



Columbia River Gorge Transit Study

Existing Conditions and Market Analysis Report

March 2016



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1 EXECUTIVE SUMMARY

BACKGROUND

The beauty of the Columbia River Gorge attracts thousands of visitors each day, particularly on weekends when the sun is shining. During these times, parking demand is often at or over capacity and access to picture-perfect sites such as Multnomah Falls can be challenging. With the 100th anniversary of the Historic Columbia River Highway approaching this year, local communities, public agencies, and land managers are looking for ways to mitigate congestion and provide transportation options. The Columbia River Gorge Transit Study was undertaken to understand existing transportation in the Columbia River Gorge (CRG) area, assess the market for transit to serve visitors and residents, and develop and recommend transit service options for two distinct timeframes:

- **Summer 2016 and summer 2017** – Pilot service to coincide with Historic Columbia River Highway 100th Anniversary and summertime parking congestion at Multnomah Falls.
- **2018-2020** – Near term service expansion between Portland and Hood River with stops at key Gorge destinations to serve a broader market and additional needs.

Project Goals

The Columbia River Gorge Transit Study is being guided by the following goals which all service options strive to achieve.

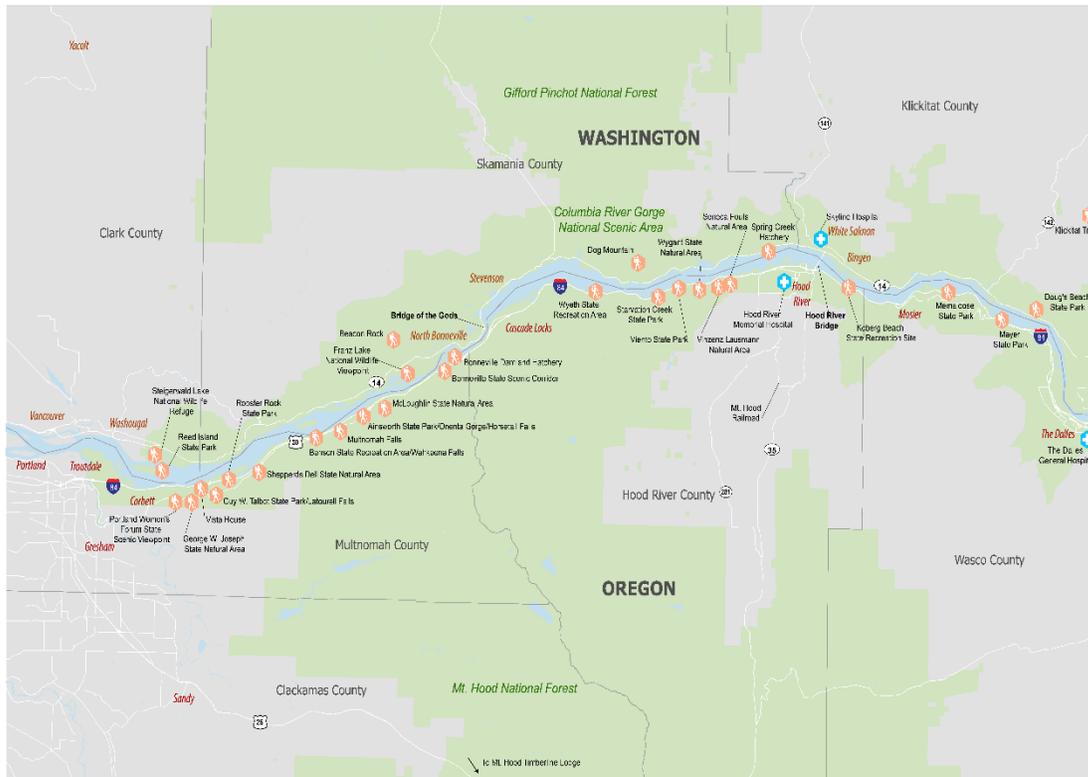
- Improve transit access and options to recreational destinations in the Columbia River Gorge and between East Multnomah County and The Dalles
- Enhance Gorge mobility and safety
- Address congestion and limited parking capacity at Multnomah Falls
- Protect natural and cultural resources by reducing illegal parking

Today, there are few public transit choices in the Gorge, and none that connect recreational and tourist attractions such as Multnomah Falls with population centers. This study will identify near-term transit solutions for both residents and visitors.

Study Area

The study area extends from the Portland Metro Area to the west to The Dalles to the east, along the I-84 Corridor (Oregon side of the Gorge). A study area map is presented in Figure 1-1.

Figure 1-1 Study Area Map



SUMMARY OF FINDINGS

This report reviews relevant planning documents, describes the existing conditions of transit in the Columbia River Gorge, and analyzed the market for future transit utilizing stakeholder and general public feedback. The findings from these investigations highlight several key themes that will direct the development of future transit service alternatives in the Columbia River Gorge. These themes are outlined below:

- **Increasing visitation has resulted in negative externalities.** Recent increases in visitation to Columbia River Gorge area destinations have been an economic boon for Gorge communities, but have produced negative effects for the natural environment, contributed to traffic congestion issues, and decreased visitor satisfaction due to resource competition. Visitation is expected to continue to increase, and the associated increased economic activity is beneficial for Gorge communities, but demand needs to be managed effectively to maintain access to resources and promote sustainable growth.
- **Congestion issues on the Historic Columbia River Highway.** As a result of the increased visitation and a constrained transportation network, traffic congestion and parking availability issues have become increasingly frequent occurrences. In order to address congestion issues, preserve a quality visitor experience, and enable increased access to Gorge destinations, transit service has been recommended by many plans and stakeholders.
- **Visitors want transit service.** Visitors overwhelmingly indicated they would consider using public transit to reach Gorge area destinations, yet current transit services are very

limited. Skamania County has offered a weekend bus service to reach trailheads on the Washington side of the Gorge for the last two years, but performance and ridership have been relatively low. Columbia Area Transit offers infrequent intercity transit in the Gorge area, but this is not useful for visitors or residents visiting recreational destinations. There is a clear desire for more accessible, convenient, and frequent transit service in the Gorge, and existing services can be leveraged to support this future service.

- **Gateway Transit Center is likely the key connection to greater Portland area transit.** Gateway Transit Center was ranked the most convenient location for connecting to Gorge transit routes with existing Portland area transit. A Gorge area transit service could connect with TriMet buses and light rail and C-Tran buses at Gateway, which would then allow riders to connect with other local and regional services around the western Gorge area.
- **Multnomah Falls is the key destination for transit in the Gorge and is also the location of the most acute congestion issues.** Transit service in the Gorge that serves the visitor market must make a stop at Multnomah Falls in order to provide access to this top visitor destination and address congestion issues.
- **Hood River is a key destination for transit in the Gorge, and can also be utilized as a transfer point.** Hood River was the second most highly ranked destination for transit (after Multnomah Falls) among both visitors and residents. It also represents an opportunity to connect to Mt. Adams Transportation Service (for transportation across the Hood River Bridge to White Salmon/Bingen) and the existing CAT service to The Dalles. If the Mt. Hood Express were to expand service from Timberline Lodge north to Hood River (as is under consideration), riders could complete a full loop around Mt. Hood.

REPORT PURPOSE & ORGANIZATION

This report is the first element of the study's planning effort and is intended to serve as the foundation for the development of service alternatives.

This report consists of four additional chapters, which are summarized below:

- Chapter 2 reviews recently completed and in-progress planning documents.
- Chapter 3 describes existing public and private transit services operating in the CRG area.
- Chapter 4 summarizes a market analysis conducted utilizing stakeholder and general public outreach.
- Chapter 5 synthesizes the findings from the document review, existing transit service analysis, and the market analysis to support the development of future transit service alternatives.

2 DOCUMENT/PLAN REVIEW

The review of plans, projects, and studies described in this section is intended to support and provide direction to the transit development efforts in the Columbia River Gorge study area. The documents reviewed in the following section are outlined in Figure 2-1.

Figure 2-1 Document Review Overview

Year	Document Title	Reference (see Appendix A for full citation)
Ongoing Planning Efforts		
2016	Mount Hood Transit Implementation Plan	(LSC Transportation Consultants, 2015a, 2015b)
2016	Gorge Tourism Studio	(Travel Oregon, 2015)
2016	Oregon Solutions: Historic Columbia River Highway Collaborative Assessment	(Oregon Solutions, 2015)
Published Documents		
2015	Columbia River Gorge Management Units Plan	(Oregon State Parks, 2015)
2015	Oregon Travel Impacts, 1991-2014p	(Dean Runyan Associates, 2015)
2014	Columbia River Gorge National Scenic Area Interagency Recreation Strategy	(Columbia River Gorge National Scenic Area Interagency Recreation Strategy Team, 2014)
2014	Columbia River Gorge Bicycle Recreation: Economic Impact Forecast for the Communities Along the Historic Columbia River Highway	(Dean Runyan Associates, 2014)
2013	Columbia River Gorge Meta-Analysis: A Spatial and Temporal Examination of Outdoor Recreation	(Burns, Chuprinko, & Shrestha, 2013)
2011	Management Plan for the Columbia River Gorge National Scenic Area	(Columbia River Gorge Commission, 2011)
2011	Columbia River Gorge Vital Signs Indicators Resident and Visitor Study	(Burns, 2011)
2011	Oregon 2011 Regional Visitor Report, Mt. Hood – Columbia River Gorge	(Longwoods Travel USA, 2011)
2011	Visitor Use Report – Columbia River Gorge National Scenic Area	(USDA Forest Service Region 6, 2011)
2008	Gorge TransLink Coordination Project	(Nelson\Nygaard Consulting Associates, 2008)

ONGOING PLANNING EFFORTS

Mount Hood Transit Implementation Plan (2016)

Drafts of two reports were available from LSC Transportation Consultants in December 2016:

- Mount Hood Express Service Expansion Analysis
- Service and Sustainable Operations Plan

These two reports are reviewed below.

Mount Hood Express Service Expansion Analysis

The Mountain Express bus transit service operated on the US-26 corridor between the City of Sandy and Rhododendron between 2004 and 2013. In 2013, with the aid of a Federal Lands Access Program (FLAP) grant, the service was expanded to reach Timberline lodge, a popular Mt. Hood recreation destination, and was renamed 'The Mt. Hood Express'. Continuing growth in ridership and desire from stakeholder agencies prompted Clackamas County (the operator of Mt. Hood Express) to investigate long-term funding solutions to sustain and possibly expand the service. LSC Transportation Consultants is working under the guidance of Clackamas County and the Mt. Hood Transportation Alliance (MHTA) Advisory Committee to evaluate existing conditions and propose future service and funding options; a draft report of their findings regarding service recommendations was available for review (LSC Transportation Consultants, 2015a).

The report considered several sources of information in making service recommendations:

- An on-board rider survey
- An on-board ridership data collection
- A survey of residents in the study area and visitors to the Mt. Hood region
- Public outreach meetings in Mt. Hood Area communities
- Market analysis using census data
- Peer review

Several service alternatives were proposed, ranging from a curtailing of operations if a sustainable funding source is not identified to an expansion of bus service north to Hood River and/or south to Warm Springs. A recommended alternative was not yet proposed in this draft report.

Mount Hood Service and Sustainable Operations Plan

This separate report addresses funding and governance for continuing and possibly expanding the Mt. Hood Express transit service. Several different governance options are reviewed (e.g., maintaining governance by Clackamas County, creating a transportation district, creating and intergovernmental transit agency) and the recommendation to continue governance and operations under Clackamas County is made. The report recommends operating the service through the Transportation Department as a Division of Public Transit; it is currently operated by Clackamas County's Department of Social Services. The report outlines a financial plan that recommends pursuing as many different funding sources as possible, including continuing to apply for federal funding (like the FLAP grant, 5310, and 5311 currently being used), continuing to utilize ODOT's Special Transportation Fund (STF), soliciting private sector contributions, continuing to receive funding from the county, and pursuing new taxation opportunities.

Gorge Tourism Studio (2016)

The Gorge Tourism Studio program is a series of tourism development workshops designed to assist communities interested in stimulating their local economies through sustainable tourism development, while protecting and enhancing local resources¹. The program is offered by Travel Oregon in partnership with 26 agencies and organizations. The Gorge Tourism Studio plans to develop the skills of communities and stakeholders in addressing these key transportation related challenges:

- Heavy seasonality of visitation
- Congestion at key attractions during peak season
- Capitalizing on and making the most of visionary projects underway in the Gorge
- Connecting resources for marketing the area as a destination

Oregon Solutions: Historic Columbia River Highway Collaborative Assessment (2016)

Oregon Solutions is an organization tasked by the Oregon Governor's office with resolving interagency conflicts related to sustainability and communities. The Historic Columbia River Highway Collaborative was designated by the Governor Kate Brown as an Oregon Solutions project in October 2015 with the focus of resolving congestion issues in the CRG while encouraging increasing levels of tourism and recreation.

