip Facilities case studies and low cost promotional ideas.
- Provided technical assistance to employers using DEQ's survey software.
- Maintained and updated the ECO employer database.
- Directed employers to organizations that could provide more in-depth help with alternate commute modes like TriMet, C-TRAN, SMART, Flexcar, CarpoolMatchNW and area TMAs.
- Developed materials that assist employers in complying with ECO requirements. Specific to 2002 were:
 - A pollution spreadsheet to show employers the environmental impact of employee transportation choices. This spreadsheet shows pollution reductions (or increases) from one survey period to the next.
 - A new form to collect more in-depth information from worksites.
 - Purchased promotional, "give-away" items advertising ECO related messages to distribute at transportation fairs, environmental events and one-on-one meetings with employers.

Further, TriMet has an Employer Outreach Program that also targets the region's ECO affected workers (those with 50 or more employees) as well as providing assistance to employers with fewer than 50 employees. The December 2003 Three-Year Work Plan outlines methods how tools such as educational programs and training materials, individual consultations, presentations and employer/employee training sessions to promote use of public transportation, carpooling, telecommuting, bicycling, walking, vanpools, flexcar, compressed work week and flexible work hour options. As the work plan states: "During the 2001-2003 fiscal years, TriMet helped Portland area employers set up, or maintain, TDM programs that impacted 190,520 workers."

The TriMet Employer Outreach Three Year Work Plan demonstrates how a local agency is working to reach new employers and further raise the number of employers that meet the ECO rule.

The above documentation of results shows that 51 percent of all ECO-affected employers in the Portland Metro region in the year 2002 have complied with a 10 percent trip reduction target, while 82 percent of all ECO rule affected employers have taken the first step - completed a baseline survey and both DEQ and TriMet have programs to increase

participation. This 82 percent of employers represents a higher percentage of total employees, as the participating employers tend to be firms with 150 employees or more. Further, the air quality credit claimed for this TCM is that based on actual program performance as noted in tables 7 through 9, below. Accordingly, this TCM has been substantially implemented.

3. ***"DEQ Voluntary Parking Ratio Program (ozone only)"***

Implement a voluntary parking ratio program providing incentives to solicit participation, including exemption from the Employee Commute Options program. See discussion above and Appendix D1-14."

Compliance Actions - DEQ Voluntary Parking Ratio Program

In 1999, the DEQ eliminated this program. (In 1996, Metro adopted mandatory parking requirements, see Appendix 8)

"Funding based Transportation Control Measures"

1. ***Increased Transit Service***

a. *Regional increase in transit service hours averaging 1.5% annually."*

Compliance Actions - Regional Transit Service

Table 2 below displays the total region-wide annual service hours for light rail and bus vehicles by year since the adoption of the region's transportation control measures (1996).

Table 2
Region-wide Annual Transit Service Hours

Fiscal Year	Service Hours			Percent Change	
	Rail	Bus	Total	cumulative from 1996	year-to-year
1996	59,544	1,821,120	1,880,664	0.0%	
1997	59,748	1,819,320	1,879,068	-0.1%	-0.0%
1998	66,708	1,869,324	1,936,032	2.9%	3.0%
1999	130,236	1,938,048	2,068,284	9.9%	6.8%
2000	143,100	2,009,148	2,152,248	14.4%	4.0%
2001	144,672	2,032,944	2,177,616	15.7%	1.1%
2002	183,648	2,048,484	2,232,132	18.6%	2.5%
2003	192,500	2,049,100	2,241,600	19.1%	0.4%
Average					2.6%

TriMet has actually increased transit service by an average of 2.6 percent since adoption of this transportation control measure. This is more than 1 percent greater than the 1.5 percent average transit service increase required annually. Furthermore, a large percentage of the increase in vehicle service hours have been provided on light rail vehicles which have three to six times the passenger carrying capacity of a bus, depending on whether a one or two car train is operating.

This level of transit service increase was made possible by large increases in payroll tax revenues within the TriMet district due to a favorable economic climate. It is unlikely TriMet will be able to sustain this level of growth over a long period of time. Service and financial planners at TriMet have forecast modest growth in service hours through the MTIP years, however, that will easily exceed the commitment to averaging 1.5 percent annual growth. Recently acquired authority from the 2003 State Legislature to increase the payroll tax rate once the recession has ended will further enable TriMet to meet this goal.

"This commitment includes an average annual capacity increase in the Central City area equal to the regional capacity increase. The level of transit capacity increase is based on the regional employment growth projections adopted by Metro Council on Dec. 21, 1995. These projections assume that the Central City will maintain its current share of the regional employment. Should less employment growth occur in the Region and/or the Central City, transit service increase may be reduced proportionately."

Compliance Action - Central City Transit Service

The following table illustrates the transit service increase for those transit services that serve the downtown.

Table 3
Central City Annual Transit Hours

1996			2003			Average Annual Increase 1996-2003
Bus	LRT	Total	Bus	LRT	Total	
1,340,508	59,544	1,400,052	1,424,592	192,516	1,608,220	
						2%

Note: Service hours are totals for all bus and light rail lines that serve the downtown Portland Central City area. The Portland Streetcar is not included.

It should be noted that the TCM is expressed in the percentage change in total transit service hours. However, there is a very large difference between the amount of bus service increase and LRT service increase in the Central City. Between 1996 and 2003, bus service in the Central City increased by 6 percent. However, LRT service in the Central City increased by 320 percent. This is significant because the additional capacity provided by LRT service is much greater than that provided by buses. For example, a standard 40-foot bus has a capacity of (seated and standing) of 65 people, while a two-car light rail train can

carry 266 people (133 people per car.) What the data also do not reflect is the elimination of buslines in favor of LRT service.

A more accurate way to consider how transit service has improved in the Central City is to look at capacity as illustrated in Table 4.

Table 4
Transit Capacity in the Portland Central City

Mode	Seated Capacity			Total Capacity (seated and standing)		
	Fall 1996	Fall 2003	Annual Average % Increase	Fall 1996	Fall 2003	Annual Average % Increase
Bus	1,172,354	1,214,256		1,830,016	1,895,494	
Rail	163,328	486,524		423,632	1,261,922	
Total	1,335,682	1,700,780	3.9%	2,253,648	3,157,346	5.7%

Accordingly, viewed from both a transit service hour and total capacity standpoint, the increase in transit in the Central City more than exceeded the TCM of 1.5 percent increase for the Central City. Based on these data and the transit service hours increases, it is concluded that the region has complied with the Central City transit service TCM.

b. Completion of the Westside Light Rail Transit facility.

Compliance Action - Westside Light Rail Transit

Westside Light Rail was opened on September 12, 1998. Since the Westside MAX Blue Line opened five years ago, 43.4 million rides have been taken along the 18-mile segment. Ridership on Westside MAX now averages 28,400 weekday boardings. In 2000, ridership on the line had already exceeded 2008 projections.

c. Completion of Light Rail Transit (LRT) in the South/North corridor by the year 2007.

Compliance Actions - South/North LRT

Interstate MAX, the 5.8 mile northern segment of this project is under construction and is scheduled to be in operation May 1, 2004. The southern portion of this project is planned in two phases - Phase 1 is an extension from Gateway regional center to the Clackamas regional Center, Phase 2 an extension from downtown Portland to Milwaukie. Phase 1 is tentatively scheduled for completion by 2008. Phase 2 would follow thereafter.

2 **Bicycle and Pedestrian Facilities**

a. *Multimodal facilities.*

Consistent with ORS 366.514³, all major roadway expansion or reconstruction projects on an arterial or major collector shall include pedestrian and bicycle improvements where such facilities do not currently exist. Pedestrian improvements are defined as sidewalks on both sides of the street. Bicycle improvements are defined as bikeways within the Metro boundary and shoulders outside the Metro boundary but within the Air Quality Maintenance Area.

Compliance Actions - Multi-Modal Facilities

As noted in the TCM, it is State law that all major roadway expansion or reconstruction projects on an arterial or major collector shall include pedestrian and bicycle improvements where such facilities do not currently exist. Accordingly, agencies seeking funding of transportation projects have designed and built projects to comply with this requirement.

b. *RTP Constrained Bicycle System.*

In addition to the multimodal facilities commitment, the region will add at least a total of 28 miles of bicycle lanes, shoulder bikeways or multi-use trails to the Regional Bicycle System as defined in the Financially Constrained Network of Metro's Interim Federal RTP (adopted July 1995) by the year 2006. Reasonable progress toward implementation means a minimum of five miles of new bike lanes, shoulder bikeways or multi-use trails shall be funded in each two-year Transportation Improvement Program (TIP) funding cycle.

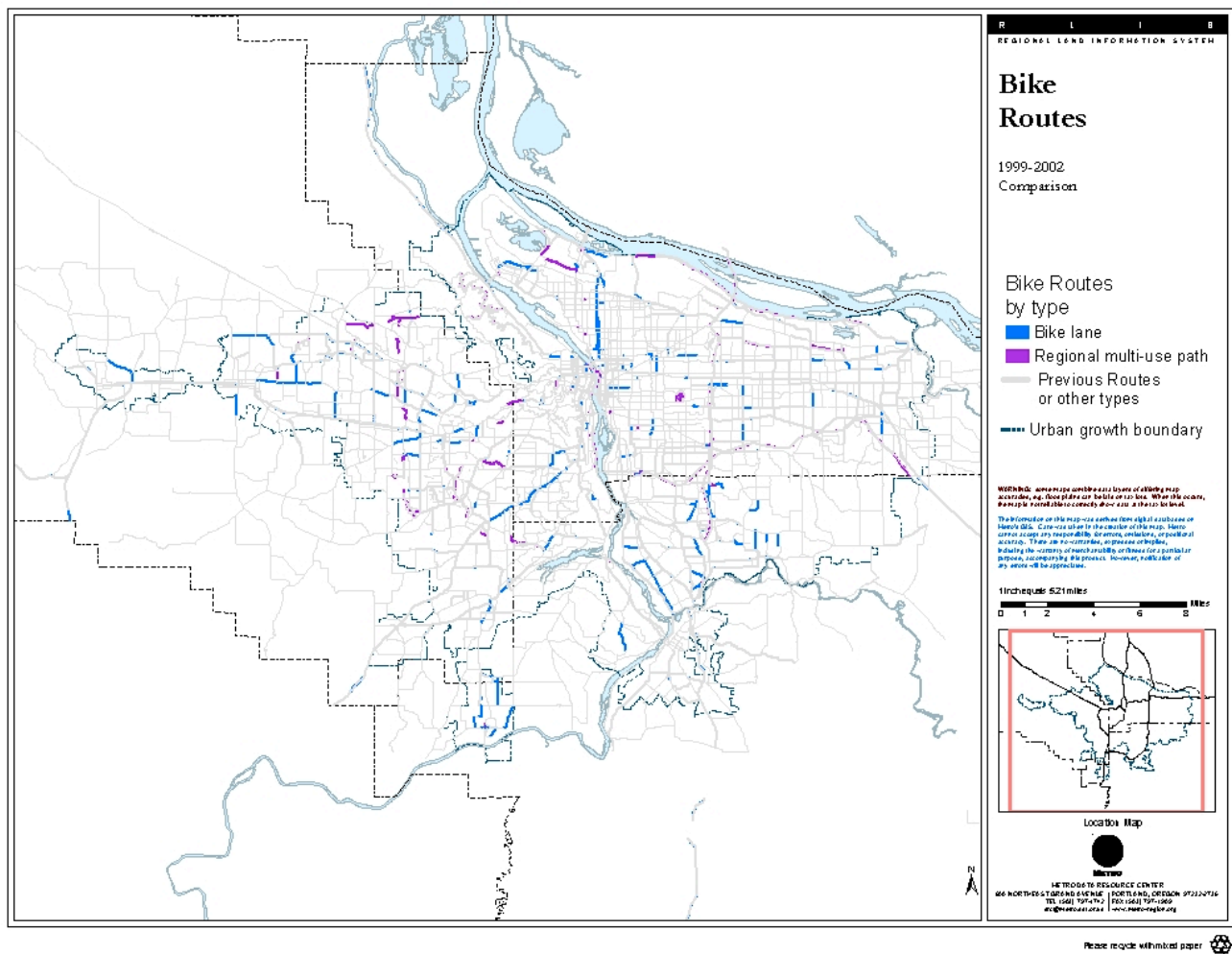
Bike lanes are striped lanes dedicated for bicycle travel on curbed streets, a width of five to six feet is preferred; four feet is acceptable in rare circumstances. Use by autos is prohibited. Shoulder bikeways are five to six foot shoulders for bicycle travel and emergency parking. Multi-use trails are eight to 12 foot paths separate from the roadway and open to non-motorized users.

