Basalt Creek Supplemental Transportation Analysis

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The purpose of this document is to demonstrate that the solutions identified in the 2012 Basalt Creek Transportation Refinement Plan are still appropriate in response to the 2018 Regional Transportation Plan update. The Basalt Creek Transportation Refinement Plan was adopted in 2012 and provided the framework for the development of concept and comprehensive plans for the Basalt Creek Urban Growth Expansion Area. Since that time, the plans for the area have refined the types of expected urban development that will occur in the area. In addition, regional planning efforts, such as the 2018 Regional Transportation Plan, have continued to be refined.

The Basalt Creek Transportation Refinement Plan was developed to determine the major transportation system necessary to serve development throughout the Basalt Creek Area. The Basalt Creek Transportation Refinement Plan set the stage for concept planning and comprehensive plan development for the Basalt Creek area. The transportation investments identified by the Basalt Creek Transportation Refinement Plan considered not only future growth within the Basalt Creek Planning area itself, but also future growth in adjacent areas, including:

- Southwest Tualatin Concept Planning Area
- Tonquin Employment Planning Area (in Sherwood)
- Coffee Creek Planning Area in Wilsonville

Since the development of the Basalt Creek Transportation Refinement Plan the Cities of Tualatin and Wilsonville have proceeded with concept and comprehensive planning for the Basalt Creek area. These planning efforts have built upon the Basalt Creek Transportation Refinement Plan as a framework for organizing the land use plans.

Furthermore, the 124th Avenue connection and Basalt Creek parkway has been constructed as an interim 3-lane facility between Tualatin-Sherwood Road and Grahams Ferry Road. The interim improvement is intended to serve existing transportation needs. Development along the corridor is encouraged to dedicate the right-of-way and complete the ultimate cross-section as appropriate.

The Regional Transportation Plan was updated in 2014 to reflect the Basalt Creek Transportation Refinement Plan. Regional land use growth assumptions and additional regional planning efforts have continued as the concept and comprehensive planning for the Basalt Creek area has been developed through an extensive multi-year and multi-jurisdictional public process.

With the advent of the 2018 Regional Transportation Plan and revised growth assumptions it seemed prudent to revisit the Basalt Creek Transportation Refinement Plan to ensure that the transportation system anticipated at the start of the process was indeed still adequate to serve the planning area.

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The following tables document the land use assumptions for the Basalt Creek Area.

Land Use in the 2010 Regional Transportation Plan travel demand forecast (Land Use in the 2012 Basalt Creek Transportation Refinement Plan Technical Report)

Zone Number	2005 Households	2035 Households	2005 Total Employment	2035 Total Employment		
1013	94	706	52	896		
1014	54	645	16	938		
Total	148	1,351	68	1,834		

Land Use in the 2018 Regional Transportation Plan travel demand forecast

Zone	2015	2040	2015 Total	2040 Total		
Number	Households	Households	Employment	Employment		
980	45	0	79	1,447		
981	107	646	167	1,447		
Total	152	646	246	2,894		

Buildout of the Basalt Creek Concept Plan

Zone	2015	2040	2015 Total	2040 Total		
Number	Households	Households	Employment	Employment		
980	45		79	2,227		
981	107	581	167	2,227		
Total	152	581	246	4,453		

It should be noted that the zone numbering system changed in 2013 but the geographic boundaries of these two zones remained the same.

Also note the total 2040 employment for both zones is the same number; however the model assumed zone 981 will have slightly more service employment than zone 980.