PUBLISHED DOCUMENTS

Columbia River Gorge Management Units Plan (2015)

Plan Overview

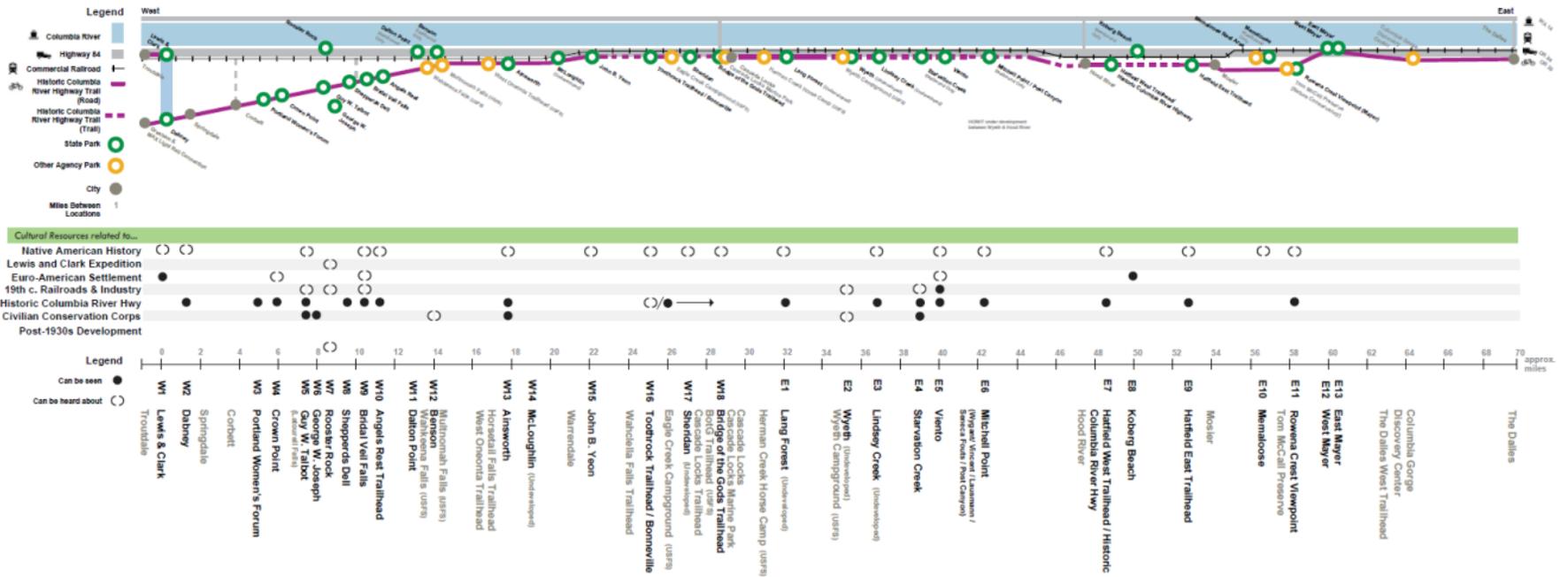
The Columbia River Gorge Management Units Plan was facilitated by the Oregon Parks and Recreation Department (OPRD), combining the inputs of federal agencies, state agencies, counties, cities, tribes, and stakeholders in the CRG area to agree upon common resource management and planning goals. The plan particularly addressed several factors in its update of the last plan (1994):

- Incorporation of ongoing Historic Columbia River Highway planning efforts into the Plan
- Increasing visitation to the CRG
- Economic opportunity sought via increased recreation
- Increased sophistication in natural resource understanding and management

As part of a unifying vision in the Plan, a Cultural Resources Inventory was developed and a corresponding map of the resources and how they are connected was created as illustrated in Figure 2-2. This diagram provides an overview of cultural resources and destinations on the Oregon side of the CRG.

¹ <http://industry.traveloregon.com/industry-resources/destination-development/rural-tourism-studio/columbia-gorge/>

Figure 2-2 Cultural Resources Network Diagram



Source: (Oregon State Parks, 2015)

The plan proposes specific improvements throughout the CRG corresponding to five different recreation types it identifies: hiking, cycling, water recreation, camping, and automobile touring. Automobile touring is identified as one cause of traffic congestion in the CRG, and the need to facilitate multi-modal transportation is mentioned, but no specific recommendations are made.

Public outreach efforts are reviewed within the plan, and several key themes were drawn from discussions with stakeholders and the public. One of those themes is identified as “Transportation and Congestion”. The results of the public outreach process indicated a consensus on the following ideas:

- A partnership with Gorge stakeholders and organizations should be developed to study Gorge-wide transportation alternatives, including the potential for ferries and shuttles using National Park Service models. Such a study should consider the following:
 - Design capacity of parks relative to maintaining a quality recreation experience.
 - Development of a shuttle to operate on a regular interval schedule and make stops in some parks
 - Options for transit service in the CRG
 - Partnerships with ODOT to consider developing a safer bike route from the Gresham MAX station to Dabney State Park and the rest of the Historic Columbia River Highway
- Promotion of carpooling, rideshare, and public transportation options for accessing CRG parks. The following details regarding these alternative modes are identified:
 - Support development of electric car charging stations at parks and reserved parking spaces for using green energy vehicles or a carpool
 - Explore providing discount day and overnight use fees for those arriving via car share or public transportation.

Additional comments from the public outreach process indicated that transit access should be provided to the Gorge. Service with stops in Cascade Locks and Hood River should be provided to facilitate this, including trips on the weekends to serve visitor traffic.

Rooster Rock

The Management Units Plan investigated each cultural resource area in the CRG separately to assess existing conditions and plans/opportunities for improvements. Rooster Rock has a very large parking area with minimal pedestrian amenities and large expanses of pavement. Rooster Rock has the potential to serve as a park and ride location for a shuttle service, but parking capacity may be an issue at some peak demand times. Parking demand is significantly less than capacity during most of the year, but large gatherings during the summer can utilize the lot to capacity.

Oregon Travel Impacts, 1991-2014p (2015)

This report examines the economic impacts of travel at the state, region, and county levels across Oregon from 1991 to 2014. ‘Mt. Hood/The Gorge’ is one of the regions examined – pages 57-60 summarize the following economic indicators regarding travel:

- Visitor spending
- Visitor volume

- Revenues from travel expenditures
- Employment supporting travel
- Tax receipts at the local and state levels from expenditures in travel

These metrics are also separated by consumer commodity (e.g., accommodations, food, retail sales), by temporal trip span, and accommodation type. These metrics are also aggregated by county to discern differences in economic indicators between the four Oregon counties in the Gorge area.

Columbia River Gorge National Scenic Area Interagency Recreation Strategy (2014)

The growth in recreation demand in the CRG and its associated negative externalities (e.g., natural resource impacts, traffic congestion) as well as the decline in available financial resources prompted the forming of a team of public recreation managers to coordinate in addressing the challenges of balancing recreation opportunities and resource management. The team is called the Columbia River Gorge Interagency Recreation Strategy team, and is composed of members from the following organizations:

- U.S. Forest Service Columbia River Gorge National Scenic Area Office
- U.S. Army Corps of Engineers
- U.S. National Park Service Lewis and Clark National Historic Trail
- U.S. Fish and Wildlife Service
- Oregon Parks and Recreation Department
- Washington State Parks and Recreation Commission
- Washington Department of Natural Resources
- Oregon Department of Transportation
- Washington Department of Transportation
- Oregon Department of Fish and Wildlife
- Washington Department of Fish and Wildlife
- Confederated Tribes of the Yakima Nation
- Columbia River Gorge Commission

The report contains an overview of natural resource conditions, recreation activities, trends in use and access (citing the results of (Burns et al., 2013; Burns, 2011)), and a discussion of growing concerns of the organizations. The plan proposes the following goals and corresponding strategies outlined in Figure 2-3.

Figure 2-3 CRG National Scenic Area Interagency Recreation Strategy Goals and Strategies

Goal	Strategy
Create a common vision for recreation in the Columbia River Gorge.	Ensure the existing regional plan is clearly understood and develop an interagency vision for regional recreation.
Clarify roles and identify the strengths and focus areas of each agency.	Meet with agencies to clearly define roles, strengths, and opportunities to leverage collective strengths through enhanced partnerships.
Practice working collaboratively toward recreation sustainability.	Improve communication and interagency collaboration through regular meetings, explore agreements and grant opportunities, and consider an annual recreation summit to address recreation demand and resource impacts.
Develop management strategies to address increasing demand, unmanaged recreation, and the capacity needs to meet current and future demand.	Address demand and unmanaged recreation through early engagement; map critical resources, existing and proposed recreation, and unmanaged recreation areas to provide context for management and planning efforts; formalize a stakeholder engagement process for added collaboration; and explore a trail master plan to address demand, management and unauthorized use. Strategies to build capacity include partnership and grant opportunities and developing a clearing house of volunteers.
Increase citizen stewardship.	Foster existing partnerships and volunteers while growing new relationships; develop a communications strategy to actively educate recreation users and improve stewardship.

Columbia River Gorge Meta-Analysis: A Spatial and Temporal Examination of Outdoor Recreation (2013)

This study expands on the analysis published in 2011 (Burns, 2011). Similar to that study, intercept survey methods were used to examine visitor demographics, preferences, and trip characteristics; activity levels and types; and economic outcomes.

Survey results indicated that the majority (53%) of visitors traveled from relatively nearby locations (50 miles or less) to visit the CRG. 64% of the visitors indicated they visited the CRG on day trips and spent an average of three hours recreating. These results indicate that a majority of visitors come from nearby locations to spend a portion of their day recreating in the CRG; long-term or overnight trips and visitors from farther locations do utilize the CRG but are less common.

Time series analyses conducted using the survey results also revealed an increase in recreation activities in the CRG and a corresponding increase in the perception of crowding. Several spatial subsets (called ‘niches’ – discrete areas of the CRG such as the ‘Wall and Falls’) were used to compare the above survey results across areas of the CRG.

Management Plan for the Columbia River Gorge National Scenic Area (2011)

The U.S. Congress commissioned the Management Plan for the Columbia River Gorge National Scenic Area, and the original plan was adopted in 1992. Revisions (adopted in 2004) were

incorporated in 2007, amendments and updates to the plan have been approved through September 2011. Transportation related policies stipulated in the plan are reviewed below.

Management Plan Goals

- Provide transportation facilities that meet the needs of the traveling public and implement this plan's recreation goals and objectives while protecting scenic, natural, cultural, and recreation resources.
- Promote alternative modes of transportation to improve the safety and enjoyment of the traveling public and to help alleviate future traffic demand.

Management Plan Objectives

- Encourage the provision of alternate modes of transportation to recreation destinations to reduce resource impacts and facilitate visitation by all segments of the public. Such alternate modes include, but are not limited to, shuttles, buses, bicycles, and boat access.
- Encourage tour boat and tour train access to important recreation facilities (such as the Gorge Discovery Center) as mass transportation alternatives that offer both access to such sites and recreational experiences in themselves.
- Improve linkages between different modes of transportation at major recreation sites in the Scenic Area.
- Improve access to recreation opportunities in the Scenic Area for the physically-challenged, less affluent, and other underrepresented user groups.

Management Plan Policies

- Accommodation of facilities for mass transportation (e.g., bus turnarounds) shall be required for all new high-intensity day-use recreation sites, except for sites predominantly devoted to boat access. These facilities are also encouraged for all new moderate-intensity day-use recreation sites where practicable.
- All transportation facilities or improvements associated with public recreation shall be designed to minimize impacts to scenic, natural, cultural, and recreation resources to the maximum extent practicable.

Management Plan Strategies

- Encourage provision of alternative modes of transportation (including bus, shuttles, rail, and boat) to recreation destinations in order to reduce resource impacts and to facilitate visitation by all segments of the public.
- Encourage provision of transportation modes that are recreational in nature.
- Improve linkages between different modes of transportation at major recreation sites in the Scenic Area.
- Encourage comprehensive recreation planning that fosters a unified, regional approach.
- Provide additional opportunities and facilities for recreational access to the Columbia River and its tributaries, scenic appreciation, and other resource-based recreation uses.

Columbia River Gorge Vital Signs Indicators Resident and Visitor Study (2011)

This study focused on assessing the following aspects of visits to the CRG using intercept survey methods to assess demographic, socioeconomic, and trip characteristics; consumer satisfaction and visitor preferences; and economic outcomes.

The survey indicated that 62% of visitors arrived to the CRG via I-84, 22% arrived via SR-14, and 12% arrived via the Historic Columbia River Highway. The most visited cultural attractions in the CRG (as measured by the survey) were the Historic Columbia River Highway, Multnomah Falls, and Vista House. Non-local visitors were over three times as likely to visit these sites as local visitors. The majority of survey respondents did not feel the CRG was too crowded on their trip.