Compliance Actions - Bicycle System

A data base of constructed bike lanes and related facilities should be completed for future conformity determinations. As a surrogate, a map comparing the bike system in 1999 and 2002 was prepared from the Metro *Bike There!* maps. The below map shows the 103 miles of new bike lanes and multi-purpose paths added during the period 1999 to 2002. That is, from a 1999 total of 519 miles, 103 miles of bikeway were added for a 2002 total of 622 miles. Of the current 622 miles of bikeways, 512 are bike lanes, defined as "striped portions of the roadway designated as a bicycle travel lane". The balance, 110 miles are regional multi-use paths defined as "physically separated from motor vehicle traffic, used by bicyclists,

³ This provides for the following exceptions:

- absence of any need;
- contrary to public safety; and
- excessively disproportionate cost.



pedestrians, skaters and other non-motorized travelers." Accordingly, the region has achieved this TCM adopted in 1996 that "...the region will add at least a total of 28 miles of bicycle lanes, shoulder bikeways or multi-use paths to the Regional Bicycle System as defined in the Financially Constrained Network of Metro Interim Federal RTP (adopted July 1995) by the year 2006."

In addition to bike lanes constructed as part of associated road improvements, this Transportation Priorities process allocated funding for approximately 3.8 miles of new off-street multi-use paths for bicycle and pedestrian use in the 2006-07 biennium. Funding for the design of an additional 4.5 miles of multi-use path was also provided as a part of these

projects. Therefore, the total of bike lanes and multi-use trails in the 2006-2007 MTIP is 8.3 miles, exceeding the five-mile minimum by 66 percent.

c. *Pedestrian facilities.*

In addition to the multimodal facilities commitment, the region will add at least a total of nine miles of major pedestrian upgrades in the following areas, as defined by Metro's Region 2040 Growth Concept: Central City/Regional Centers, Town Centers, Corridors & Station Communities, and Main Streets. Reasonable progress toward implementation means a minimum of one and a half miles of major pedestrian upgrades in these areas shall be funded in each two-year TIP funding cycle."

Compliance Finding - Pedestrian Facilities

New pedestrian projects awarded funding in the most recent Transportation Priorities process focused on improving the safety of pedestrian crossings at intersections. This includes the Central Eastside bridge heads project (which also includes access from Water Avenue to the Morrison Bridge) and the St. John's town center pedestrian improvements. The length of the improvements across intersections and the new Morrison Bridge access are approximately .4 miles in length. The Forest Grove town center pedestrian improvement project will be providing approximately 1.2 miles of new sidewalks in the 2006-07 biennium. This totals 1.6 miles, or about 7 percent over the 1.5 mile target for new pedestrian improvements. In addition, in the past over 9 miles of pedestrian facilities have been constructed. Accordingly, it is concluded that this TCM has been met.

2. Latest Emissions Model (OAR 340-252-0120)

- a. **Requirement:** *The State Conformity Regulations require that the conformity determination must be based on the most current emission estimation model available.*

Finding of compliance: Metro employed EPA's recommended Mobile 5a-h emissions estimation model in preparation of this conformity determination. Additionally, Metro uses EPA's recommended EMME/2 transportation planning software to estimate vehicle flows of individual roadway segments. These model elements are fully consistent with the methodologies specified in OAR 340-252-0120.

In addition, Metro has begun running the MOBILE6 model in order to begin familiarization with this new model in anticipation of its use in future conformity determinations.

3. Consultation (OAR 340-252-0130)

- a. **Requirement:** *The State Conformity Regulations require the MPO to consult with the state air quality agency, local transportation agencies, DOT and EPA regarding enumerated items. TPAC is specifically identified as the standing consultative body in OAR 340-225-0060(1)(b).*

Finding of compliance: Specific topics are identified in the Regulations that require consultation. TPAC is identified as the Standing Committee for Interagency Consultation. Most of the agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2004 RTP and the MTIP, (EPA and the Federal Transit Administration, whose closest offices are located in Seattle have not been able to participate at TPAC) including development of the financially constrained system, at both the region's technical and policy committee levels (TPAC and JPACT) during the development of the 2004 RTP. However, a special interagency meeting was convened on October 2, 2003, with all affected agencies, including EPA, FTA and FHWA as well as representatives of DEQ, TriMet and Metro participating in order to review an early draft of this document and discuss the conformity determination approach, schedule and assumptions prior to TPAC review..

- i. *Determination of which Minor Arterial and other transportation projects should be deemed "regionally significant."*

Metro models virtually all proposed enhancements of the regional transportation network proposed in the MTIP, the 2004 RTP and by local and state transportation agencies. This level of detail far exceeds the minimum criteria specified in both the State Rule and the Metropolitan Planning Regulations for determination of a regionally significant facility. This detail is provided to ensure the greatest possible accuracy of the region's transportation system predictive capability. The model captures improvements to all principal, major and minor arterial and most major collectors. Left turn pocket and continuous protection projects are also represented. Professional judgment is used to identify and exclude from the model those proposed intersection and signal modifications, and other miscellaneous proposed system modifications, (including bicycle system improvements) whose effects cannot be meaningfully represented in the model. The results of this consultation were used to construct the analysis year networks identified in Appendix 1 of this Determination.

- ii. *Determine which projects have undergone significant changes in design concept and scope since the regional emissions analysis was performed.*

All agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2004 RTP and 2004-07 MTIP and commented extensively on the Plan's preparation, including development of the 2004 RTP financially constrained system, at both the region's technical and policy committee levels (TPAC and JPACT).

- iii. *Analysis of projects otherwise exempt from regional analysis.*

All projects capable of being modeled have been included in the Conformity Analysis quantitative networks, regardless of funding source or "degree of significance", as reviewed by TPAC.

- iv. *Advancement of TCMs.*

All past and present TCMs have been implemented on schedule. There exist no obstacles to implementation to overcome. See C1(d) in this section., above.

- v. *PM10 Issues.*

The region is in attainment status for PM10 pollutants.

- vi. *forecasting vehicle miles traveled and any amendments thereto.*

The forecast of vehicle miles is the product of the modeled road and transit network defined in the financially constrained system, which was approved during extensive consultation with all concerned agencies including DEQ as part of TPAC and JPACT.

- vii. *determining whether projects not strictly "included" in the TIP have been included in the regional emission analysis and that their design concept and scope remain unchanged.*

All projects capable of being modeled have been included in the Conformity Analysis quantitative networks, regardless of funding source or "degree of significance".

- viii. *project sponsor satisfaction of CO and PM₁₀ "hot-spot" analyses.*

The MPO defers to ODOT staff expertise regarding project-level compliance with localized CO conformity requirements and potential mitigation measures which are considered on a project-by-project basis as a part of the environmental assessment. There exist no known PM₁₀ hot spot locations of concern.

- ix. *evaluation of events that will trigger new conformity determinations other than those specifically enumerated in the rule.*

This section is not applicable to the 2004 RTP or MTIP conformity determination.

- x. *evaluation of emissions analysis for transportation activities which cross borders of MPOs or nonattainment or maintenance areas or basins.*

The Portland-Vancouver Interstate Maintenance Area (ozone) boundaries are geographically isolated from all other MPO and nonattainment and maintenance areas and basins. Emissions assumed to originate within the Portland-area (versus the Washington State) component of the Maintenance Area are independently calculated by Metro. The Clark County Regional Transportation Commission (RTC) is the designated MPO for the Washington State portion of the Maintenance area. Metro and RTC coordinate in development of the population, employment and VMT assumptions prepared by Metro for the entire Maintenance Area. RTC is the lead agency for conformity determinations for plans and projects in the Washington State portion of the Maintenance Area.

Conformity of projects occurring outside the Metro boundary but within the Portland-area portion of the Interstate Maintenance Area were assessed by Metro as provided in State regulations. A request was made of each county to forward projects within the Maintenance Area boundary. While several projects were forwarded to Metro from Multnomah County for analysis, none of these projects was considered a regionally significant project. (see Appendix 7) No regionally significant projects outside the urban boundary have been declared to Metro for analysis.

- xi. *disclosure to the MPO of regionally significant projects, or changes to design*

scope and concept of such projects that are not FHWA/FTA projects.

In the process of updating the 2000 RTP and the 2004 RTP, local jurisdictions and regional and state agencies made changes to the projects. These changes will be reflected in the air quality modeling and considered in the conformity determination.

xii. the design schedule and funding of research and data collection efforts and regional transportation model development by the MPO.

This consultation occurs in the course of MPO development and adoption of the annual Unified Planning Work Program.

xiii. development of the TIP.

Development of the MTIP included review by TPAC, which is the designated body for interagency consultation.

xiv. development of RTPs.

Development of the 2004 RTP was directly reviewed by TPAC, which is the standing body for interagency consultation.

xv. establishing appropriate public participation opportunities for project level conformity determinations.

In line with other project-level aspects of conformity determinations, it is most appropriate that project management staff of the state and local operating agencies be responsible for any public involvement activities that may be deemed necessary in making project-level conformity determinations.

- b. **Requirement:** *The State Conformity Regulations require a proactive public involvement process that provides opportunity for public review and comment by providing reasonable public access to technical and policy information considered by the agency at the beginning of the public comment period and prior to taking formal action on the conformity determination for all transportation plans.*

Finding: Appendix 2 contains a timeline that describes key products and opportunities for public comment as part of the 2004 RTP. In addition, development of the MTIP included extensive public review and comment opportunities. Appendix 9 includes comments received from the earlier public comment period from October 31, 2003 through January 13, 2004. Comments received during the February 13, 2004 through February 27, 2004 period will be included in a separate document.