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The following table provides a list of transportation investments assumed in the 2040 regional travel demand forecast:

2040 Financially Constrained RTP Projects near Basalt Creek area

Nominating Agency	2018 RTP ID	Project Name	Start Location	End Location	Description	Estimated Cost (2016 Dollars)	Time Period	Financially Constrained	RTP Investment Category	Primary Purpose
Washington County	10568	Tualatin- Sherwood Rd Improvements	Langer Farms Pkwy	Teton Ave	Widen from three to five lanes with bike lanes and sidewalks.	\$35,000,000	2018- 2027	Yes	Roads and Bridges	Relieve current congestion
Sherwood	10674	Oregon- Tonquin Intersection Improvements	SW Oregon St	SW Tonquin Rd	Reconstruct and realign three leg intersection with a roundabout (partial two-lane roundabout) approx 400 feet northeast of existing roundabout at SW Oregon St & Murdock Rd. ROW, PE, design & construction. Potential for signal in-lieu of dual-roundabout system if better for development and once SW 124th Ave project is completed. If roundabout, project will include rapid flashing beacons at new roundabout and retrofit of adjacent roundabout to meet MUTCD suggestions for pedestrian crossings at roundabouts. This is currently a Washington County facility but would likely become Sherwood's upon completion of project to TSP standards.	\$2,400,000	2018- 2027	Yes	Roads and Bridges	Relieve future congestion
Wilsonville	10588	Grahams Ferry Rd Improvements	Day Rd	County line	Widen Grahams Ferry Road to 3 lanes, add bike/pedestrian connections to regional trail system and fix (project development only) undersized railroad overcrossing.	\$13,200,000	2028- 2040	Yes	Freight	Improve freight access to indust & intermodal
Washington County	10590	Tonquin Rd Improvements	Grahams Ferry Rd	124th Ave	Realign and widen to three lanes with bike lanes and sidewalks and street lighting.	\$11,400,000	2018- 2027	Yes	Roads and Bridges	Build Complete Street
Wilsonville	10853	Garden Acres Road Extension	Day Road	Ridder Road	Construct three lane road extension with sidewalks and cycle track and reconstruct/reorient Day Road/Grahams Ferry Road/Garden Acres Road intersection.	\$14,260,000	2018- 2027	Yes	Roads and Bridges	Relieve future congestion
Wilsonville	11243	Day Rd Improvements	Grahams Ferry Rd	Boones Ferry Rd	Widen street from 3 to 5 lanes with buffered bike lanes, sidewalks and street lighting. Improve structural integrity for increased freight traffic and provide congestion relief. Sidewalk infill and creation of Tonquin Trail multi-use path spur will reduce pedestrian and vehicle conflicts. Bike buffers will reduce bicycle and freight conflicts.	\$10,560,000	2028- 2040	Yes	Roads and Bridges	Relieve future congestion

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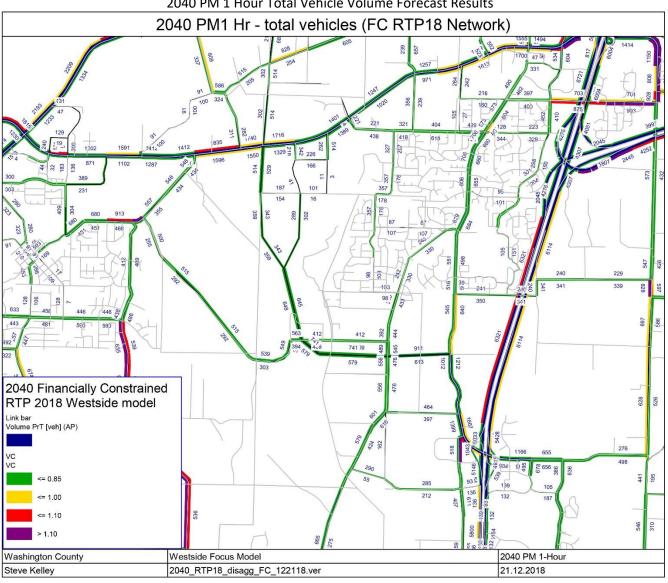
2040 Financially Constrained RTP Projects near Basalt Creek area (Continued)