Oregon 2011 Regional Visitor Report, Mt. Hood – Columbia River Gorge (2011)

A representative sample of survey respondents was drawn from 2010-2011 visitors to the Mt. Hood-Columbia River Gorge region, and these respondents were asked a series of questions regarding economic indicators, visitor profiles, and activity preferences. Transportation mode shares are identified for overnight trips to the CRG on page 25 with a breakdown of the personal (e.g., personal/rental car, bicycle) and commercial (e.g., plane, train, bus) vehicle types used. All of the statistics for the Mt. Hood-CRG trips are compared with statewide statistics to illustrate differences in the proportions between the CRG and Oregon state.

Visitor Use Report, Columbia River Gorge National Scenic Area (2011)

The National Visitor User Monitoring (NVUM) program collects and publishes data describing visitors, their preferences, and their behaviors at the national, regional, and forest level. The most recent published report (2011) indicated that a majority of visitors came from nearby locations; primarily from the Portland metro area. Demographic and socioeconomic characteristics regarding the visitors are also available, as well as data regarding economic outcomes (e.g., spending patterns).

Gorge TransLink Coordination Project (2008)

A report summarizing the results of the Gorge TransLink Coordination Project was completed by Nelson\Nygaard in 2008. Gorge TransLink is an alliance of rural transportation providers in the Gorge Skamania and Klickitat Counties, WA and Hood River, Wasco, and Sherman Counties, OR. This project reviewed previous coordinated transportation planning efforts and proposed interagency guidelines for Gorge TransLink partners to more seamlessly connect different transit services in the CRG. The proposed guidelines were as follows:

- Transfers
 - Clearly identify transfer locations.
 - Coordinate schedules for timed transfers to the greatest extent possible.
 - Interagency operator communication should occur to facilitate system transfers.

- Passengers are expected to transfer by their own means or with assistance from a personal aide or companion.
- Fares
 - Develop a consistent fare policy that allows fares to be transferred among different services.
 - Develop a universal fare instrument to be recognized by all services.
- Transit operators will make information available on how to utilize one or more transit services in the CRG.

Recommendations were also made regarding opportunities for vanpool programs. Finally, recommendations were made to designate the Mid-Columbia Economic Development District (MCEDD) as ‘Lead Agency’ and enable MCEDD to coordinate among the agencies to reach strategic goals, such as applying for grant funding for new or improved services.

KEY FINDINGS

The following are key findings from the published and ongoing planning efforts that help demonstrate the need for expanded transportation options, especially improved transit mobility and access, in the Columbia River Gorge.

Increases in Visitation and Activity

Economic activity (e.g., visitation, spending) has increased rapidly in the CRG area. While this increase in activity has resulted in economic benefits for the agencies, communities, and businesses in and around the CRG area, associated negative externalities (e.g., traffic congestion, crowding) are becoming increasingly apparent. Many of the planning efforts reviewed herein are grappling with the challenge of encouraging increasing levels of economic activity while still maintaining a quality recreation experience and minimizing natural resource impacts. Transportation planning is one tool that can be used to address these seemingly conflicting objectives.

Transportation Options

Increased economic activity in the CRG area has led to an increased desire from agencies, stakeholders, and members of the public for transportation options in the CRG area. Different ideas have been proposed for what these transportation options might look like; the options proposed are reviewed below:

- Encouragement of carpool, rideshare, and car sharing programs for travel to and within the CRG area. These options could be incentivized using reduced fees for park visitation or reserved parking spaces for high occupancy vehicles.
- Shuttle/bus service circulating throughout CRG destinations
- Bus service connecting nearby regional transit systems with CRG destinations
- Possible expansion of Mt. Hood Express bus transit service north to Hood River

Bicycle Recreation/Travel

Increasing levels of bicycle recreation in the CRG (Dean Runyan Associates, 2014) could present an opportunity for increased transit use in the CRG area. It is estimated that bicycle recreation

and travel in the CRG will continue to grow as the new sections of the Historic Columbia River Highway continue to open to bicyclists in the future. Bicyclists may be able to utilize transit for some portion of their trip. Transit service could enable some bicyclists to park their vehicles further from areas of the CRG overburdened by parking demand; or negate the necessity of a vehicle altogether for those traveling from nearby areas.

New transportation services in the CRG should accommodate bicyclists to the best extent possible by providing bicycle racks on vehicles, bicycle parking areas at transit stops and destinations, and being cognizant of sharing the roadway with bicyclists. Improving the accommodation of bicycle travel in the CRG can have a positive impact on the growth in economic activity related to bicycle travel and could potentially decrease reliance on automobiles in the CRG.

3 REVIEW OF EXISTING SERVICES

This section reviews the existing transit and transportation services in the Columbia River Gorge area. The reviewed services are separated into public and private transportation providers. A map of the study area denoting fixed route services, transfer locations, and destinations is shown in Figure 3-1.

Columbia River Gorge Transit Study | Existing Conditions and Market Analysis Report
 Oregon Department of Transportation, Region 1

Figure 3-1 Study Area Map of Transit Services and Destinations



PUBLIC TRANSPORTATION PROVIDERS

This section provides a detailed review of public transportation providers operating within the Columbia River Gorge study area. Public transportation providers are separated into (1) primary services providing transportation within the CRG study area and (2) services that connect to these primary providers from other areas around the CRG. The providers reviewed are summarized in Figure 3-2.

Figure 3-2 Public Transportation Providers Summary

Transportation Provider	Area Served (relative to CRG area)	Type of Service (relative to CRG Area)
Primary Services based in CRG area		
Columbia Area Transit (Hood River County Transportation District) ²	The Dalles, Hood River, Portland	Fixed-route and Demand-response
Mid-Columbia Council of Governments LINK ³	The Dalles, Hood River, Portland	Fixed-route and Demand-response
Skamania County Public Transportation ⁴	Skamania County	Fixed-route and Demand-response
Mt. Adams Transportation Service (MATS) ⁵	Klickitat County	Fixed-route and Demand-response
Connecting Services based outside of CRG area		
Sandy Area Metro (City of Sandy) ⁶	Gresham Transit Center and City of Sandy	Fixed-route and Demand-response
Mt. Hood Express (Clackamas County) ⁷	US-26 from City of Sandy to Mt. Hood	Fixed-route
C-TRAN ⁸	Clark County	Fixed-route and Demand-response
Ride Connection ⁹	Eastern Multnomah County	Demand-response
TriMet ¹⁰	Eastern Multnomah County	Fixed-route and Demand-response

² <http://community.gorge.net/hrctd/>

³ <http://mccog.com/transportation/>

⁴ <http://www.skamaniacounty.org/senior-services/homepage/services/public-transportation/>

⁵

<http://www.klickitatcounty.org/senior/ContentROne.asp?fContentIdSelected=1835930300&fCategoryIdSelected=1478042651&fX=X>

⁶ <http://www.ci.sandy.or.us/Transit/>

⁷ <http://www.mthoodexpress.com/>

⁸ <http://www.c-tran.com/>

⁹ <http://www.rideconnection.org/Ride/Home.aspx>

¹⁰ <http://trimet.org/>

Primary Services

The following public transportation services operate within the CRG study area.

Hood River County Transportation District (Columbia Area Transit)

Service Summary

The Hood River County Transportation District (provides transit service in Hood River County under the name of Columbia Area Transit (CAT). Fixed route service between Hood River and Portland is provided once per day (round trip) on Tuesdays and Thursdays. Fixed-route service between The Dalles and Hood River is provided three times per day (round trip) Monday through Friday. Demand-response service is provided to the Hood River County general public to reach destinations in Portland, Hood River, Odell, Parkdale, and Cascade Locks Monday through Friday. CAT’s fixed-route and demand-response fares are summarized in Figure 3-3.

Figure 3-3 Columbia Area Transit Fares

Fare Type (all prices one-way)		Fare Cost
Fixed Route		
Hood River – The Dalles	General Public - One Way Trip	\$3.00
Hood River - Portland	General Public - One Way Trip	\$8.00
Demand-Response		
Hood River	General Public	\$1.25
Odell	General Public	\$1.50
Parkdale	General Public	\$2.00
Cascade Locks	General Public	\$2.25
Shopping Trip Fares (special days for shopping - the fare takes care of all stops for shopping)		
Hood River	Wednesdays	\$2.50
Odell	Fridays	\$3.00
Parkdale	Fridays	\$4.00

Ridership

Ridership data were received for May-October 2015 from Columbia Area Transit. This ridership data is illustrated in Figure 3-4 (Hood River to Portland) and Figure 3-5 (Portland to Hood River) using boxplots to show the distribution of ons (boardings) and offs (alightings) by stop and month. The boxplots indicate the median number of passengers boarding or alighting as well as the spread of the data.

Figure 3-4 CAT Boarding/Alighting Distributions by Stop and Month (Hood River to Portland)

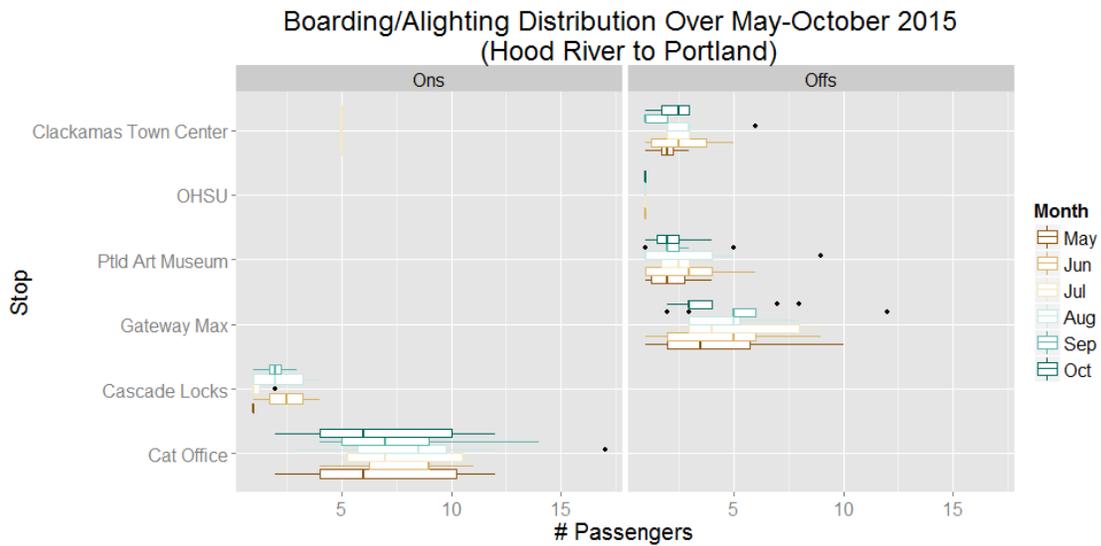
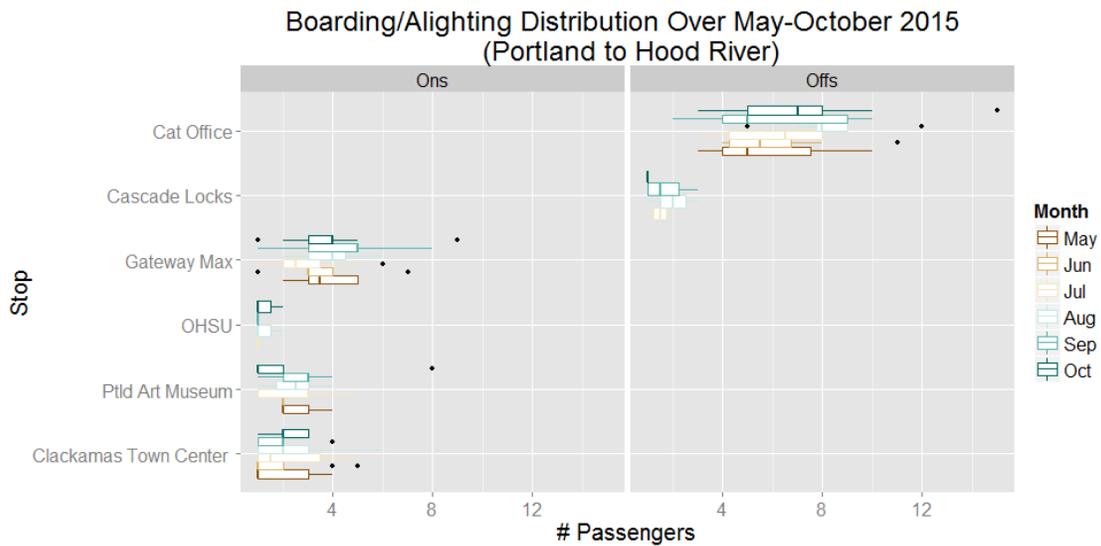


Figure 3-5 CAT Boarding/Alighting Distributions by Stop and Month (Portland to Hood River)



The data indicate that most passengers heading from Hood River to Portland board CAT in Hood River at the CAT office, some passengers board in Cascade Locks. Alightings are distributed throughout the Portland area stops, with the least alightings occurring at Oregon Health Science University (OHSU). The opposite trends hold regarding the trips heading from Portland to Hood River, indicating that it is likely many riders use the service in both directions. There does seem to be some variation in ridership between months, suggesting there may be some small amount of discretionary ridership using the service during the middle of the summer. This is corroborated by the increase in ridership in the middle summer months shown in Figure 3-6.