On September 29, 2003 a notice of Metro's intent to update the 2000 RTP and conduct an air quality conformity analysis of the 2004 RTP and 2004-07 MTIP was sent to affected

governments and interested residents, businesses and community groups. This notice summarized the public process and a timeline for adoption of the 2004 RTP, the 2004-07 MTIP and a conformity determination for both plans. On October 31, 2003, a 30-day public comment period began on the draft 2004 RTP air quality conformity analysis procedures and methodologies. Metro's website and transportation hotline also supplied information on the plan update and conformity determination process, including opportunities for public comment. Appendix 6 contains copies of the 45-day kickoff notice and Oregonian notice. In addition, a post card was mailed to approximately 2,500 persons who had asked to be placed on either the RTP or MTIP interested persons mailing list. The post cards were also mailed to representatives of neighborhood organizations and community planning organizations. An email newsletter was also sent out to elected officials and representatives of local, regional and state officials.

Further, on February 13, 2004 a new 14 day public review and comment period was advertised in the Oregonian including notification of a February 26, 2004 public hearing before the Metro Council and a deadline for written comments of February 27, 2004. Table 5 describes the 2004 RTP and 2004-07 MTIP conformity process.

Table 5

2004 Regional Transportation Plan /2004-07 MTIP Conformity Analysis Timeline

September 29, 2003	Notification of 2004 RTP and joint 2004 RTP/2004-07 MTIP air quality conformity process to affected governments, interested citizens, community groups
October 31, 2003	Begin 30-day public comment period on draft 2004 RTP and draft conformity determination document for the 2004 RTP and 2004-07 MTIP
December 4, 2003	Metro Council Public hearing on 2004 RTP, 2004-07 MTIP and draft conformity determination; close of public comment period
December 5, 2003	Review of 2004 RTP and air quality conformity analysis results and tentative action by TPAC
December 11, 2003	Action on 2004 RTP and 2004-2007 MTIP
January 9, 2004	2025 Air quality conformity results completed and announced on web site.
January 13, 2004	Close of public comment period.
January 15, 2004	Air quality conformity approvals by JPACT and Metro Council & transmittal to USDOT on January 16, 2004
February 5, 2004	USDOT requests Report changes and reopening public comment period
February 13, 2004	Revised Report completed and public notice published for additional 14 day public comment period
February 26, 2004	Metro Council public hearing
February 27, 2004	Close of public comment, distribution of all public comments to JPACT and Metro Council
March 1, 2004	JPACT action on revised conformity determination
March 4, 2004	Metro Council action on revised conformity determination

4. Timely Implementation of TCMs (OAR 340-252-0140).

- a. Requirement: *The State Conformity Regulations require MPO assurance that "the transportation plan, [and] TIP... must provide for the timely implementation of TCMs from the applicable implementation plan."*

Finding: See C.1(d), above. Based on this information, it is found that the TCMs are being implemented in a timely fashion.

5. Support Achievement of NAAQS

- a. **Requirement:** The State Implementation Plan (SIP) requires the 2004 RTP and 2004-07 MTIP to support achievement of NAAQS.

Finding:

Several policies and objectives in Section 1.3.4 of the 2004 RTP directly support achievement of National Ambient Air Quality Standards (NAAQS). These objectives are achieved through a variety of measures affecting transportation system design and operation, also described in Chapter 1 of the 2004 RTP. The plan sets forth goals and objectives for road, transit, freight, bicycle, and pedestrian improvements as well as for implementation of system and demand management strategies.

The highway system is functionally classified to ensure a consistent, integrated, regional highway system of principal routes, arterial and collectors. Acceptable level-of-service standards are set for maintaining an efficient flow of traffic. The RTP also identifies regional bicycle and pedestrian systems for accommodation and encouragement of non-vehicular travel. System performance is emphasized in the RTP and priority is established for implementation of transportation system management (TSM) measures.

The transit system is similarly designed in a hierarchical form of regional transitways, radial trunk routes and feeder bus lines. Standards for service accessibility and system performance are set. Park-and-ride lots are emphasized to increase transit use in suburban areas. The RTP also sets forth an aggressive demand management program to reduce the number of automobile and person trips being made during peak travel periods and to help achieve the region's goals of reducing air pollution and conserving energy.

In conclusion, 2004 RTP and the 2004-07 MTIP is in conformance with the SIP in its support for achieving the NAAQS. Moreover, the RTP provides adequate statements of guiding policies and goals with which to determine whether projects not specifically included in the RTP at this time may be found consistent with the RTP in the future. Section 1.3.7 in Chapter 1 of the 2004 RTP identifies key policies that guide the selection

of projects and programs to implement the RTP. Conformity of such projects with the SIP would require interagency consultation.

6. Quantitative Analysis (OAR 340-252-0190)

1. Conduct a Quantitative Analysis

Requirement: *OAR 340-252-0190 requires that a quantitative analysis be conducted as part of the 2004 RTP conformity determination. The analysis must demonstrate that emissions resulting from the entire transportation system, including all regionally significant projects expected within the time frame of the plan, must fall within budgets established in the maintenance plan for criteria pollutants. In the Portland-Vancouver Air Quality Maintenance Area these include ozone precursors (HC and NO_x) and carbon monoxide (CO). A specified methodology must be used to calculate travel demand, distribution and consequent emissions as required by OAR 340-20-1010. The Portland metropolitan area has the capability to perform such a quantitative analysis.*

Finding: For the Oregon portion of the Portland-Vancouver airshed, emission budgets have been set for various sources of pollutants (mobile, point, area) and are included in the SIP and in the region's Ozone and Carbon Monoxide Maintenance Plans. The 2004 RTP and 2004-07 MTIP must conform to the SIP mandated mobile emission budgets. Mobile emission budgets are set for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NO_x), and hydrocarbons (HC).

The region's approved Maintenance Plans identify two sets of analysis years, one set for winter CO and one set for summer ozone precursors (NO_x and HC). The CO budget years are 2007, 2010, 2015 and 2020. The ozone analysis years are 2006, 2010, 2015 and 2020. In addition, a plan horizon year must also be evaluated. For the 2004 RTP, the horizon year is 2025. Table 6 shows the budget years and associated emissions budgets. The 2004-07 MTIP is a subset of the financially constrained system described in the 2004 RTP.

Table 6**2004 RTP/2004-07 MTIP Mobile Emissions Budgets¹**

	Winter CO	Summer HC	Summer NOx
	(thousand pounds/day)	(tons/day)	(tons/day)
2006	<i>n/a</i>	41	51
2007	775	<i>n/a</i>	<i>n/a</i>
2010	772*	40	52
2015	801*	40	55
2020	856*	40	59
2025	856*	40	59

¹ Budgets are from the Maintenance Plan adopted in 1996 except as noted. Year 2025 budget based on Ozone Maintenance Plan emission budget "for years 2020 and beyond".

*Previous air quality conformity determinations have used Carbon Monoxide budgets based on a draft, July 12, 1996 copy of the Maintenance Plan. However, the correct budgets are those in the approved State Implementation Plan published in the September 2, 1997 Federal Register (FR), as cited in the FR in Section 52.1970 (c) (122)(i)(B), which revises the 2010, 2020 and years thereafter as listed in Table 5, above.

Source: Metro

The network that was analyzed is summarized in Appendix 1. The protocol for definition of the Determination's analysis and budget years is summarized in Appendix 3, including discussion of why each analysis year was selected. Appendix 4 contains a summary of the principle model assumptions, including a discussion of assumed transit costs, parking factors, and intersection density and the impact of these factors on travel mode selection by 2040 design type (e.g., central city, regional centers, town centers, station communities, mainstreets, employment areas, corridors, etc.). A detailed description of the network assumptions coded into Metro's regional model is contained in a 2004 RTP Financially Constrained System Atlas, available for review at Metro located at 600 NE Grand Avenue, Portland, OR 97232. The Atlas includes information about system and individual link capacities in the 2000 base year and capacities assumed after planned improvements as well as the year of expected operation of each planned improvement. The results of the quantitative analysis are shown in Table 7 and Figures 1 through 5. In summary, Metro's analysis indicates that, with regard to the established budgets in all budget years (i.e., 2006, 2007, 2010, 2015, 2020 and 2025), that regional emissions meets Federal and State requirements.

2. Determine Analysis Years.

- a. **Requirement:** *The State Conformity Regulations) require the first analysis year to be no later than 10 years from the base year used to validate the transportation demand planning model (340-252-0070), that subsequent analysis years be no greater than 10 years apart and that the last year of the 2004 RTP must be an analysis year (340-252-0070).*

Finding: See Appendix 3 regarding selection of analysis and budget years, including discussion of why each analysis year was selected.

3. Perform the Emissions Impact Analysis.

- a. **Requirement:** *The State Conformity Regulations) require Metro to conduct the emissions impact analysis.*

Finding: Calculations were prepared, pursuant to the methods specified at OAR 340-20-1010, of CO and Ozone precursor pollutant emissions assuming travel in each analysis year on networks that have been previously described. A technical summary of the regional travel demand model, the EMME/2 planning software and the Mobile 5a-h methodologies is available from Metro upon request. The methodologies were reviewed by TPAC.

4. Determine Conformity.

- a. **Requirement:** *Emissions in each analysis year must be consistent with (i.e., must not exceed) the budgets established in the maintenance plan for the appropriate criteria pollutants (OAR 340-252-0190).*

Finding: Metro's analysis indicates that regional emissions will remain within established budgets in all budget years

- Carbon Monoxide - 2007, 2010, 2015, 2020 and 2025
- Ozone - 2006, 2010, 2015, 2020 and 2025
- Nitrogen Oxides - 2006, 2010, 2015, 2020 and 2025

Table 7 provides a summary of these emissions and shows that the 2004 RTP and 2004-07 MTIP, conform with the SIP.