Nominating Agency Tualatin	2018 RTP ID 11417	Project Name Blake Street Extension	Start Location 115th Ave	End Location 124th Ave	Description Extend Blake Street to create an east-west connection between 115th and 124th. Install signal at Blake and 124th. New road section will provide an alternative route for industrial traffic	Estimated Cost (2016 Dollars) \$17,000,000	Time Period 2018- 2027	Financially Constrained Yes	RTP Investment Category Roads and Bridges	Primary Purpose Increase access to jobs
Washington	11470	Basalt Creek	Grahams	Boones	on the high injury corridor: Tualatin/Sherwood Road. Extend new 5 lane Arterial with bike lanes,	\$31,700,000	2018-	Yes	Roads and	Serve new
County Washington County	11487	Parkway Boones Ferry Improvements	Ferry Rd Basalt Creek East- West Arterial	Ferry Rd Day Rd	sidewalks and street lighting. Widen from 3 lanes to 5 lanes with bike lanes, sidewalks and street lighting	\$1,200,000	2027 2028- 2040	Yes	Bridges Roads and Bridges	urban area Relieve future congestion
Wilsonville	11489	Boones Ferry / I-5 off ramp improvements	SB I-5 off ramp	Boones Ferry Rd	construct second right-turn lane	\$1,063,000	2028- 2040	Yes	Roads and Bridges	Relieve current congestion
Tualatin	11962	Grahams Ferry Rd	SW Ibach Rd	Helenius Rd	Upgrade SW Grahams Ferry Road to roadway standards between SW Ibach Road and Helenius Road.	\$5,048,800	2028- 2040	Yes	Roads and Bridges	Build Complete Street

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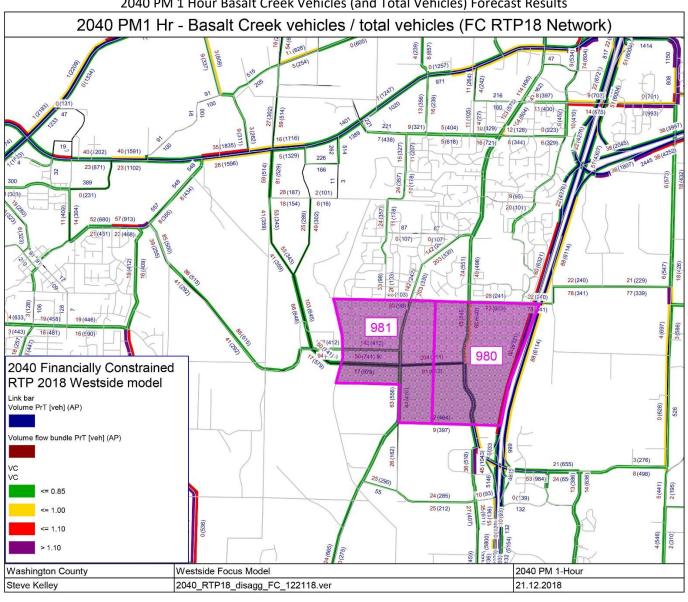
Financially Constrained 2018 Regional Transportation Plan Network 2040 PM 1 Hour Total Vehicle Volume Forecast Results



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Financially Constrained 2018 Regional Transportation Plan Network 2040 PM 1 Hour Basalt Creek Vehicles (and Total Vehicles) Forecast Results



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Summary

The 2018 Regional Transportation Plan contains a number of Financially Constrained projects identified in the Basalt Creek area. These projects were generally identified by the Basalt Creek Transportation Refinement Plan in 2012. It is anticipated that these projects will be implemented in conjunction with development in the area. The resulting planned system, including the build out scenario documented in the land use tables above, results in anticipated traffic operations consistent with regional and local level of service standards.

The level of service maps and analysis in this report are intended to provide a planning level system assessment consistent with the requirements for Transportation Planning in Oregon. A detailed operational analysis will be necessary prior to project development. The detailed operational analysis should consider needed turn lanes and assess vehicular movements at intersections to determine the appropriate design configuration. This analysis is intended to provide a generalized system assessment that would be an appropriate input into an operational evaluation necessary for project development.