Figure 3-6 Columbia Area Transit Hood River to Portland Fixed Route Monthly Ridership (May-October 2015)

Month	Passengers
May	104
Jun	143
Jul	148
Aug	148
Sep	141
Oct	125
Total	809

Operations and Productivity

Operations and productivity data were received for May-October 2015 from Columbia Area Transit. Monthly averages for the operations data were calculated and are presented in Figure 3-7. There is currently considerably more demand for the demand-response service, suggesting that the majority of riders on CAT are not discretionary riders.

Figure 3-7 Operations Data for Columbia Area Transit (Averaged for May-October 2015)

Attribute	Monthly Averages (May-Oct)
Demand-response	
Passenger Trips	1,856.8
Revenue Miles	11,695.6
Revenue Hours	640.2
Down-Time (deadhead) Miles	1,137.1
Down-Time (deadhead) Hours	71.9
Trips per Revenue Hour	2.9
Trips per Revenue Mile	0.2
Hood River to Portland Fixed-route	
Passenger Trips	134.8
Revenue Miles	1,638.0
Revenue Hours	76.5
Trips per Revenue Hour	1.8
Trips per Revenue Mile	0.1
Hood River to The Dalles Fixed-route	
Passenger Trips	255.8
Revenue Miles	3,276.0
Revenue Hours	299.3
Trips per Revenue Hour	0.9
Trips per Revenue Mile	0.1

Monthly averages for the productivity measures received from CAT were calculated and are presented in Figure 3-8.

Figure 3-8 Columbia Area Transit Productivity Measures (Averaged for May-October 2015)

Attribute	Six Month Average (May-Oct)
Cost Per Passenger Trip	\$22.97
Cost Per Vehicle-Hour	\$82.52
Cost Per Vehicle-Mile	\$4.51
Passenger Per Vehicle-Hour	3.6
Monthly Fare Recovery Percent	6.2%

Funding

Funding data were received for the 2015-2017 fiscal year from Columbia Area Transit. CAT is financed through a combination of grant and local funding. The breakdown of grants and local funding sources utilized by CAT is presented in Figure 3-9.

Figure 3-9 Columbia Area Transit Grant Funding (FY 15-17)

Funding Type	Grant	Amount	Percent of Total
Grant	5311 Formula Operations	\$ 320,564.00	39.3%
	5311 F (Inter-City HR-TD)	\$ 93,156.00	11.4%
	5311 F (Inter-City) Admin	\$ 5,200.00	0.6%
	5310 Capital Maintenance	\$ 39,481.00	4.8%
	5311 Capital Vehicle Replacement	\$ 116,220.00	14.3%
	pass-thru for MCEDD	\$ 25,000.00	3.1%
	STF Formula	\$ 160,000.00	19.6%
	Medicaid (disbursed from MCCOG)	\$ 15,462.25	1.9%
Local	Local Taxes and Fees	\$ 669.48	0.1%
	Interest Earnings	\$ 351.14	0.0%
	Intergovernmental	\$ 16,361.49	2.0%
	Service Contract Revenue	\$ 21,740.80	2.7%
	Advertising	\$ 1,350.00	0.2%
Total		\$ 815,556.16	100%

Mid-Columbia Council of Governments

The Mid-Columbia Council of Governments (MCCOG) is the regional planning organization for Hood River, Wasco, Gilliam, Sherman, and Wheeler Counties. MCCOG provides a fixed route bus service between The Dalles and Hood River to on Tuesdays and Thursdays to allow riders originating in The Dalles to utilize CAT’s Hood River to Portland service. The trip takes place on either end of the round trip between Hood River and Portland, allowing passenger’s to transfer at CAT’s office in Hood River.

MCCOG also provides dial-a-ride transportation services (called ‘The LINK’) in Wasco County. It is available to the general public, and operates Monday through Friday. Fares range from \$1.50 to \$5.00, and trips must be scheduled at least 24 hours in advance.

MCCOG also acts as the Medicaid brokerage for Gorge area counties (Hood River, Wasco, and Sherman) as well as 11 other counties in eastern Oregon. They coordinate reimbursements for riders (covered under the Oregon Health Plan) of various private and public demand-response transportation providers. Reimbursement funds are received through Eastern Oregon Community Care Organization.

Skamania County

Service Summary

Skamania County Senior Services (the transportation operator) operates three transit services in the Skamania County area within the CRG: (1) a weekday fixed-route bus service, (2) a weekend seasonal fixed-route bus service (called the West End Transit (WET) bus) to trailheads along SR-14, and (3) a demand-response (dial-a-ride) service.

Daily Fixed-Route

Skamania County operates a fixed bus route service along the SR-14 corridor between Fisher’s Landing Transit Center (Vancouver) and Carson year-round, Monday through Friday. Two trips per day are made Monday through Thursday – an AM and a PM trip – and three trips per day are made on Fridays with the inclusion of a mid-day trip. Fares are outlined in Figure 3-10. Buses are ADA accessible. Leashed or well-controlled dogs are allowed on the bus. Bicycles are hauled via two-bike racks on the buses.

Figure 3-10 Skamania County WET Bus Fares

Age	Zone 1 (within Skamania County)	Zone 2 (outside of Skamania County)
12 and younger	Free	Free
12-17	\$0.50	\$1.00
18 and older	\$1.00	\$2.00
All Day Pass (all ages)	\$4.00	\$4.00

WET Bus – Weekend Trail Service

Skamania County operates a seasonal (May through Mid-October) weekend fixed-route service (called the WET bus) stopping at nine trailheads along the SR-14 corridor between Fisher’s Landing Transit Center (Vancouver) and Dog Mountain (Skamania County). The WET bus runs three trips per day and is also ADA accessible. The same fares and rules (regarding dogs and bicycles) cited above apply to the WET bus. Skamania County Senior Services employs nine drivers to drive the weekend WET bus who regularly drive the demand-response vans (discussed below). Drivers were “spread thin” during the 2015 season and the agency hopes to hire at least one additional driver for 2016. The WET bus weekend trailhead service is funded in partnership with US Western Federal lands, WSDOT, local agencies (tourism funds), and Friends of the Gorge.

Safety concerns became apparent in May 2015 when two people were killed while trying to park a vehicle at Dog Mountain. Parking is limited at this trailhead, and consequently many people park in dangerous locations along SR-14 to access the trail. These issues motivated the following proposed mitigations:

- A United States Forest Service (USFS) employee will staff the Dog Mountain trailhead to oversee parking and traffic control.
- A shuttle was proposed to provide loop service between Stevenson and the Dog Mountain trailhead so that visitors could park in alternate locations during times of heavy traffic.

Skamania County Senior Services is now in the process of applying for further funding from the Western Federal Lands Access Program (FLAP) to finance its 2016-2017 WET weekend bus operations. As part of this application for funding, Skamania County Senior Services has received letters of support from Mid-Columbia Economic Development District, the Skamania County Chamber of Commerce, and Friends of the Columbia River Gorge.

Demand-response

Skamania County Senior Services operates a demand-response service available for all users, but targeted towards seniors, persons with disabilities, and low income populations. Rides are provided Monday through Friday. Special priority is given to rides for medical appointments, social services appointments, and essential shopping (e.g., pharmacies). Rides are also provided for transportation to meal sites, general shopping trips, and ‘Meals on Wheels’ trips.

Fares are charged to the general public as outlined in Figure 3-11. For seniors (persons 60 years of age or greater) service is provided on a free (but donations accepted) basis. Medicaid authorized trips are reimbursed by the regional Medicaid brokerage.

Figure 3-11 Skamania County Demand-response Fares (General Public)

Age	Zone 1 (within Skamania County)	Zone 2 (outside of Skamania County)
12 and younger	Free	Free
12-17	\$1.00	\$2.00
18-59	\$2.00	\$4.00
60 and older	Donations accepted	Donations accepted

Weekend WET Bus Funding/Operations

Aggregated funding and operations data were available for Skamania County’s weekend WET bus for the two operating periods of 2014 and 2015. This data is presented in Figure 3-12.

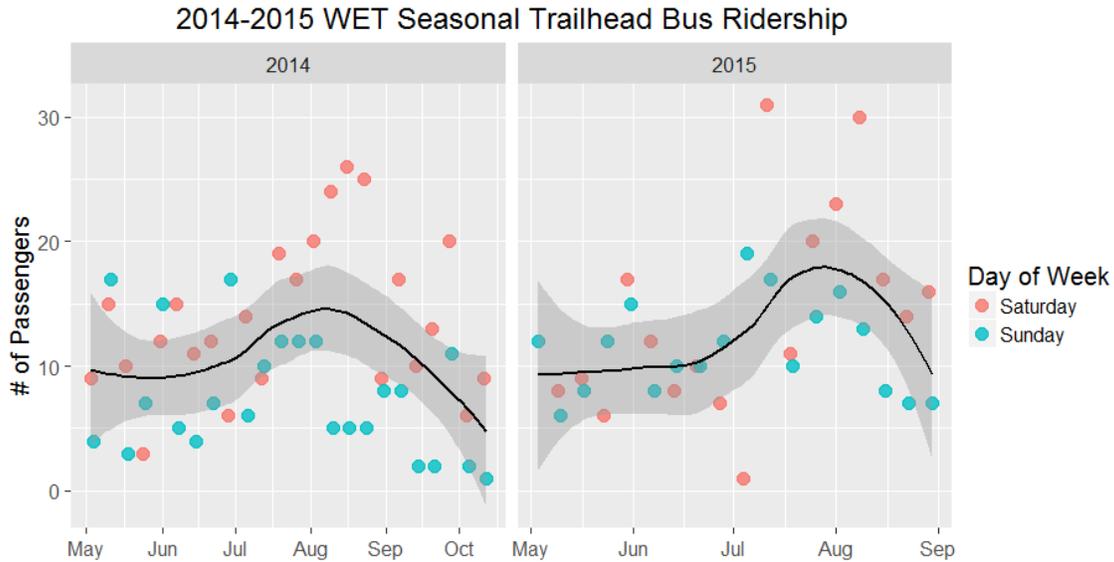
Figure 3-12 Weekend WET Bus Funding, Operations, and Productivity (2014-2015)

Attribute	Quantity
Funding	
Skamania County Match	\$9,147.13
Western Federal Lands Grant	\$52,609.34
Total Cost	\$61,756.47
Operations	
Revenue Miles	39,974 miles
Revenue Hours	1,400 hours
Revenue Days	96 days (48 per year)
Total Ridership	1,073 passengers
Productivity	
Passengers per Revenue Hour	0.77
Cost per Passenger	\$57.56 per passenger

Weekend Ridership Data

Ridership data were obtained for Skamania County’s WET weekend bus service during 2014 and 2015. These data were aggregated to calculate total number of riders per day and are illustrated in Figure 3-13. Different days of the week are highlighted by point color and a moving average curve (with a confidence interval to illustrate spread) was plotted for each year. Saturdays appear to be the highest ridership days, with an average of 14 riders per day across the sample, a minimum of 1 rider, and a maximum of 31 riders. Ridership peaks in August, with approximately 30 riders using the service on some Saturdays. Ridership has increased slightly overall from 2014 to 2015, as illustrated by the average curves. The data indicate that the total ridership increased from 444 in 2014 to 511 in 2015 (a 15% increase).

Figure 3-13 2014-2015 Weekend WET Bus Ridership



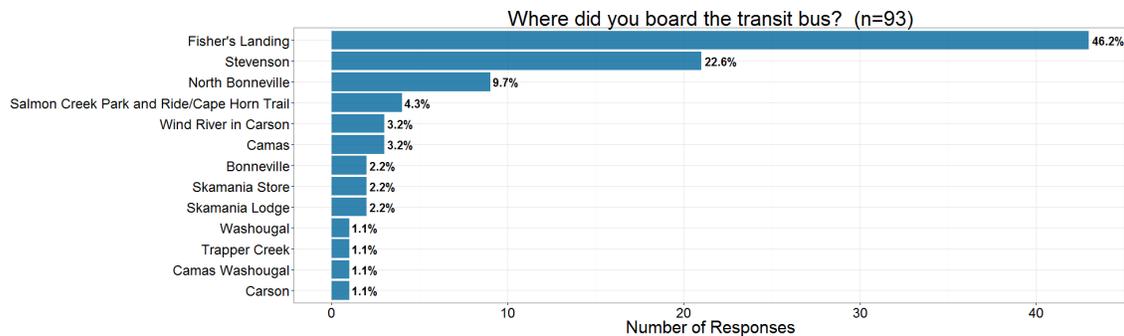
Weekend Rider Survey

An annual on-board survey was conducted on the weekend WET bus service in July through mid-August during 2014 and 2015. Every rider was given the survey and asked to fill it out. Ninety-seven transit riders completed the survey over the two-year period. The results of the following three survey questions during 2014 and 2015 (samples pooled) are shown in the figures below.