Table 7
2004 RTP/2004-07 MTIP Conformity Results¹

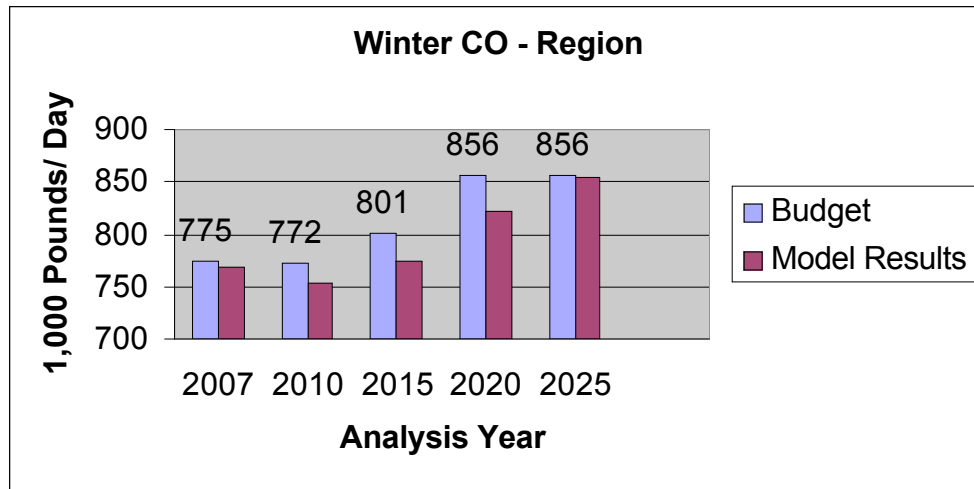
	Winter CO		Summer HC		Summer NOx	
	(thousand pounds/day)		(tons/day)		(tons/day)	
	<i>Budget</i>	<i>Model Result</i>	<i>Budget</i>	<i>Model Result</i>	<i>Budget</i>	<i>Model Result</i>
2006	<i>n/a</i>	<i>n/a</i>	41	39.4	51	46.1
2007	775	769.0	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
2010	772*	752.6	40	36.4	52	42.2
2015	801*	774.5	40	34.7	55	38.0
2020	856*	822.2	40	37.3	59	37.1
2025	856	854.4	40	37.2	59	41.3

¹ Budgets are from the Maintenance Plan adopted in 1996. Year 2025 budget should be adjusted based on emission budget input factors.
 *Previous air quality conformity determinations have used Carbon Monoxide budgets based on a draft, July 12, 1996 copy of the Maintenance Plan. However, the correct budgets are those in the approved State Implementation Plan published in the September 2, 1997 Federal Register (FR), as cited in the FR in Section 52.1970 (c) (122)(i)(B), which revises the 2010, 2020 and years thereafter as listed in Table 7, above.

Source: Metro

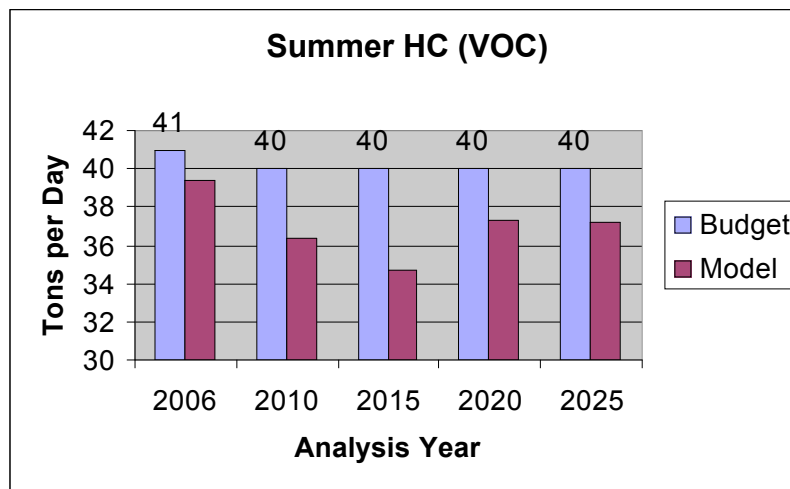
Figures 1, 2 and 3 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NOx), and hydrocarbons (HC) respectively. Figures 4 and 5 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) in the Portland central city subarea and 82nd Avenue subarea.

Figure 1



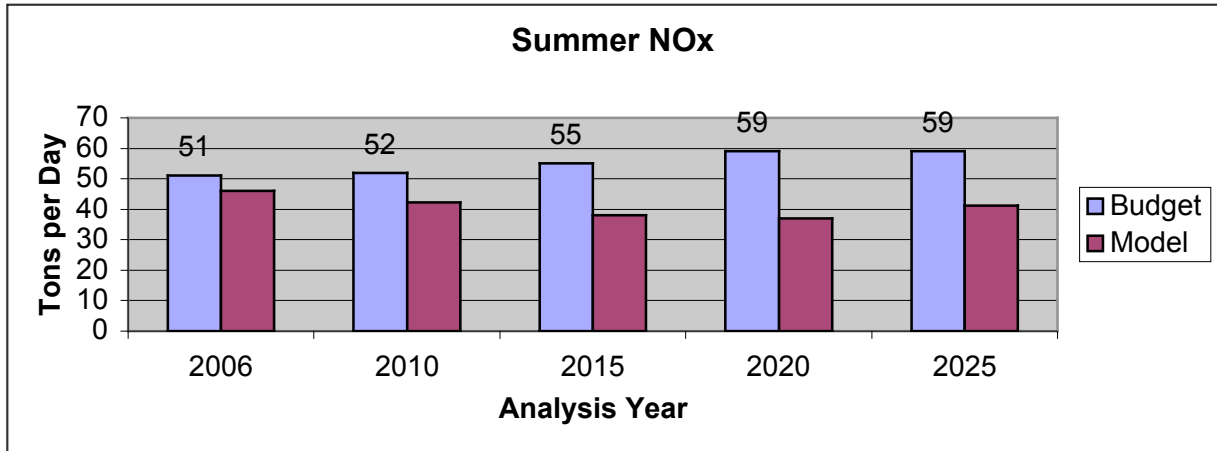
Based on RTP Financially Constrained System and 2004-07 MTIP
Source: Metro

Figure 2



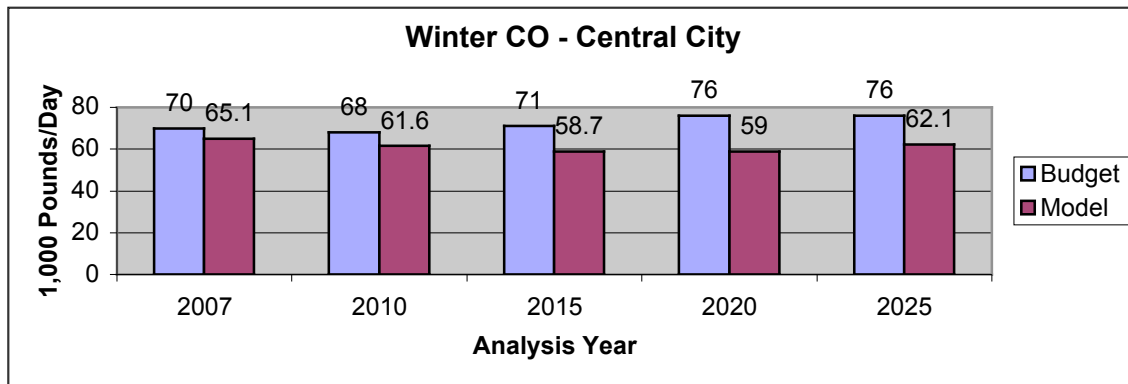
Based on RTP Financially Constrained System and 2004-07 MTIP
Source: Metro

Figure 3



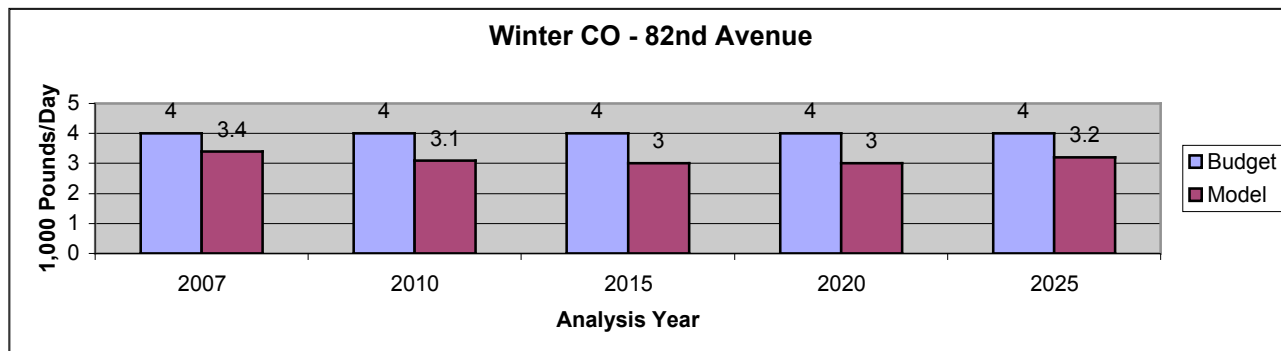
Based on RTP Financially Constrained System and 2004-07 MTIP
Source: Metro

Figure 4



Based on RTP Financially Constrained System and 2004-07 MTIP.
Source: Metro

Figure 5



Based on RTP Financially Constrained System and 2004-07 MTIP
Source: Metro

Seasonal Adjustments

The emission results that are compared with the budgets are computed with the use of MOBILE5a-h. After the raw emission totals are calculated several revisions are made to arrive at a final result reported above. The raw emission total comes from a number derived from the Metro Transportation Model that is set for transportation conditions in May of the desired year. However, the Carbon Monoxide emissions are of most concern in the winter. The precursors of ozone pollution, HC and Nox, are of most concern in the summer. Accordingly, adjustments are made to the raw numbers to account for transportation conditions for the needed season. That is, a seasonal adjustment is made for the CO emissions to reflect fewer trips in winter as compared with May and for HC and NOx for more trips in summer than occur in May. The seasonal adjustment also changes the travel model output from emissions per Average Weekday (a 5 day average) to emissions per Average Day (a 7 day average that includes weekends). These adjustments are illustrated for the years 2010, 2015 and 2025 in tables 8, 9 and 10, below.

Emission Credits

The above results also include the use of credits. That is, there are some measures that are being implemented or which will be implemented in the future which are expected to decrease air quality emissions from mobile sources. As specified in OAR 340-252-0230, credits may be used to reduce the estimated amount of pollution from mobile sources. The following tables show the unadjusted MOBILE5a-h results as well as the adjustments made for each credit and the final adjusted numbers for the years 2010, 2015 and 2025. Metro is using two credits, one for Tier 2 emission controls and a second for ECO rule benefits. As can be seen, the largest credit is the Tier 2 credit, especially in later years.

Table 7
Metro RTP 2010 Financially Constrained System
Forecast Conformity Emissions, Credits and Adjustments

	Metro Winter CO	Credit as % of Raw Total	Central City Winter CO	82nd Avenue Winter CO	HC	Credit as % of Raw Total	AQMA Nox	Credit as % of Raw Total
Raw Total	878.7		71.9	3.7	41.1		58.6	
Seasonal Adjustment	-114.8	n/a	-9.3	-0.5	1.1	n/a	1.3	n/a
Adjusted Total	764.5		62.6	3.2	39.2		57.3	
Credits								
Tier 2	0	0%	0	0	-2.8	-7%	-14.7	-25%
ECO	-11.9	-1%	-0.9	-0.0	-0.8	-2%	-0.4	-1%
Emissions with Credits	752.5		61.7	3.2	36.4		44.5	
Budget	772		68	4	40		52	

Includes: Seasonal Adjustments, ECO Rule Credits, and Tier 2 Adjustments to NOx and VOC.
Seasonal adjustments provide appropriate time of year calibration to forecast emission forecasts and are not a credit.

Table 8
Metro RTP 2015 Financially Constrained System
Forecast Conformity Emissions, Credits and Adjustments

	Metro Winter CO	Credit as % of Raw Total	Central City CO	82nd Avenue CO	HC	Credit as % of Raw Total	AQMA Nox	Credit as % of Raw Total
Raw Total	905.3		68.6	3.5	40.4		60.3	
Seasonal Adjustments	-117.7	n/a	- 8.9	-0.5	1.1	n/a	1.2	n/a
Adjusted Total	787.6		59.7	3.0	39.3		59.1	
Credits								
Tier 2	0		0	0	-3.8	-9%	-20.7	-34%
ECO	-13.1	-5%	-1.0	-0.0	-0.8	-2%	-0.4	-1%
Adjusted Model	774.5		58.7	3.0	34.7		38.0	
Budget	772		71	4	40		55	

Includes: Seasonal Adjustments, ECO Rule Credits, and Tier 2 Adjustments to NOx and VOC. Seasonal adjustments provide appropriate time of year calibration to forecast emission forecasts and are not a credit.

Table 9
Metro RTP 2025 Financially Constrained System
Forecast Conformity Emissions, Credits and Adjustments

	Metro CO	Credit as % of Raw Total	Central City CO	82nd Avenue CO	HC	Credit as % of Raw Total	AQMA Nox	Credit as % of Raw Total
Raw Total	1000.5		72.7	3.7	44.3		66.8	
Seasonal Adjustments	-130.1	n/a	- 9.5	-0.5	-1.2	n/a	-1.3	n/a
Adjusted Total	870.4		63.2	3.2	43.1		65.5	
Credits								
Tier 2	0		0	0	-4.9	-11%	-23.7	-35%
ECO	-16.0	-2%	-1.2	-0.1	-1.0	-2%	-0.5	-1%
Adjusted Model	854.4		62.1	3.2	37.2		41.3	
Budget	856		76	4	40		59	

Includes: Seasonal Adjustments, ECO Rule Credits, and Tier 2 Adjustments to NOx and VOC. Seasonal adjustments provide appropriate time of year calibration to forecast emission forecasts and are not a credit.

Tier 2 Emission Credit

The EPA final rule on Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements ("Tier 2 standards") for passenger cars, light trucks, and larger passenger vehicles was published on February 10, 2000 (65 FR 6698). The program is designed to focus on reducing the emissions most responsible for the ozone and particulate matter (PM) impact from these vehicles -- nitrogen oxides (NOx) and non-methane organic gases (NMOG), consisting primarily of hydrocarbons (HC) and contributing to ambient volatile organic compounds (VOC).

The program also applies the same set of federal standards to all passenger cars, light trucks, and medium-duty passenger vehicles. Light trucks include "light light-duty trucks" (or LLDTs), rated at less than 6000 pounds gross vehicle weight and "heavy light-duty trucks" (or HLDTs), rated at more than 6000 pounds gross vehicle weight). "Medium-duty passenger vehicles" (or MDPVs) form a new class of vehicles introduced by this rule that includes SUVs and passenger vans rated at between 8,500 and 10,000 GVWR. The program thus ensures that essentially all vehicles designed for passenger use in the future will be clean vehicles.

The air quality modeling software, MOBILE5a and MOBILE5b were released in 1993 and 1996, respectively, before the Tier 2 rules were proposed. As a result, MOBILE5a and MOBILE5b did not address the effects of Tier 2 exhaust and evaporative emission certification requirements on emissions for motor vehicles starting in 2004. These effects will be addressed in the MOBILE6 on-road emissions model, planned to be used for the Metro area in the future and being tested for use in the Metro area currently. However, for this air quality conformity determination, MOBILE5 is being used and as noted, does not account for these changes in emissions.

EPA has approved a method of including Tier 2 effects in calculating air quality impacts while using MOBILE5. This air quality conformity determination uses the MOBILE5a-h emission model and applies Tier 2 emission rate adjustments consistent with the *MOBILE5 Information Sheet #2, Tier 2 Benefits Using MOBILE5*, as published by the EPA April 2000. The Tier 2 adjustments were provided for emission rates

at 24.6 miles per hour. Metro determined the percentage change the Tier 2 adjustments made to the original emission at 24.6 miles per hour. The resulting percentage change was then applied to all emission rates for other speeds. The results of this credit are shown on the tables above.

ECO Rule Credit

One of the Transportation Control Measures included in the Ozone Maintenance Plan is the ECO, or Employee Commute Option rule. This rule states that a 10 percent trip reduction is required for employers who employ more than 50 employees at the same work site. As noted in section C 1. d. of this report, the ECO rule is being implemented in the region by DEQ as well as TriMet. As noted in the findings of the *2002 Regional Transportation Demand Management Program Evaluation Report, Metro, April 2003*) which calculates the air quality benefits of the ECO rule (see page 17 of the report), the ECO Rule has direct air quality benefits and these have been calculated on the basis of actual progress on this TCM. According to the *2002 Regional Transportation Demand Management Program Evaluation Report*, the auto-trip reduction number translates to a reduction of 852,014 vehicle-miles traveled per workweek, which, in turn, leads to reduction in the following air pollutants:

Hydrocarbons 6,276 lbs.

Nitrogen oxides 3,233 lbs.

Carbon monoxide 48,496 lbs.

Carbon dioxide 852,014 lbs.

These air quality benefits were directly credited against the forecasts of air quality emissions of the air quality model.

Appendix 4.3

Table A
Federal – State Revenues
Available for Capital Projects
in the Financially Constrained System

in the Financially Constrained System													
Highway									Transit				
		State Highway Trust Fund ¹	OTIA Highway Modernization	Planning and Development STIP	Maintenance and Preservation Projects to Current Standards	Federal Demonstration Projects (40% to Highways)	Borders and Corridors Program	Highway Total (w/out bonding)	Interstate MAX	Commuter Rail	I-205 MAX	Milwaukie LRT	Small Starts/BRT/Other
New TEA	2003	\$13.50				\$4.83		\$18.33	\$68.85				
	2004	\$9.78		\$2.00		\$4.15	\$3.46	\$17.39	\$77.50	\$20.50			
	2005	\$10.84		\$2.00		\$4.15	\$3.46	\$18.45	\$40.35	\$18.00			
	2006	\$10.35			\$0.25	\$4.15	\$3.46	\$29.96		\$23.25	\$57.50		
	2007	\$10.12			\$0.25	\$4.15	\$3.46	\$29.73			\$60.00		
	2008	\$9.91	\$12.00		\$0.25	\$4.15	\$3.46	\$29.52			\$60.00		
	2009	\$9.72	\$12.00		\$0.25	\$4.15	\$3.46	\$29.33			\$60.00		
New TEA	2010	\$9.54	\$12.00		\$0.25	\$4.15	\$3.46	\$17.15				\$60.00	
	2011	\$9.35	\$12.00		\$0.25	\$4.15	\$3.46	\$16.96				\$60.00	
	2012	\$9.18	\$12.00		\$0.25	\$4.15	\$3.46	\$16.79				\$60.00	
	2013	\$8.99	\$12.00		\$0.25	\$4.15	\$3.46	\$16.60				\$60.00	\$10.00
	2014	\$8.83	\$12.00		\$0.25	\$4.15	\$3.46	\$16.43				\$17.50	\$10.00
	2015	\$8.54	\$12.00		\$0.25	\$4.15	\$3.46	\$16.15					\$10.00
New TEA	2016	\$8.37	\$12.00		\$0.25	\$4.15	\$3.46	\$15.98					\$10.00
	2017	\$8.21	\$12.00		\$0.25	\$4.15	\$3.46	\$15.81					\$10.00
	2018	\$8.05			\$0.25	\$4.15	\$3.46	\$15.66					\$10.00
	2019	\$7.88			\$0.25	\$4.15	\$3.46	\$15.49					\$10.00
	2020	\$7.71			\$0.25	\$4.15	\$3.46	\$15.32					\$10.00
	2021	\$7.56			\$0.25	\$4.15	\$3.46	\$15.17					\$10.00
New TEA	2022	\$7.40			\$0.25	\$4.15	\$3.46	\$15.01					\$10.00
	2023	\$11.06			\$0.25	\$4.15	\$3.46	\$18.67					\$10.00
	2024	\$10.88			\$0.25	\$4.15	\$3.46	\$18.49					\$2.00
	2025	\$10.71			\$0.25	\$4.15	\$3.46	\$18.32					
Total; uncommitted or unappropriated													
		\$181.90	\$120.00	\$4.00	\$5.00	\$91.30	\$58.80	\$456.00	\$186.70	\$61.75	\$237.50	\$257.50	\$112.00

¹ Forecast assumes an annual one cent increase in the state gas tax beginning in Year 2002 plus an additional 1 cent every fourth year and increase in state vehicle registration fee of \$10 in Year 2002 and \$15 in Year 2012. All revenue not dedicated to modernization by state law are assigned to shortfall in maintenance and preservation costs. Source "Financial Assumptions for the Development of Metropolitan Transportation Plans"; ODOT, May 1998 (Oct. 2003 update by J. Svadlanak). \$20 million YOE modernization reserve available in 06-07.

Year 2003 is updated estimate from the 2000 STIP. All revenues are in 2003 \$.

Appendix 4.3

Table B
Regional Revenues
Available for Capital Projects
in the Financially Constrained System