- Question 1: Where did you board the transit bus? (Figure 3-14)
- Question 2: What is your destination? (Figure 3-15)
- Question 3: How often do you ride the bus? (Figure 3-16)

Results indicate that the largest proportions of riders (46%) are boarding WET bus at Fisher’s Landing Transit Center. This proportion of riders is likely parking at the transit center and riding the WET bus into the CRG, or used C-TRAN to connect with the WET bus.

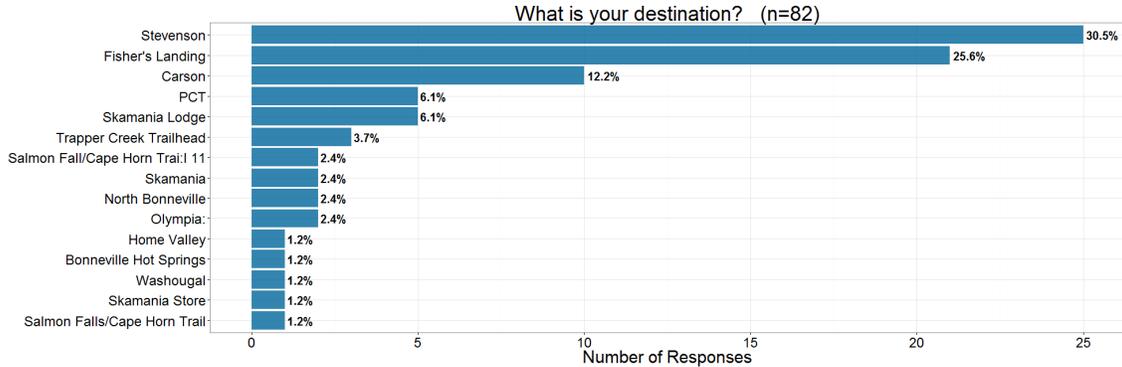
Figure 3-14 Skamania County Ride Survey Results – Question 1



Approximately one third of riders are using the WET bus to travel to Stevenson (31%) and 26% are traveling to Fisher’s Landing. The patterns observed in this origin-destination survey indicate that the majority of travel is occurring between Fisher’s Landing and Stevenson. This could

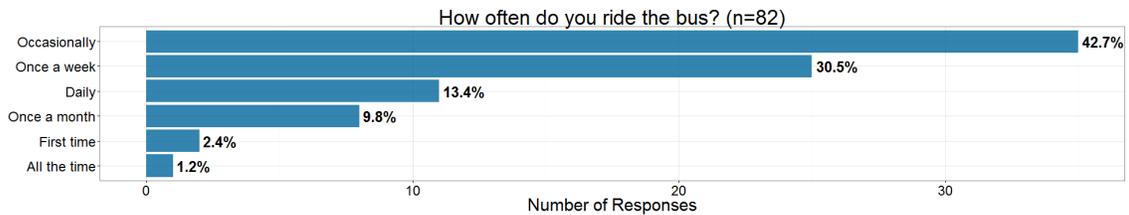
indicate residents nearby Stevenson are utilizing the WET bus to reach the C-TRAN network (Vancouver area) and/or the TriMet network (Portland area).

Figure 3-15 Skamania County Ride Survey Results – Question 2



The majority of riders are using the WET bus sparingly, with 43% of riders indicating they are riding occasionally and 31% of riders indicating they ride once per week.

Figure 3-16 Skamania County Ride Survey Results – Question 8



Mt. Adams Transportation Service

Mt. Adams Transportation Service (MATS – operated by Klickitat County in Washington) provides fixed route service connecting Hood River (OR) with White Salmon (WA), and Bingen (WA) across the Columbia River via Hood River Bridge. This service is critical because no non-motorized travel is allowed across the Hood River Bridge. This service runs four times per day on Mondays, Wednesdays, and Fridays. Fares are \$1.00 each way (for passengers 12 and older). Bicycles can be hauled on the vehicle via bicycle racks.

MATS also operates a dial-a-ride service throughout Klickitat County for seniors, low-income persons, and persons with disabilities. Fares vary by length of trip; seniors are only asked to make a suggested donation. Routine trips are provided to senior meal sites, local shopping, and shopping in Hood River.

Connecting Services

The following services connect with public and private transportation providers in the CRG.

TriMet

Service Summary

TriMet provides fixed route service throughout Gresham, Troutdale, Wood Village, and Fairview. Bus lines and MAX (light rail) lines heading into these areas (illustrated for eastern Multnomah

County in the map presented in Figure 3-17) could potentially connect with another service utilizing I-84 or the Historic Columbia River Highway to reach the CRG. TriMet currently connects with C-Tran at several locations throughout the Portland Metro Area (including Portland City Center and Gateway Transit Center), which can be used to reach Skamania County’s bus services to provide service to the Washington side of the CRG. Gateway Transit Center also offers the opportunity to connect with Columbia Area Transit and private transportation providers. TriMet also connects with the Sandy Area Metro bus service at Gresham Transit Center, which can be used to connect with Clackamas County’s Mt. Hood Express bus service. TriMet fares are outlined in Figure 3-18.

Figure 3-17 TriMet System Map in Eastern Multnomah County

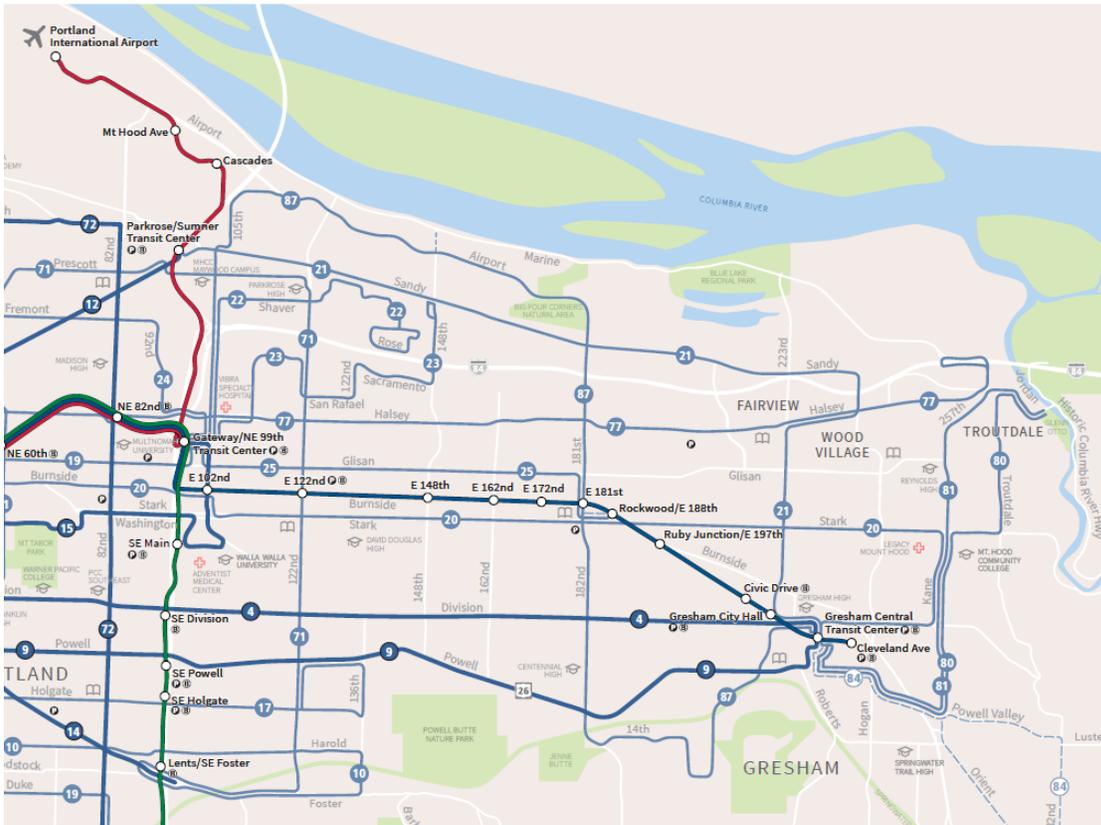


Figure 3-18 TriMet Fares

Fare Type	2.5 Hour Pass	All Day Pass
Adult	\$2.50	\$5.00
65+, Medicare, or Disability	\$1.25	\$2.50
7-17 or High School/GED	\$1.25	\$2.50

Clackamas County (Mt. Hood Express)

Service Summary

The Mt. Hood Express is a bus transit service administrated by Clackamas County. The Mt. Hood Express runs fixed route service along US-26 between the City of Sandy and Timberline Lodge at Mt. Hood (known as The Mt. Hood Express) and a point-deviated fixed route shuttle service called the ‘Villages Shuttle’ in the communities immediately surrounding Mt. Hood. It has been operating since 2004 and formerly operated as the “Mountain Express” (prior to a 2013 service expansion). Service has expanded geographically and temporally during this period of operation. The service operates daily and year-round (with the exception of Thanksgiving and Christmas Day). Connection to the Sandy Area Metro bus service is available at Sandy Transit Center. The Mt. Hood Express Service is diagrammed in the picture to the right.¹¹ Fares for the Mt. Hood Express are summarized in Figure 3-19.

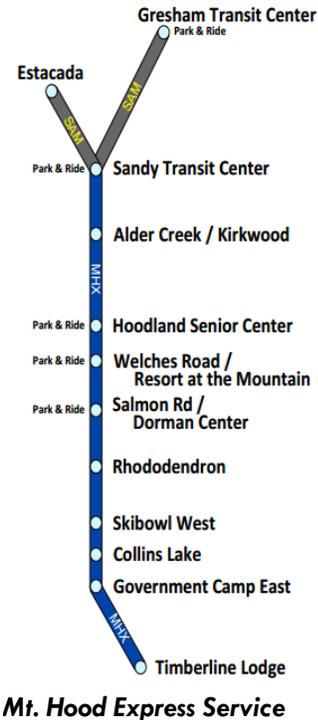


Figure 3-19 Mt. Hood Express Fares

Fare Type	Fare Cost
One-Way	\$2.00
All Day Pass	\$5.00

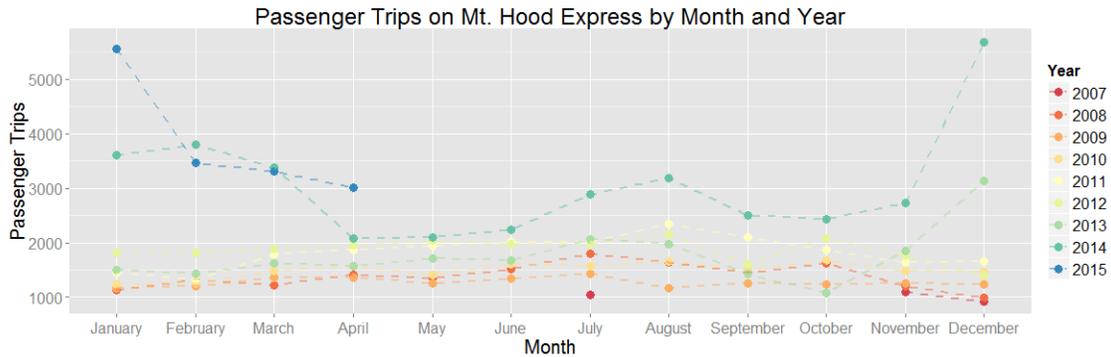
Two recent planning efforts, the Alternative Transit and Transportation Demand Management Study in the Mt Hood area (ATTDMS, USFS, 2012) and the Mt Hood Multimodal Transportation Plan (2014), both identified public transit as an essential component of short and long term transportation planning (Clackamas County, 2014). Clackamas County is currently updating its transit master plan, which could expand service to connect Mt. Hood to Hood River and Warm Springs. A draft service expansion analysis considering these alternatives is reviewed in Chapter 2 of this report.

Ridership

Monthly ridership data were available from January 2007 through April 2015; these data are illustrated in Figure 3-20. Overall ridership has substantially increased since 2007, with the maximum ridership observed in December 2014 being 5,687 passenger trips. Ridership typically peaks in the winter between December-January and a smaller peak is observed in the summer in August. Winter ridership is associated with recreational snow sport tourism, while summer ridership is associated with hiking and bicycling. In August 2014, bicycle trailers were added to Mt. Hood Express buses.

¹¹ http://media.wix.com/ugd/b4f0b4_Od0a2c3ddd964591ab9bfd148e3b3808.pdf

Figure 3-20 Monthly Passenger Trips on Mt. Hood Express (2007-2015)



Rider Profile

In September 2013, the Mt. Hood Express conducted a survey of 219 riders to gather information regarding rider profiles and preferences (Clackamas County, 2014). The rider sample surveyed was split into two sub-samples based on trip purpose: commuting (35%) and recreation/social (47%).

Recreation/Social

The majority (59%) of recreation/social users are traveling from the cities of Portland and further to use the service and reach Mt. Hood. 43% of riders are driving to park and ride locations nearby and riding the service to the terminus at Timberline Lodge.

Commute

The Mt. Hood Express is regularly used to reach employment at the resorts and businesses in the Mt. Hood communities. 80% of these commuters have a household income below \$40k annually, and of these, 72% do not have access to a vehicle, resulting in 58% of the commuters using the Mt. Hood Express residing in low-income (<\$40k per year) households without access to a vehicle.

Performance

Aggregated performance statistics were presented in Clackamas County’s Mt. Hood Express 2014 Annual Report (Clackamas County, 2014). These measures are presented in Figure 3-21.

Figure 3-21 Mt. Hood Express performance statistics

Attribute	Quantity
Total Ridership	32,285 passengers
Average Rides per Hour	4.9 passenger trips per hour
Average Cost per Hour	\$72.48 per hour
Average Cost per Ride	\$14.77 per passenger trip
Average Cost per Mile	\$2.68 per mile
Total Expenses	\$476,390
Fare Box Revenue	\$59,798
Fare Box Recovery	12.6%

Source: (Clackamas County, 2014)

Funding

The Mt. Hood Express Transit Service is funded through a public-private partnership between Clackamas County, Timberline Lodge, Mt. Hood Ski Bowl, and The Resort at the Mountain to provide financial support for the operation of services (LSC Transportation Consultants, 2015a). The area resorts contribute on a voluntary basis, with a total of \$50,000 contributed per year to the Mt. Hood Express. Clackamas County contributes approximately \$27,000 in direct funding and an additional \$39,000 in in-kind services.

The service was re-branded from ‘The Mountain Express’ to the ‘Mt. Hood Express’ in 2013 due to a service expansion (from Rhododendron to Timberline Lodge) made possible by a Federal Lands Access Program (FLAP) grant.

Funding source proportions are outlined in Figure 3-22.

Figure 3-22 Mt. Hood Express Transit Revenue Sources* (FY 2015)

Revenue Source	Proportion
Oregon Department of Transportation 5311	20%
Federal Lands Access Program	37%
ODOT 5310 Preventative	2%
Special Transportation Fund (STF) Formula	5%
Fares	14%
Private Partners and County	15%
County In-Kind Administrative Services (Estimated)	8%

Note: Since the revenue contracts cross over multiple years and sometimes even fall on a different fiscal year such as FLAP, the annual revenue totals were calculated using best estimates.

Source: Mt. Hood Express, 2015.

C-TRAN

Service Summary

The Clark County Public Transit Benefit Area Authority (C-TRAN) is a transit service operating in Clark County, WA, which includes the cities of Battle Ground, Camas, Vancouver, and Washington. C-TRAN provides fixed route bus services throughout these areas in addition to a demand-response van service. C-TRAN’s fares for both services are outlined in Figure 3-23.

Figure 3-23 C-TRAN Fares

Fare Type	Fixed Route (regular bus service)			C-VAN (Paratransit)	
	C-Zone	All-Zone	Express To Portland	C-Zone	All-Zone
Adult & Reduced	\$1.80	\$2.50	\$3.85	\$1.80	\$2.50
Honored Citizens (65+, Medicare, disability) & Youth	\$0.90	\$1.25	\$3.85	\$1.80	\$2.50

City of Sandy (Sandy Area Metro)

Service Summary

The Sandy Area Metro (SAM) is a fixed-route bus service operated by the City of Sandy. Bus service is provided between Gresham and Sandy and between Sandy and Estacada. Riders can connect to the Mt. Hood Express service (provided by Clackamas County) at the Sandy Transit Center. STAR demand-response service to the general public, with fares waived for ADA-eligible riders. Fares for SAM and STAR are outlined in Figure 3-24.

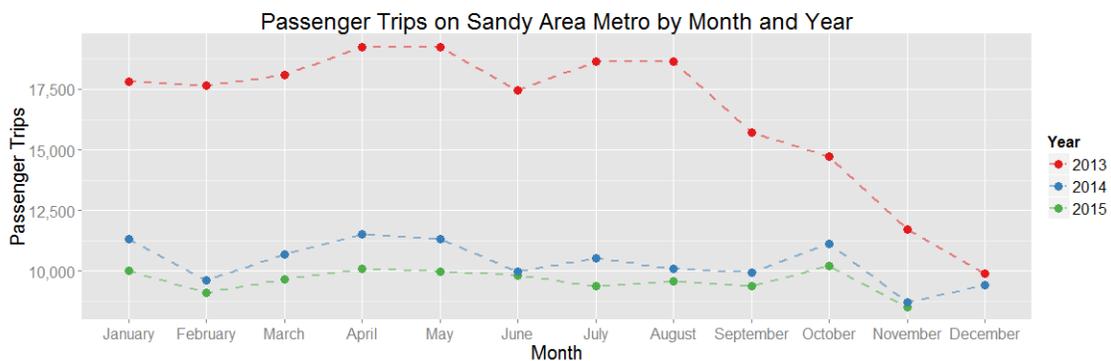
Figure 3-24 SAM and STAR Fares

Fare Type	Fare Cost	Fare Comments
SAM Gresham & Estacada	\$1.00	One-Way
Senior (60+) or Person with a Disability	\$1.00	Round-Trip
STAR General Public	\$1.00	One-Way
ED (by eligibility)	\$2.00	One-Way

Ridership

Ridership data were available from Sandy Area Metro during 2013–2015; these data are illustrated in Figure 3-25. Ridership for the system appears to have dropped considerably since 2013. Fares were introduced in October 2013 along with increases in Saturday service and the introduction of Sunday service. SAM has coordinated with Mt. Hood Express since 2013 to better enable transfers between services.

Figure 3-25 Sandy Area Metro System Ridership by Month and Year



Rider Survey

An on-board rider survey was conducted during September 2014. The largest proportions of passengers using the service (50%) were starting or ending their trips in Sandy, while significant proportions were using the service for Portland (14% origin, 18 % destination) and Gresham (24% origin, 27% destination) based trips. Most riders used transit often (52% every day, 37% once or more per week). The largest proportion of trips was commute trips (43%), and most riders lived in Sandy (57%). Riders generally had low household incomes, with 42% reporting household

income under \$10k annually, and 15% reporting household income between \$10k and \$20k annually.

Ride Connection

Service Summary

Ride Connection is a non-profit transportation provider that operates several types of transit services (fixed-route, deviated-fixed-route, and demand-response) throughout Washington, Clackamas, and Multnomah Counties with an emphasis on service in the western portion of the Portland metro area. Fares are not charged, but donations are accepted. The only service provided by Ride Connection that could potentially connect with transit services in the CRG area is a demand-response service in Multnomah County for older adults (greater than 60 years of age) and persons with disabilities.

PRIVATE TRANSPORTATION PROVIDERS

The following is a summary of private transportation providers operating within the study area. The providers reviewed are summarized in Figure 3-26.

Figure 3-26 Private Transportation Providers Summary

Transportation Provider	Type of Service
NW Navigator ¹²	Charter Bus
Greyhound ¹³	Intercity Bus
Amtrak ¹⁴	Intercity Rail
Explore the Gorge ¹⁵	Limo Service
American Empress ¹⁶	River Boat Cruise
Sea to Summit ¹⁷	Shuttle Bus Tour
Grey Line Tours ¹⁸	Shuttle Bus Tour
Martin's Gorge Tours ¹⁹	Shuttle Bus/Van Tour
America's Hub World Tours ²⁰	Shuttle Bus/Van Tour

¹² <http://www.nwnavigator.com/>

¹³ <http://www.gorgetranslink.com/regional-greyhound.html>

¹⁴ <http://www.gorgetranslink.com/regional-amtrak.html>

¹⁵ <http://www.hoodriverlimousines.com/>

¹⁶ <http://www.americanqueensteamboatcompany.com/our-vessels/american-empress/>

¹⁷ <http://www.seatosummit.net/tour/columbia-river-gorge-tours/>

¹⁸ http://www.grayline.com/tours/portland/multnomah-falls-columbia-river-gorge-tour-5917_6/

¹⁹ <http://www.martinsgorgetours.com/index.html>

²⁰ <http://www.americashubworldtours.com/Newsite/products-page/featured-tours/multnomah-falls-shuttle/>

Intercity Service

The following services operate on intercity routes with service to many major cities across the U.S. and Canada.

Amtrak

Amtrak operates its Empire Builder intercity (Portland/Seattle to Chicago) rail service with stops in Portland, Vancouver, and Bingen on the Washington side of the CRG parallel to SR-14. One train heads west from Bingen to Portland in the morning (8:04-10:10 AM) and one train heads east from Portland to Bingen (4:45 PM – 6:21 PM) each day. This service is not useful for visitors on a day trip to the CRG but could potentially be used for overnight trips. Fares retrieved in November 2015 are outlined in Figure 3-27. Riders could potentially connect with MATS in Bingen for further service in the CRG.

Figure 3-27 Amtrak Fares in Study Area (November 2015)

Fare Type	One-Way Fare
Vancouver-Bingen	\$11.00
Portland-Bingen	\$13.00

Greyhound

Greyhound operates an intercity bus service on following I-84 with stops in Portland, Hood River, The Dalles, and points east. There are three trips per day each direction and fares retrieved in November 2015 are outlined in Figure 3-28. Riders using the Greyhound service can potentially connect with MATS and CAT in Hood River for further service in the CRG.

Figure 3-28 Greyhound Fares in Study Area (November 2015)

Fare Type	One-Way Fare
Portland-Hood River	\$21.00
Portland-The Dalles	\$25.00
Hood River-The Dalles	\$12.00

Shuttle Tour Services

The following services provide shuttle bus/van tours of the CRG area that can be booked individually or in groups of varying sizes. Tours are shared with other patrons.

Martin’s Gorge Tours

Martin’s Gorge Tours provides guided shuttle tour service to hiking, waterfall, and winery destinations in the CRG. Service also includes guided walking tours at sites. Prices range from \$49 to \$99 per person depending on the service. Patrons can be picked up from various hotels in the CRG. The tour buses are not wheelchair accessible.

Sea to Summit

Sea to Summit provides multiple CRG tours of natural/hiking destinations (e.g., waterfalls, Vista House, Bonneville Dam) and wineries. CRG tours can be combined with tours of Mt. Hood. Tours are between 4-9 hours and cost between \$75-\$125 per person.

America's Hub World Tours Multnomah Falls Shuttle

America's Hub World Tours offers the 'Multnomah Falls Shuttle' service, which operates six trips per day between Portland and Multnomah Falls Saturday—Monday during the low season (November—April) and Saturday--Wednesday during the high season (May—October). The service stops at four locations. Prices and the number of stops at each location are outlined below

- Northwest Portland Hostel (1 stop per day)
 - \$40 per person
- Oregon Convention Center (6 stops per day)
 - \$40 per person
- Columbia Gorge Premium Outlet (5 stops per day)
 - \$25 per person
- Multnomah Falls (6 stops per day)

The shuttle tours are not guided, but guided tours of Multnomah Falls and several other waterfall locations are available to be booked separately.

Gray Line Tours

Existing Tour Service

Gray Line Tours operates a tour bus service departing from downtown Portland and stopping at five locations in the CRG:

- Crown Point and Vista House
- Latourell Falls, Oneonta Gorge, Horsetails Falls
- Multnomah Falls
- Bonneville Dam
- Dam Fish Hatchery

The tour is narrated by a guide with information on each site visited. The tour operates daily in the middle of the summer; Saturday, Sunday, Tuesday and Thursday in late Spring and early Fall; and Saturday only in late Fall and early Spring. The tour costs \$56 per person.

Proposed Tour Service Expansion (2016)

Gray Line Tours plans to expand their services by offering a shuttle service on Thursdays – Sundays between mid-June and early-September. The shuttle service will circulate along the Historic Columbia River Highway between Troutdale (McMenamin's Edgefield) and Horsetail Falls from 9 AM-3 PM at roughly 1.5-2 hour headways. On either end of the circulation, it will depart from downtown Portland at 8:30 AM and arrive back in downtown Portland at 3:30 PM. The shuttle service is not narrated (as opposed to the tour bus) and is instead a circulator service aimed specifically at patrons wishing "to avoid the parking and traffic hassles that come with a trip to the Gorge trail heads". Proposed prices for the service are outlined in Figure 3-29.