Revenues								Commitments			Allocations								
(2003 \$ Millions)	Regional STP	CMAQ	Enhancements	Other Bridges (from federal sources)	Safety	Federal Demonstration (60% to non-highway)	Total Revenues	Allocation to HCT	Allocation to Regional Initiatives ¹	Total Available for New Regional Projects	Proposed Allocation to Transit (6%)	Proposed Allocation to East Multnomah County (12%)	Proposed Allocation to Portland (32%)	Proposed Allocation to Clackamas County (25%)	Proposed Allocation to Washington County (25%)	Willamette River Bridges (80% of Fed Bridge \$ + \$.6 m local)	OTIA Local Bridge to Willamette Bridges ²	OTIA Local Freight ³	OTIA I & II
2003	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82												
2004	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82	\$6.00	\$3.00	\$26.42						\$4.30			\$27.80
2005	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82	\$6.00	\$3.00	\$26.42						\$4.30			\$21.89
2006	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82	\$7.55	\$4.40	\$23.47	\$1.38					\$4.30			\$12.12
2007	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82	\$7.55	\$4.40	\$23.47	\$1.38	\$16.50	\$60.30	\$40.70	\$13.90	\$4.30	\$22.50		
2008	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82	\$7.55	\$4.40	\$23.47	\$1.41	\$2.82	\$7.51	\$5.87	\$5.87	\$4.30	\$17.59	\$12.50	
2009	\$14.76	\$9.47	\$1.40	\$0.92	\$1.45	\$6.82	\$34.82	\$7.55	\$4.40	\$23.47	\$1.41	\$2.82	\$7.51	\$5.87	\$5.87	\$4.30	\$17.59	\$12.50	
2010 (New TEA)	\$15.79	\$10.13	\$1.50	\$0.98	\$1.55	\$6.82	\$36.78	\$7.55	\$4.40	\$25.43	\$1.53	\$3.05	\$8.14	\$6.36	\$6.36	\$4.30	\$17.59	\$12.50	
2011	\$15.79	\$10.13	\$1.50	\$0.98	\$1.55	\$6.82	\$36.78	\$7.55	\$4.40	\$25.43	\$1.53	\$3.05	\$8.14	\$6.36	\$6.36	\$4.30	\$17.59	\$12.50	
2012	\$15.79	\$10.13	\$1.50	\$0.98	\$1.55	\$6.82	\$36.78	\$7.55	\$4.40	\$25.43	\$1.53	\$3.05	\$8.14	\$6.36	\$6.36	\$4.30			
2013	\$15.79	\$10.13	\$1.50	\$0.98	\$1.55	\$6.82	\$36.78	\$7.55	\$4.40	\$25.43	\$1.53	\$3.05	\$8.14	\$6.36	\$6.36	\$4.30			
2014	\$15.79	\$10.13	\$1.50	\$0.98	\$1.55	\$6.82	\$36.78	\$7.55	\$4.40	\$25.43	\$1.53	\$3.05	\$8.14	\$6.36	\$6.36	\$4.30			
2015	\$15.79	\$10.13	\$1.50	\$0.98	\$1.55	\$6.82	\$36.78	\$7.55	\$4.40	\$25.43	\$1.53	\$3.05	\$8.14	\$6.36	\$6.36	\$4.30			
2016 (New TEA)	\$16.90	\$10.84	\$1.60	\$1.05	\$1.66	\$6.82	\$38.88	\$7.55	\$4.40	\$27.53	\$1.65	\$3.30	\$8.81	\$6.88	\$6.88	\$4.30			
2017	\$16.90	\$10.84	\$1.60	\$1.05	\$1.66	\$6.82	\$38.88	\$7.55	\$4.40	\$27.53	\$1.65	\$3.30	\$8.81	\$6.88	\$6.88	\$4.30			
2018	\$16.90	\$10.84	\$1.60	\$1.05	\$1.66	\$6.82	\$38.88	\$7.55	\$4.40	\$27.53	\$1.65	\$3.30	\$8.81	\$6.88	\$6.88	\$4.30			
2019	\$16.90	\$10.84	\$1.60	\$1.05	\$1.66	\$6.82	\$38.88	\$7.55	\$4.40	\$27.53	\$1.65	\$3.30	\$8.81	\$6.88	\$6.88	\$4.30			
2020	\$16.90	\$10.84	\$1.60	\$1.05	\$1.66	\$6.82	\$38.88	\$7.55	\$4.40	\$27.53	\$1.65	\$3.30	\$8.81	\$6.88	\$6.88	\$4.30			
2021	\$16.90	\$10.84	\$1.60	\$1.05	\$1.66	\$6.82	\$38.88	\$7.55	\$4.40	\$27.53	\$1.65	\$3.30	\$8.81	\$6.88	\$6.88	\$4.30			
2022 (New TEA)	\$18.08	\$11.60	\$1.72	\$1.13	\$1.78	\$6.82	\$41.12	\$7.55	\$4.40	\$29.77	\$1.79	\$3.57	\$9.53	\$7.44	\$7.44	\$4.30			
2023	\$18.08	\$11.60	\$1.72	\$1.13	\$1.78	\$6.82	\$41.12	\$7.55	\$4.40	\$29.77	\$1.79	\$3.57	\$9.53	\$7.44	\$7.44	\$4.30			
2024	\$18.08	\$11.60	\$1.72	\$1.13	\$1.78	\$6.82	\$41.12	\$7.55	\$4.40	\$29.77	\$1.79	\$3.57	\$9.53	\$7.44	\$7.44	\$4.30			
2025	\$18.08	\$11.60	\$1.72	\$1.13	\$1.78	\$6.82	\$41.12	\$7.55	\$4.40	\$29.77	\$1.79	\$3.57	\$9.53	\$7.44	\$7.44	\$4.30			
Total 2003-2025	\$371.80	\$238.55	\$35.27	\$23.18	\$36.52	\$156.86	\$862.17	\$163.00	\$94.00	\$583.55	\$31.78	\$74.55	\$215.11	\$161.64	\$134.84	\$77.40	\$92.85	\$50.00	\$61.81

Years 2003-2007 revenues have been committed to projects and are not available for reallocation - amount shown in year 2007 is actual amount from regional and OTIA I/II sources committed to non-highway projects on financially constrained list in that area.

Year 2003 of STP, CMAQ and Enhancements updated based on TEA-21 authorization.

All revenues shown in 2003 \$. After 2003, federal revenues are expected to grow at the rate of inflation plus a 7% increase at each TEA authorization.

¹ Includes regional planning (\$850,000), Transit Oriented Development (\$2 m), Corridor Planning (\$.25), and RTO programs; including TMA start-ups (\$1.3 m).

² Assumes Metropolitan portion of funds based on state modernization formula. Two thirds of the metropolitan portion assumed to be allocated to Willamette River bridge projects.

³ Assumes 50% of statewide freight modernization funds allocated to Metro area projects.

Appendix 4.3

Table C
Local Revenues

	Clackamas County Jurisdictions								Multomah County Jurisdictions		
Year	Clackamas Co. System Development Charge	Clackamas Co. Urban Renewal District	Lake Oswego SDC	Lake Oswego Street Fund, Assessment Project Fund, and General Fund	Milwaukie State Gas Tax	Oregon City Urban Renewal	Oregon City SDC's and Street Fund	Locally Generated Revenues Available for Clackamas Co. Regional Capital Projects	Gresham Transportation Impact Fee	Gresham Urban Renewal	Locally Generated Revenues Available for Multnomah Co. Regional Capital Projects
2003	\$1.82	\$8.00	\$0.60	\$1.10	\$0.00	\$1.00	\$0.90	\$13.42	\$3.80	\$0.74	\$4.54
2004	\$1.94	\$8.00	\$0.60	\$1.10	\$0.00	\$1.50	\$0.80	\$13.94	\$3.80	\$0.74	\$4.54
2005	\$2.06	\$8.00	\$0.50	\$0.00	\$0.00	\$2.25	\$0.00	\$12.81	\$3.80	\$0.74	\$4.54
2006	\$2.18	\$8.00	\$0.50	\$0.00	\$0.20	\$0.25	\$0.50	\$11.63	\$3.80	\$0.74	\$4.54
2007	\$2.33	\$3.50	\$0.50	\$0.00	\$0.20	\$4.00	\$0.60	\$11.13	\$3.80	\$0.74	\$4.54
2008	\$2.54	\$3.50	\$0.50	\$0.00	\$0.20	\$1.30	\$0.90	\$8.94	\$3.80	\$0.74	\$4.54
2009	\$2.77	\$3.50	\$0.50	\$0.00	\$0.25	\$0.30	\$0.80	\$8.12	\$3.80	\$0.74	\$4.54
2010	\$3.02	\$3.50	\$0.50	\$0.00	\$0.25	\$0.30	\$0.30	\$7.87	\$3.80	\$0.74	\$4.54
2011	\$3.29	\$3.50	\$0.50	\$0.00	\$0.25	\$0.80	\$0.30	\$8.64	\$3.80	\$0.74	\$4.54
2012	\$3.58	\$3.50	\$0.50	\$0.00	\$0.25	\$0.00	\$0.30	\$8.13	\$3.80	\$0.74	\$4.54
2013	\$3.96	\$3.50	\$0.50	\$0.00	\$0.25	\$0.00	\$0.30	\$8.51	\$3.80	\$0.74	\$4.54
2014	\$4.46	\$0.00	\$0.50	\$0.00	\$0.25	\$0.00	\$0.30	\$5.51	\$3.80	\$0.74	\$4.54
2015	\$5.02	\$0.00	\$0.50	\$0.00	\$0.20	\$0.00	\$0.30	\$6.02	\$3.80	\$0.74	\$4.54
2016	\$5.65	\$0.00	\$0.50	\$0.00	\$0.20	\$0.00	\$0.30	\$6.65	\$3.80	\$0.74	\$4.54
2017	\$6.36	\$0.00	\$0.50	\$0.00	\$0.20	\$0.00	\$0.30	\$7.36	\$3.80	\$0.74	\$4.54
2018	\$7.15	\$0.00	\$0.50	\$0.00	\$0.20	\$0.00	\$0.30	\$8.15	\$3.80	\$0.74	\$4.54
2019	\$7.86	\$0.00	\$0.50	\$0.00	\$0.20	\$0.00	\$0.30	\$8.86	\$3.80	\$0.74	\$4.54
2020	\$8.63	\$0.00	\$0.50	\$0.00	\$0.20	\$0.00	\$0.30	\$9.63	\$3.80	\$0.74	\$4.54
2021	\$9.49	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$0.30	\$10.29	\$3.80	\$0.74	\$4.54
2022	\$10.44	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$0.30	\$11.24	\$3.80	\$0.74	\$4.54
2023	\$10.96	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$0.30	\$11.76	\$3.80	\$0.74	\$4.54
2024	\$11.51	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$0.30	\$12.31	\$3.80	\$0.74	\$4.54
2025	\$12.08	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$0.30	\$12.88	\$3.80	\$0.74	\$4.54
Totals for Years 2003-2025	\$129.09	\$56.50	\$11.70	\$2.20	\$3.30	\$11.70	\$9.30	\$223.79	\$87.40	\$17.00	\$104.40

All revenues in 2003 \$.

For RTP Project
#'s 5037,
5040,5049,
5059, 5062

Appendix 4.3

Table C
Local Revenues

	City of Portland						Washington County Jurisdictions				
						Total Locally Generated Revenues Available for Portland Regional Capital Projects					Total Locally Generated Revenues Available for Regional Capital Projects
Year	Portland Local Improvement Districts	Portland System Development Charge	Portland Urban Renewal Districts	Public - Private Development Agreement	Port of Portland		Washington Co. TIF (Roads)	Washington Co. TIF (Transit)	Washington Co. MSTIP	Co. Regional Capital Projects	
2003	\$1.10	\$1.50	\$3.50			\$6.10	\$7.32	\$1.39	\$27.20	\$35.91	\$59.96
2004	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$48.38	\$57.10	\$86.74
2005	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$14.07	\$22.78	\$51.29
2006	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$14.03	\$22.75	\$50.09
2007	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$19.08	\$27.80	\$54.64
2008	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.96	\$22.67	\$47.32
2009	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.91	\$22.63	\$46.45
2010	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.87	\$22.58	\$46.15
2011	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.82	\$22.53	\$46.88
2012	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.76	\$22.48	\$46.32
2013	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.71	\$22.42	\$46.64
2014	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.65	\$22.37	\$43.58
2015	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.59	\$22.31	\$44.03
2016	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.53	\$22.24	\$44.60
2017	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.47	\$22.18	\$45.24
2018	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.40	\$22.11	\$45.97
2019	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.33	\$22.05	\$46.61
2020	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.26	\$21.98	\$47.32
2021	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.19	\$21.91	\$47.91
2022	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.12	\$21.83	\$48.78
2023	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$13.05	\$21.76	\$49.23
2024	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$12.97	\$21.69	\$49.70
2025	\$1.10	\$1.50	\$3.50		\$5.07	\$11.17	\$7.29	\$1.42	\$12.90	\$21.61	\$50.20
Totals for Years 2003- 2025	\$25.30	\$34.50	\$80.50	\$36.70	\$111.51	\$251.81	\$167.66	\$32.72	\$365.28	\$565.66	\$1,145.65

Update status of \$9 million OHSU contribution toward Tram project to \$4.5 million LID and \$2 million TIF.
Public - private includes \$27.7 m for eastside streetcar and \$9 m for tram.

Appendix 4.3

RTP Transit Projects Costs and Revenues Financially Constrained System

Transit	Project Cost	Federal Grants	Tri-Met		Regional		Total Revenues
			General Fund	Other Local	Flexible Funds		
I-205 LRT	\$475.00	\$237.50		\$80.00	\$15.00	\$332.50	
Milwaukie LRT*	\$515.00	\$257.50		\$257.50	\$15.00	\$530.00	
Wilsonville-Beaverton Commuter Rail	\$113.50	\$61.75				\$61.75	
Streetcar; PSU to Riverplace	\$15.35	\$12.35		\$3.00		\$15.35	
Streetcar; Riverplace to Gibbs	\$20.00	\$18.00		\$2.00		\$20.00	
Streetcar; Gibbs to Bancroft	\$12.00	\$12.00				\$12.00	
Streetcar; Pearl District to Lloyd District	\$36.90	\$19.80		\$19.80		\$39.60	
Streetcar; Oregon Street to Water Avenue	\$44.00	\$22.00		\$22.00		\$44.00	
Aerial Tram; Marquam Hill to South Waterfront	\$15.50			\$15.50		\$15.50	
Bus Rapid Transit; Milwaukie to Oregon City	\$8.89	\$4.45				\$4.45	
Bus Rapid Transit; Foster Rd. to Damascus	\$23.70	\$11.85				\$11.85	
Bus Rapid Transit; Barbur Blvd to King City	\$23.10	\$11.55				\$11.55	
Transit Center Upgrades	\$15.18					\$0.00	
Park-and-ride Improvements	\$18.56					\$0.00	
Frequent Bus Improvements	\$17.70				\$31.78	\$31.78	
Local Bus Improvements	\$17.23					\$0.00	
Access Improvements	\$4.02					\$0.00	
Bus Stop Pads & Shelters	\$2.67					\$0.00	
Low Floor Route Conversion (Routes 20, 26, 40, 52, 62, 70, 76, 77)	\$3.05					\$0.00	
Buses for Expanded Service						\$0.00	
Operations Facilities for Expanded Service	\$141.30					\$0.00	
Totals	\$1,522.65	\$668.75	\$0.00	\$399.80	\$61.78	\$1,130.33	

* Regional flexible funds are not committed for Milwaukie LRT.

Appendix 6.0
2000 RTP Decision Record



2004 RTP



METRO

Appendix 6.0

2000 RTP Decision Record

The following list of documents represents the decision record for the 2000 RTP. The list is a compilation of all RTP documents and supporting policy and technical documents created during the 2000 RTP update. The documents are organized chronologically in three boxes and map tubes by subject area. The three boxes are titled "2000 RTP Supporting Documents." The three map tubes are titled "2000 RTP Documents."

Metro Charter

Metro Charter (1992)

Approved by the voters of the Metro area in 1992, the Charter sets forth Metro's functions and powers, authorizes Metro to address issues of regional significance and requires adoption of a Regional Framework Plan. (19 pages)

1992 Regional Transportation Plan

1992 Regional Transportation Plan (January 23, 1992)

The state acknowledged RTP adopted by the Metro Council in 1992 to update the 1989 plan and begin to incorporate the policy direction of the Transportation Planning Rule, federal Clean Air Act Amendments of 1990 and the Regional Urban Growth Goals and Objectives (RUGGOs). (160 pages)

2040 Growth Concept Related Documents

2040 Framework newsletters (1993-97)

Full newsletter published by Metro's Growth Management Services Department to update citizens and interested parties about key developments in regional growth management and transportation in a more extensive manner.

Region 2040 Concepts for Growth Report (June 1994)

A report describing Metro's Region 2040 program. The report outlines what Metro has learned about shaping this region's land-use and transportation future. The report was developed based on public input and technical analysis of the 2040 Growth Concept scenarios. (104 pages)

Transportation Analysis of the Growth Concepts (July 1994)

This report outlines a transportation analysis of potential 2040 Growth Concept scenarios and highlights general conclusions as a result of transportation modeling used in the analysis. (60 pages)

Region 2040: Recommended Alternative Technical Appendix (September 15, 1994)

This document provides a summary of data used to analyze the 2040 Growth Concept Recommended Alternative, including land use and transportation assumptions. (45 pages)

Metro 2040 Growth Concept (December 8, 1994)

This document contains the 2040 Growth Concept and map, and supporting analysis and appendices. (89 pages)

Regional Urban Growth Goals and Objectives (December 14, 1995)

This document contains an urban growth policy framework, including the 2040 Growth Concept, that represents the starting point for Metro's long-range planning program as required by ORS 268.380(1). The planning activities identified in this document contain implementation ideas for future study, including development of the Regional Transportation Plan. The Regional Framework Plan, functional plans such as the Regional Transportation Plan, and functional plan amendments must be consistent with RUGOOs and the 2040 Growth Concept. (41 pages)

Interim Federal Regional Transportation Plan

Interim Federal Regional Transportation Plan (July 1995)

The federally recognized RTP adopted by the Metro Council in 1995 to address new federal planning requirements in the Intermodal Surface Transportation Efficiency Act (ISTEA), the Clean Air Act and the Americans with Disabilities Act. (145 pages)

RTP Policy Development

Transportation Planning Public Involvement Policy (July 1995)

This document describes public participation procedures and guidelines that Metro is expected to follow in the development of regional transportation plans, programs and major projects. The document also includes a set of procedures for public involvement activities conducted by Metro as part of all Metro transportation planning, programming and project development activities where Metro acts as the lead agency. (31 pages)

Transportation Planning Local Public Involvement Policy (July 1995)

This document describes Metro's public involvement policy for local jurisdictions submitting projects for regional funding or other action. The document also includes a set of procedures for public involvement activities conducted at the local level. These procedures require that local transportation plans and programs meet minimum standards for public involvement at the local level prior to subsequent action by the Metro Council. (24 pages)

Draft Regional Bicycle Plan (October 1995)

This document provides the policy and planning direction for bicycle transportation planning in the Portland metropolitan region. This plan establishes draft regional goals, objectives and policies for bicycle transportation and served as the basis for updating the bicycle element of the 2000 RTP. (56 pages)

Regional Parking Management Program (December 1995)

This document summarizes a regional parking analysis conducted by Metro in response to requirements in the Transportation Planning Rule. The report estimates the number of non-residential parking spaces in the region and a policy discussion of approaches for reducing the number of parking spaces needed in the region. (90 pages)

Citizen Advisory Committee (CAC) Discussion Draft (March 22, 1996)

A 21-member citizen advisory committee was formed in 1995 to provide detailed public input on the plan to the Metro Council. The citizen advisory committee recommended transportation policies to guide development of the 2000 RTP. This document was released for public review and comment on March 22, 1996. (53 pages)

Public Comment Report (April 10, 1996)

This report provides a compilation of public comments received on the RTP CAC Discussion Draft (March 22, 1996). A comment period was held from March 22, 1996 to April 9, 1996. Comments were solicited through the 2040 Framework Spring 1996 newsletter, which was mailed to 40,000 households in the region, through advertisements in community newspapers and at a series of six Regional Livability Open Houses held March 30, 1996 to April 8, 1996. (110 pages)

Citizen Advisory Committee (CAC) Final Draft (April 19, 1996)

A 21-member citizen advisory committee was formed in 1995 to provide detailed public input on the plan to the Metro Council. The citizen advisory committee recommended transportation policies to guide development of the 2000 RTP. This document updates the March 22, 1996 CAC Discussion Draft based on public input received during the comment period held from March 22, 1996 to April 9, 1996. This document was released for public review and comment on April 19, 1996. (54 pages)

Public Comment Report (May 28, 1996)

This report provides a compilation of public comments received on the RTP CAC Final Draft (April 19, 1996). A comment period was held from April 19, 1996 to May 17, 1996. (135 pages)

RTP JPACT Recommendations (July 11, 1996)

This document reflects changes made to the CAC Final Draft based on public comments received between March 22, 1996 and May 17, 1996. This document was forwarded to the Metro Council Transportation Committee for consideration. (53 pages)

RTP Metro Council Transportation Planning Committee Recommendations (July 16, 1996)

This document reflects changes made to the JPACT draft based on Metro Council Transportation Planning Committee Recommendations. This document was forwarded to the Metro Council for consideration. (53 pages)

Summary of Public Comments and Recommendations (July 16, 1996)

This document provides a summary of public comments received March 22, 1996 to June 17, 1996 regarding the CAC Discussion Draft and CAC Final Draft and TPAC recommendations on disposition of those comments. (84 pages)

Regional Transportation Policy (July 25, 1996)

This document contains the final draft of regional transportation policies that were approved by resolution in July 1996 by the Joint Policy Advisory Committee on Transportation (JPACT), a group of local elected officials, and the Metro Council. The policies guided development of transportation strategies and projects that were incorporated into the 2000 RTP. (56 pages)

Congestion Management System

Interim Congestion Management System (January 1996)

This document describes federal ISTEA requirements for implementing a congestion management system (CMS) as they apply to the Portland metropolitan region. The document describes the federal CMS requirements and procedures for implementation. (26 pages)

RTP Systems Development, Part I

Draft Alternatives Analysis Findings (July 16, 1997 and revised December 9, 1997)

This document summarizes the results of an evaluation of the region's level of service policy for motor vehicles and public transportation. The study examined a series of five conceptual motor vehicle and transit systems for their ability to serve expected growth in the region. The document includes a detailed analysis of how each alternative performed according to a number of key performance measures as well as the costs associated with each system.

Discover the Choices Transportation Workshops Public Comment Report (December 1997)

This report summarizes public comments received during a series of six community workshops conducted during November 1997. The workshops were designed to provide information and solicit comments about the RTP and specific transportation improvements that had been identified in September and October 1997 by local jurisdiction staff, the RTP CAC and Metro staff.

Street Design Guidelines for 2040

Creating Livable Streets: Street Design Guidelines for 2040 (November 1997)

This document is a handbook that provides street design guidelines for consideration by local jurisdictions in support of the goals in the 2040 Growth Concept and the Regional Transportation Plan. All the guidelines are consistent with regional street design policies in Chapter 1 of the 2000 RTP.

Regional Framework Plan

Regional Framework Plan (December 1997)

This document sets out the land use, transportation, parks, water resources, natural hazards and related policy directives for the region. Chapter 2 of this plan deals with transportation.

Regional Framework Plan Appendices (December 1997)

This document provides supporting background information used to develop the Regional Framework Plan.

RTP Systems Development, Part II

Citizen Advisory Committee Idea Kit (January 6, 1998)

A compilation of guiding principles and transportation needs and projects generated by technical workshops held with local jurisdiction staff in September 1997, the RTP Citizen Advisory Committee in October 1997, and a series of public workshops held throughout the region in November 1997. This document served as the basis for development of a list of RTP projects for modeling purposes.