Figure 3-29 Gray Line Shuttle Service Proposed Pricing

Ticket Type	Price
From/to Portland – Full Day Pass	\$39.00 per adult, \$20.00 per youth (6-12)
From/to Troutdale – Full Day Pass	\$25.00 per adult, \$13.00 per youth (6-12)
From/to Troutdale – Half Day Pass	\$19.00 per adult, \$10.00 per youth (6-12)

Other Services

These services are either high-cost tour or charter transportation. They are not likely to be integrated into a transit plan in the CRG, but are relevant to be aware of.

Explore the Gorge

Hood River Limousines operates an ‘Explore the Gorge’ service, which is chartered individually for group sightseeing trips or other transportation services.

NW Navigator

NW Navigator is a charter bus service that can be reserved for group transportation in Oregon. Several tour ideas are offered on the website, with several including excursions in the CRG.

American Empress

American Empress is a riverboat cruise business operating along the Columbia River through the CRG. Tours are nine days and cost approximately \$3,000.

KEY FINDINGS

Information regarding public and private transportation providers in the CRG area was reviewed. Key findings from this review of existing services that may inform a new transportation service are summarized below:

- Columbia Area Transit currently runs an underutilized transit service between Portland and Hood River. The Mt. Hood Express runs a well-utilized transit service between the City of Sandy and Mt. Hood, and has considered expanding service to Hood River. These two services represent an opportunity for expansion and/or collaboration to provide a transit service in the CRG area.
- Gray Line Tours plans to offer a new circulator shuttle service in the CRG in 2016 – how ODOT’s proposal for transit service complements/competes with this service will be important to plan for. America’s Hub World Tours currently offers a similar circulator shuttle service as well.
- Skamania County runs a relatively new, underutilized transit service from Fisher’s Landing to Stevenson, WA. If there is growing interest in more utilized transit service on the Washington side of the CRG, this service may be important to leverage. Safety issues related to a lack of parking near Dog Mountain necessitated the use of shuttles from Stevenson. Similarly, the lack of parking at key destinations along the Historic Columbia River Highway supports the development of transit service.

4 MARKET ANALYSIS

The existing and potential markets for transit in the Columbia River Gorge area were analyzed using two methods: (1) a series of stakeholder focus groups and (2) an online survey distributed to the general public. The results from each outreach effort are described below and key findings are summarized.

STAKEHOLDER FOCUS GROUPS

The project team conducted eight focus group meetings on December 8th and 9th, 2015 with key stakeholders interested in the Columbia River Gorge and the potential for new transit service in the area. The goal of the meetings was to collect information and develop a better understanding of the region’s perspective on the following topics:

- Current transportation challenges and opportunities
- Effectiveness of current transit services
- Potential markets for transit to, from, and within the region
- Components of a successful transit service

A total of 40 stakeholders participated in the focus group meetings. Meeting participants were identified by Oregon Department of Transportation staff or referred by other participants during the invitation process. Not all stakeholders who were invited were able to participate. Participants with similar backgrounds were grouped into the same meeting to focus the discussion. The types of focus groups and organizations interviewed are outlined in Figure 4-1.

Figure 4-1 Focus Group Outline

#	Focus Group Name	Organizations Represented
1	Public Transit Providers	TriMet
		Clackamas County Mt. Hood Express
		Ride Connection, Inc
		Hood River County Trans District (Columbia Area Transit)
		Skamania County Public Transportation
2	Recreation / Tourism	Port of Cascade Locks
		Travel Portland
		Trail Keepers of Oregon
		U.S. Forest Service
		Travel Portland
3	Local Government / Elected Officials	City of Troutdale
		City of Cascade Locks

#	Focus Group Name	Organizations Represented
		Regional Solutions, Governor's Office
		City of Hood River
		City of The Dalles
		Senator Merkley's Office
4	Regional Planning	Mid-Columbia Economic Development District
		FHWA, Western Federal Lands Division
		USFS, Columbia River Gorge National Scenic Area
5	Tourism	West Columbia Gorge Chamber of Commerce
		USACE, Bonneville Dam
		Friends of the Historic Columbia River Highway
		Multnomah Falls Lodge
		Oregon State Parks
		Mid-Columbia Bus Company
6	Local Government / Elected Officials	Hood River County
		City Manager of Mosier
		City of Hood River
		Senator Wyden's Office
7	Private Transit Providers	Gray Line Tours
		Greyhound
		Martin's Gorge Tours
8	East Gorge Congestion	Northeast Multnomah County Community Association
		Historic Columbia River Highway Advisory Committee
		Friends of the Gorge / Towns to Trails
		Historic Columbia River Highway Advisory Committee
		Multnomah County Sheriff

Key Findings

Key findings from the stakeholder focus group sessions are documented below; a complete account of the focus groups can be found in Appendix B.

Gorge Transportation Issues

Stakeholder focus groups identified issues that are partially motivating the development of transit service and/or are important to be cognizant of in the development of transit service.

Congestion and Capacity

- The Columbia River Gorge is an increasingly popular destination with growing traffic congestion

- Recreation facilities are over capacity for visitors, which is threatening to damage the facilities and natural resources and negatively impact the visitor experience
- Multnomah Falls gets the most attention and advertising in the Gorge, which may contribute to congestion; people may not be aware of other recreation opportunities available
- Viaducts are choke points on Historic Columbia River Highway
- The busy season used to be limited to the summer months, but the season has recently expanded to February – October, due in part to unusually warm and dry weather in 2015. Before recent growth in popularity, busy season in the Gorge was considered to be Memorial Day – Labor Day
- Parking facilities in popular areas are over capacity and people are parking illegally along the Historic Columbia River Highway and State Route 14, which exacerbates congestion
- Capacity at recreation facilities has historically been controlled by limiting parking spaces; if transit increases the number of people visiting a site, stakeholders expressed a concern that the resource could be damaged further; other capacity controls may need to be implemented
- ODOT’s variable message sign at Troutdale notifies people when the Multnomah Falls parking lot is full
- It is difficult to manage parking in the Gorge because parking rules are different depending on which agency manages the land; people may avoid parking in areas where there is a parking fee
- Traffic is worse eastbound than westbound – people tend to use the Historic Columbia River Highway to reach the waterfalls then take I-84 back to Portland
- There is a lack of parking and growing congestion in downtown Hood River

Access

- Transit services get requests to cross the Hood River Bridge because there is no pedestrian traffic allowed on the bridge
- It is difficult to manage access to recreational destinations in the Gorge because important transportation corridors run through it (e.g., I-84)

Safety and Enforcement

- There is not enough enforcement of parking and traffic violations on the Historic Columbia River Highway
- Sheriffs used to tow illegally parked vehicles, but that caused more problems as people were stranded in the Gorge
- Cars are broken into in parking lots
- Illegal parking along the Historic Highway creates a safety hazard due to limited pedestrian infrastructure
- Parking tickets does not seem to discourage illegal parking

Gorge Transit Challenges

Stakeholder focus groups identified key challenges that will need to be addressed during the development of Gorge transit service alternatives.

Desired Services

- Locals using transit for the commute or to access services have different destination preferences than recreationist/tourist markets – locals likely would not want to spend time stopping at recreation locations

- Transit schedules need to be appropriate for the destination – people do not want to feel stuck
- Stops need to be accommodating to people without cars who are waiting for a bus – restrooms, lights, shelters, benches
- Transit should have the ability to carry recreation gear like bicycles
- Park and ride locations are needed

Funding

- There is limited availability of funding for both short term and long term transit solutions
- Cost per rider is high in rural areas due to lower population density and higher number of miles driven

Awareness and Information Distribution

- People do not know what transit services are available
- Resources need to be put into marketing transit service so people know how to use it
- Capitalize on existing communications channels such as Travel Oregon, Travel Portland, MCEDD, and Friends of the Gorge

Barriers to Transit

- It is difficult to increase ridership if people do not have to pay for parking at their destination
- People do not have a compelling reason to give up individual flexibility that comes with driving their own car
- Jurisdictional boundaries of transit systems could pose a challenge
- People in rural areas may not want to transfer service lines to reach their destinations
- People with disabilities have trouble planning trips with transit – they need to know every barrier they may face from starting point to destination

Transit Logistics

- The Gorge has small roads, steep hills, and sometimes icy conditions
- Large buses cannot access some tourist sites like Vista House or could add to congestion on Historic Columbia River Highway
- Bonneville Dam area may be a challenging place to find a bus stop and turnaround point
- Need to identify potential park and ride locations for riders from Portland metro area and inter-city stops in the Gorge
- Services that depend on cellular data do not function well in the Gorge due to lack of data coverage

Opportunities

Stakeholders identified opportunities for transit service alternative development and implementation.

Funding

- New transportation funding is available through Federal Lands Access Program
- Tourism organizations, recreation groups, and local businesses may be willing to contribute to congestion solution

Awareness and Information Distribution

- Find a venue for real-time information that will help people plan their trips – tell people which parking areas are full, which areas are busy, and recommend where they should go and how they should get there
- Gorge TransLink compiles information on transit service in the Gorge and could be a venue for future Gorge transit information
- Positive messaging can be used to provide travel information when people are planning their trips while simultaneously reminding people to be a good steward when they recreate
- The Gorge should be marketed as a single region – do not divide it into two states
- Park and rides could also have a “Trail Concierge” to help guide people to less busy areas of the Gorge

Desired Outcomes

- Use transit as a tool to spread out congestion and avoid heavy use of single areas
- Avoid damaging Gorge facilities and natural resources by relieving capacity issues
- Increase mobility and access of low income populations
- Limit private cars on Historic Columbia River Highway at particular times

Service Requests and Destinations

- The region could be served by an express transit service that travels along I-84 and stops at hub points, where smaller shuttles with more frequency could deliver people to sites along Historic Columbia River Highway. Hubs could be designed as a place where people can wait comfortably for less frequent service.
- There may be an opportunity for the private sector to fill the transit gap on the Historic Columbia River Highway that could connect to Gorge transit on I-84.
- People want to get from Portland International Airport to the Gorge without a car.
- People want to get dropped off at trailheads, do a multi-day hike through the Gorge, and get a ride back.
- People want to cycle through the Gorge and take a one-way transit trip back.
- People want better connection throughout the Gorge on both sides of the Columbia River.
- Troutdale is at the hub of several trail systems between the Portland metro region and the Gorge.
- Historic Columbia River Highway Advisory Committee is trying to get people to start their Gorge trips from urban centers through Gorge Hubs program, primarily serving cyclists; proposed hubs: The Dalles, Mosier, Hood River, Cascade Locks, Troutdale, Wood Village
- Towns to Trails is developing a network of European style trails connecting urban areas in the Gorge. Most waterfalls are already connected, working on connections between Washougal – Stevenson and Hood River – The Dalles
- Park and ride locations should also have good access to other transit so people do not have to drive
- There is seasonal employment on Mt. Hood in the winter – Mt. Hood Meadows operates a shuttle from Hood River for employees; people in Hood River want a shuttle to Mt. Hood Meadows for recreation

Potential Starting Points (Regional transit connectivity and park and ride)

- Gateway Transit Center
- Gresham Transit Center
- Halsey-Weidler Corridor locations
- McMenamins Edgefield
- Troutdale Airport
- Columbia Gorge Outlet Mall
- Troutdale
- Rooster Rock State Park
- Gorge urban centers
- Dodson/Ainsworth
- Benson State Recreation Area

Potential Destinations (Stops)

- Historic Columbia River Highway State Trail
- Portland Women’s Forum
- Vista House
- Latourell Falls
- Bridal Veil Falls
- Angel’s Rest
- Rowena Crest Trailhead
- Multnomah Falls
- Ainsworth State Park
- John B. Yeon Trailhead
- Larch Mountain
- Bonneville Dam and Fish Hatchery
- Eagle Creek
- Cascade Locks – Pacific Crest Trail connection
- Hood River
- Mt. Hood Meadows
- Starvation Creek
- The Dalles
- One-way trips: John Yeon to Cascade Locks, Starvation Creek to Viento State Park, Hood River to Mosier
- Connection to Fruit Loop
- Line between Hood River and The Dalles

Potential Rider Markets to Serve

- Senior citizens
- People with disabilities
- Low income populations
- Commuters traveling to urban centers
- Millennials who do not want to use cars
- Hikers trying to reach trailheads
- Cyclists
- Recreationists
- Tourists who do not want to drive
- Families

PUBLIC SURVEY

An online survey was conducted during January 2016 to understand the market for transit in the Columbia River Gorge. 1,732 total responses were received between January 11th and January 31st, 2016. Responses to all questions are summarized and analyzed below; key market findings from the analysis are then presented. Question and answer text for the survey is documented in Appendix C.