Proposed Transportation Solutions for 2020 (September 1998)

A compilation of a list and maps of projects and programs identified to address regional transportation needs through 2020. Each chapter of the document focuses on a different areas of the Portland metropolitan region, with a total of seven subareas. The document also provides a technical analysis of performance of the regional transportation system for each subarea based on RTP Round 1 model results. The document was distributed at a series of open houses held in Gresham, Oregon City, Portland and Beaverton in October 1998 and served as the basis for creation of the RTP Facts Pack (Fall 1999).

Getting There Newsletter (Fall 1998)

This document provides a detailed overview of the updated RTP.

RTP Public Comment Report (November 21, 1998)

This report summarizes specific comments gathered on surveys and written comments submitted to Metro during a series of open houses held throughout the region in October 1998 and in response to the RTP Getting There newsletter (1998) and Proposed Transportation Solutions for 2020 (September 1998).

Urban Growth Management Functional Plan

Urban Growth Management Functional Plan (September 1998 update)

Regional regulations relating to future growth, including specific requirements and tools to address future population and job growth, parking, water quality and street designs. Originally adopted in November 1996.

Oregon Highway Plan

Oregon Highway Plan (March 18, 1999)

The 20-year state highway plan that guides how state highways are developed and managed. The transportation planning rule requires that regional and local transportation plans be consistent with the highway plan. Copies of this document are available from ODOT at (503) 986-4121.

RTP Systems Development, Part III

Getting There Facts Pack (Fall 1999)

A compilation of an update to the Fall 1998 newsletter and 8 fact sheets that summarizes key transportation system findings and proposed strategic system improvements recommended in the November 5, 1999 RTP adoption draft. The fact sheets were distributed upon request as part of the public comment period held from October 1, 1999 through December 16, 1999. The fact sheets are also available on Metro's website.

1999 Regional Transportation Plan adoption draft (November 5, 1999)

A draft version of the RTP that was the focus of a public comment period from October 1, 1999 to December 16, 1999.

Public comment report (December 16, 1999)

A compilation of public comments on the adoption draft RTP and supplemental revisions received during a sixty-day public comment period from October 1, 1999 to December 16, 1999.

1999 Regional Transportation Plan resolution draft (December 16, 1999)

A draft version of the RTP, adopted by resolution No. 99-2878B and amended by Resolution No. 00-2888. (331 pages)

2000 RTP Supplemental Revisions (May 15, 2000)

This document contains a series of supplemental revisions to the 1999 RTP resolution draft (Resolution No. 99-2878B and amended by Resolution No. 00-2888). This document only excerpts sections of the draft RTP as necessary to describe the proposed supplemental revisions. (50 pages)

2000 RTP Appendix (May 15, 2000)

A draft compilation of technical and background documents used during the RTP update. (142 pages)

Public comment report (June 29, 2000)

A compilation of public comments on the resolution draft RTP and supplemental revisions received during the final 45-day public comment period from May 15, 2000 to June 29, 2000. (202 pages)

I-5 to 99W Connector Supporting Technical Documents

Southwest Corridor Study (September 1986)

This document evaluates motor vehicle and transit alternatives to address travel demand in southwest Washington County. (80 pages)

Western Bypass Study Alternatives Analysis (May 1995)

This document presents the Western Bypass Study Alternatives Analysis findings on five alternatives transportation scenarios. The purpose of the study was to identify alternatives for improving north-south circumferential travel through southeast Washington County. Copies of this document are available from ODOT at (503) 731-8200. (385 pages)

Western Bypass Study Alternatives Analysis Executive Summary (May 1995)

2000 RTP Decision Record
August 10, 2000

This document presents a summary of the Western Bypass Study Alternatives Analysis. Copies of this document are available from ODOT at (503) 731-8200. (63 pages)

Western Bypass Study Recommended Alternative Report (June 1996)

This document presents the Western Bypass Study recommended alternative findings. The report discusses the history and background of the study and the process that was followed in conducting the study, including a summary of alternatives analyzed. (92 pages)

I-5 to 99W Connector Metro Ordinance & Resolution

Ordinance No. 97-689A

This ordinance amends the 1992 RTP to require the need, function, mode and general corridor for the I-5 to 99W connector as shown in Exhibit A and supported by Exhibits B and C. **Exhibit A** identifies the general corridor for the I-5 to 99W connector. **Exhibit B (I-5 to 99W Connector Technical Report)** (March 1997) defines the need, function, mode and general corridor for the I-5 to 99W connector. **Exhibit C (I-5 to 99W Connector Findings of Fact and Statement of Reasons in Support of Exceptions to Goals 3, 4, 11 and 14)** (March 11, 1997) sets out findings of fact and reasons to support amendments to Metro's Regional Transportation and to comprehensive plans of affected local governments to include the I-5 to 99W connector.

Resolution No. 97-2497

This resolution amends the 1995 RTP Project List to include the highway and arterial improvements identified in the Western Bypass Study.

Sunrise Corridor Supporting Technical Documents

Draft Environmental Impact Statement: Sunrise Corridor Highway 212/224 (I-205 to US 26)
(July 15, 1993)

This document presents the draft environmental impact statement for the Sunrise Corridor Highway. This DEIS documents the study of impacts of the project alternatives and describes the purpose and need for this project, discusses alternatives examined, describes the existing environment and identifies the environmental consequences resulting from this project. Copies of the document are available from ODOT at (503) 378-0939. (419 pages)

Sunrise Corridor: Final Findings Report for the Major Investment Study Consultation
(February 5, 1998)

This document presents final findings of compliance with Major Investment Study (MIS) requirements. (19 pages)

Other 2000 RTP Supporting Documents

RTP Finance JPACT Presentation (5/11/00)

This document contains the presentation made to JPACT on May 11, 2000 regarding RTP finance.

System Performance Measures Rounds 1-4

This document contains the intra-ugb and region-wide system performance measures for each of four rounds of RTP modeling.

Miscellaneous RTP Fact Sheets/Handouts

This folder contains miscellaneous RTP fact sheets and handouts, including: RTP Adoption Package (June 2000), 1999 RTP Post-Resolution Activities (August 2000), RTP Adoption Timeline (Fall 1999), RTP Alternatives Analysis assumptions (November 1996), TV Highway Corridor motor vehicle and street design classifications (April 2000), RTP Quick Facts (April 1999), Region 2040 at a glance (December 1996) and 2000 RTP Public Involvement Timeline (June 2000).

Related Resolutions/Staff Report

This folder contains Resolution No. 96-2327 which adopts the RTP policies which served to guide development of the 2000 RTP, Resolution No 99-2878B which adopts the December 16, 1999 resolution draft RTP, Resolution No. 00-2888A which adopts amendments to the December 16, 1999 resolution draft RTP and Resolution No. 00-2969B which adopts the 2000 RTP as the federal Metropolitan Transportation Plan.

Ordinance and staff Report

This folder contains Ordinance 00-869A, which adopts the 2000 RTP, and related documents not found elsewhere in this decision record.

FY 2000-01 Unified Work Plan (3/16/00)

This document contains transportation planning activities of Metro and other area governments for fiscal year July 1, 2000 through June 30, 2001, including the RTP update. (114 pages)

Round 2 Analysis

This file contains key findings based on analysis of Round 2 model results for each RTP subarea. These findings served as the basis for development of the RTP subarea factsheets.

RTP Project Lists

This folder contains paper copies of key RTP project lists from April 1998 through May 11, 2000.

RTP Final Notice

This folder contains copies of the final notices sent to interest citizens, local governments, special districts as well as the mailing list.

Miscellaneous Correspondence

This file contains key RTP-related correspondence as itemized below:

- Letter from ODOT regarding RTP level of service policy. (November 11, 1997)
- Letter from ODOT regarding RTP level of service policy. (August 1, 2000)
- Letter from Metro to Westside Business Coalition on Transportation regarding RTP. (August 2, 2000)
- Letter from Westside Business Coalition on Transportation regarding RTP. (August 8, 2000)

Technical Memos dated 1997

This file contains key RTP-related technical memos as itemized below:

- Metro Regional Street Design Study final Analysis and Conclusions for Connectivity Case Studies (May 20, 1997)

Technical Memos dated 1998

This file contains key RTP-related technical memos as itemized below:

- Revised Schedule of RTP Workshops (January 30, 1998)
- TPAC Discussion Summary (February 20, 1998)
- RTP Transportation Analysis Zone Assumptions (March 12, 1998)
- Draft RTP Project List (April 10, 1998)
- RTP Update – Status of Round 1 Modeling and Analysis
- RTP Update – Additional Round 1 Modeling Information (July 15, 1998)
- TPAC Discussion Items – Round 2 RTP Modeling (August 11, 1998)
- RTP Update – Expanded Round 1 Modeling Analysis (August 20, 1998)
- RTP Update – Expanded Round 1 Modeling Analysis (September 18, 1998)
- Round 2 Modeling Assumptions for Pleasant Valley / Damascus Area (November 10, 1998)
- Round 2 Modeling Assumptions for South Washington County (November 20, 1998)
- RTP Round 2 Preferred and Strategic Systems (November 20, 1998)
- RTP Round 2 Existing Resource System (November 20, 1998)
- RTP Finance (December 28, 1998)

Technical Memos dated 1999

This file contains key RTP-related technical memos as itemized below:

- System Development Options for the Financially Constrained System (January 20, 1999)
- System Development Options for the Financially Constrained System (February 18, 1999)
- RTP Round 2 Existing Resources System (February 18, 1999)
- RTP Round 2 Project List (March 11, 1999)
- RTP Round 2 Model Assumptions (March 12, 1999)
- Tualatin Valley Highway Model Refinements (April 9, 1999)
- Additional Round 2 Analysis Materials (April 16, 1999)
- RTP Round 3 Refinement Modeling (April 16, 1999)
- RTP Strategy for TV Highway (May 10, 1999)
- Proposed Changes to RTP System Maps (June 17, 1999)
- Proposed Changes to RTP System Maps (June 25, 1999)
- Transit Public Information and Map Revisions (June 25, 1999)
- RTP Resolution (June 29, 1999)
- RTP Resolution Process (June 29, 1999)
- Summary of Changes to 1999 RTP (TPAC Working Draft 1) (October 15, 1999)
- TV Highway Corridor Study in draft RTP (October 19, 1999)
- Round 3 Analysis Materials (October 22, 1999)
- MPAC RTP Discussion Issues (October 27, 1999)
- RTP Adoption Draft Revisions and Discussion Issues (November 4, 1999)
- JPACT RTP Discussion Issues (November 18, 1999)
- Regional Transportation Plan – Adoption Draft (December 1, 1999)
- Exhibit “B” to Resolution No. 99-2878 TPAC Recommendations on Public Comments (December 3, 1999)
- Draft 1999 RTP (December 9, 1999)

- Final Comments on RTP Resolution Draft (December 16, 1999)
- Summary of Council Changes (December 16, 1999)

Technical Memos dated 2000

This file contains key RTP-related technical memos as itemized below:

- FHWA Borders / Corridors Funding Program (March 22, 2000)
- Final Round of Public Comments on the RTP (June 22, 2000)
- TPAC Recommendations on RTP Comments (June 29, 2000)
- Addendum - Final Round of Public Comments on the RTP (June 29, 2000)
- JPACT Recommendations on RTP Comments (July 13, 2000)