Respondents Description

The following results describe the types of people that took the survey. The survey was non-scientific²¹ and so the group of respondents that took the survey was partially a result of the outreach methods used and self-selection bias²². This could affect the interpretation of the results, and so it is first important to describe the respondents that took the survey.

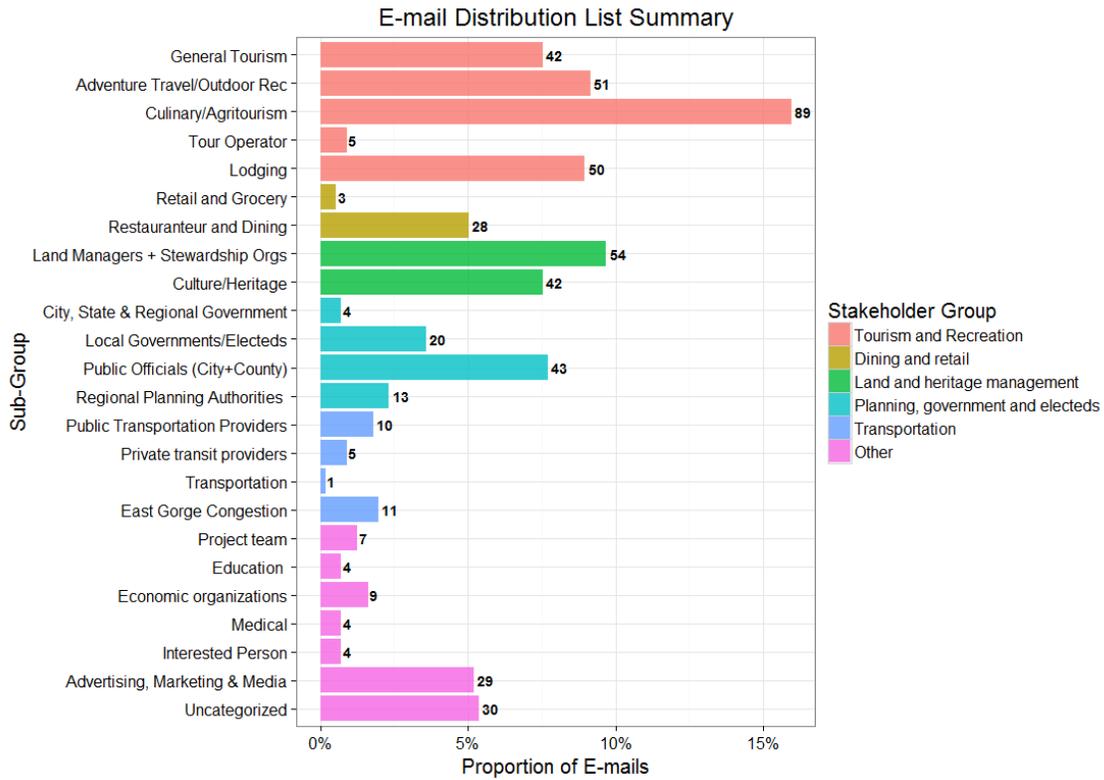
Survey Distribution

The survey was distributed by ODOT to the general public using e-mail lists, a news release, social media, and physical mailers. The numbers of different e-mails (i.e. persons) that were in each stakeholder group distribution list utilized are illustrated in Figure 4-2. Tourism and recreation comprise the largest group of e-mails the survey was distributed to.

²¹ The sample of respondents was a convenience sample (obtained using ODOT's outreach channels) and not wholly representative of the population of Gorge visitors and residents.

²² Those that took the survey were likely more interested in the Columbia River Gorge and/or transit and so results may be biased towards the interests of that group.

Figure 4-2 E-mail Distribution List Breakdown by Stakeholder Group



Responses over Time

Figure 4-3 and Figure 4-4 illustrate the number of responses received over the survey period. Survey responses were received in two significant spikes: (1) the days around January 12th when the survey was initially distributed and (2) the days around January 26th when ODOT utilized additional outreach efforts.

Figure 4-3 Responses per Day over Survey Period

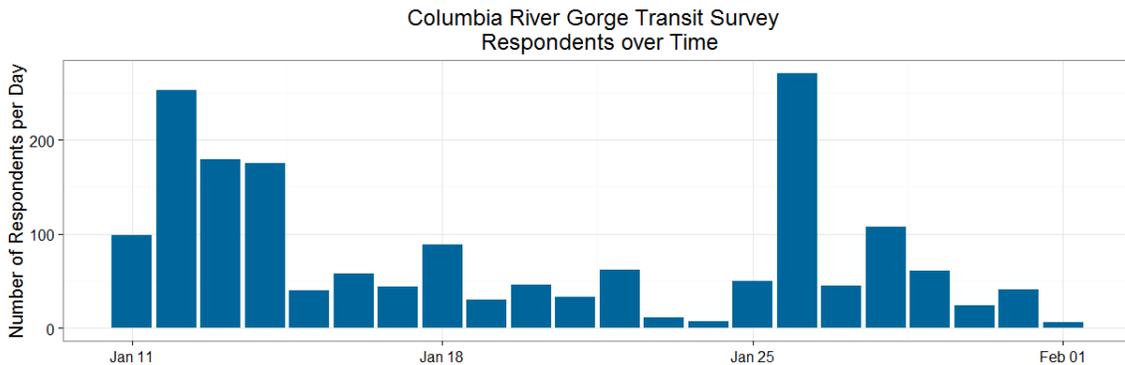
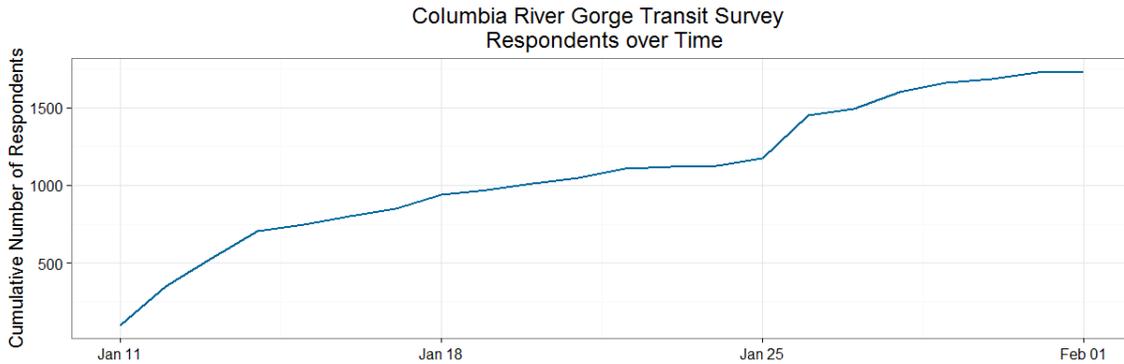


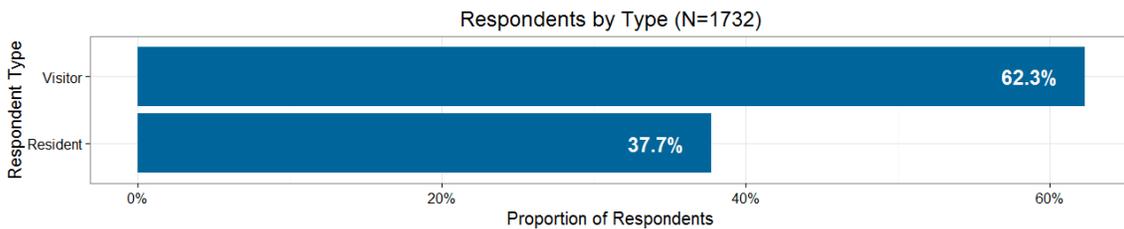
Figure 4-4 Response Pool Growth over Survey Period



Respondent Types

Survey respondents were asked if they primarily identified as a visitor or a resident of the Columbia River Gorge. The distribution of respondent types is illustrated in Figure 4-5. Visitors (tourists, recreationalists) comprised a larger portion of the respondent pool at 62%.

Figure 4-5 Types of Survey Respondents

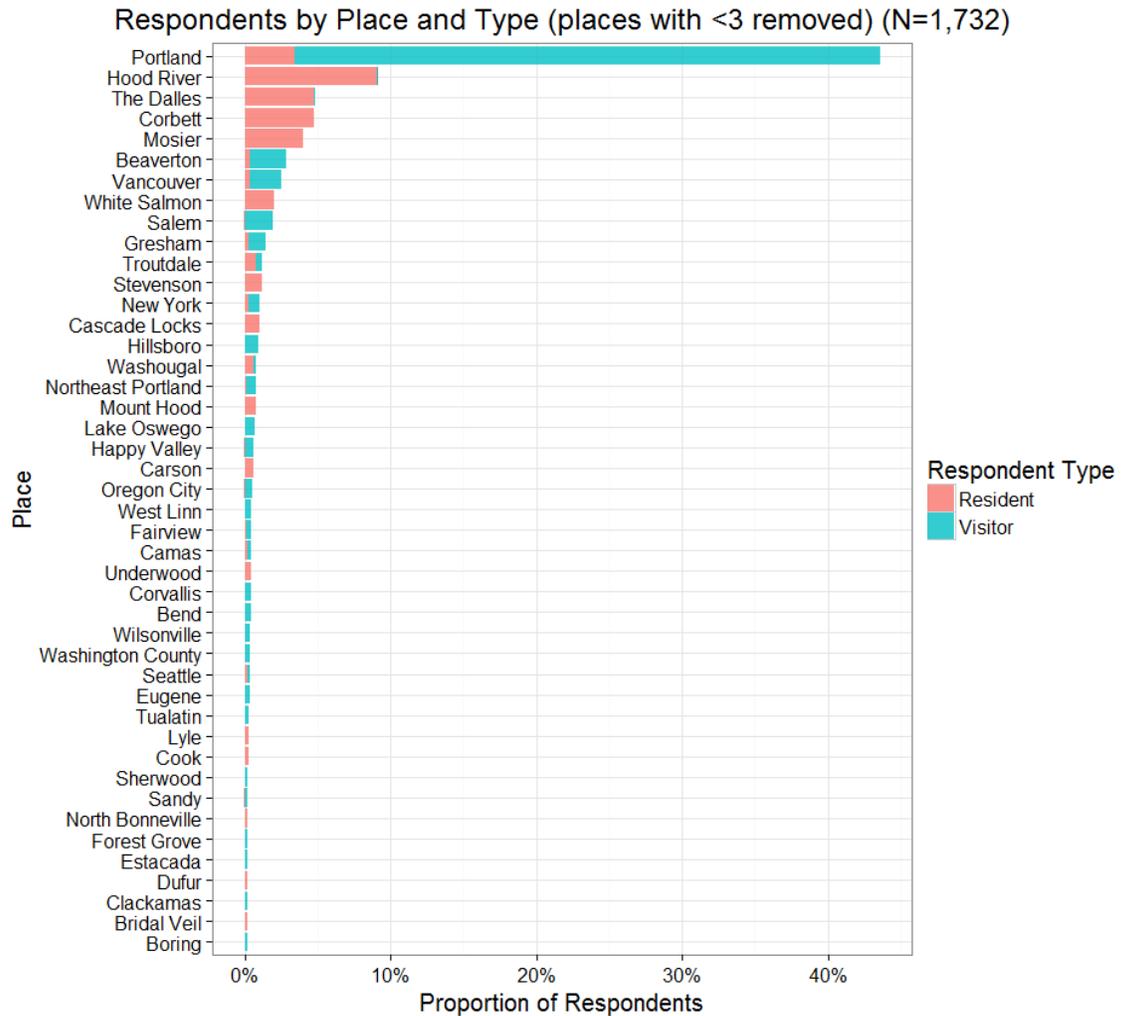


Respondents by Geography

Respondents were asked which ZIP code they currently reside in, which could be used to identify approximate geographic locations of respondents. The distribution of respondents by place (as geocoded using the Google geocoding API) is presented in Figure 4-5; respondent types are also identified within each place. Over 40% of respondents resided in Portland. 25% of respondents resided within the Gorge communities of Hood River, Corbett, Mosier, The Dalles, or White Salmon. The remainder of respondents generally resided in other Oregon and Washington communities, with a small proportion of respondents living in other states or countries.

Some respondents either did not understand the resident/visitor question or answered incorrectly, as illustrated by the proportion of Portland, Beaverton, and Gresham residents who indicated they were residents of the Columbia River Gorge.

Figure 4-6 Respondent Distribution by Place and Type



The distribution of respondents by place is illustrated geographically by maps in Figure 4-7 and Figure 4-8. Respondents were concentrated in the Portland metropolitan area and the Columbia River Gorge area communities.

Figure 4-7 Geographic Respondent Distribution

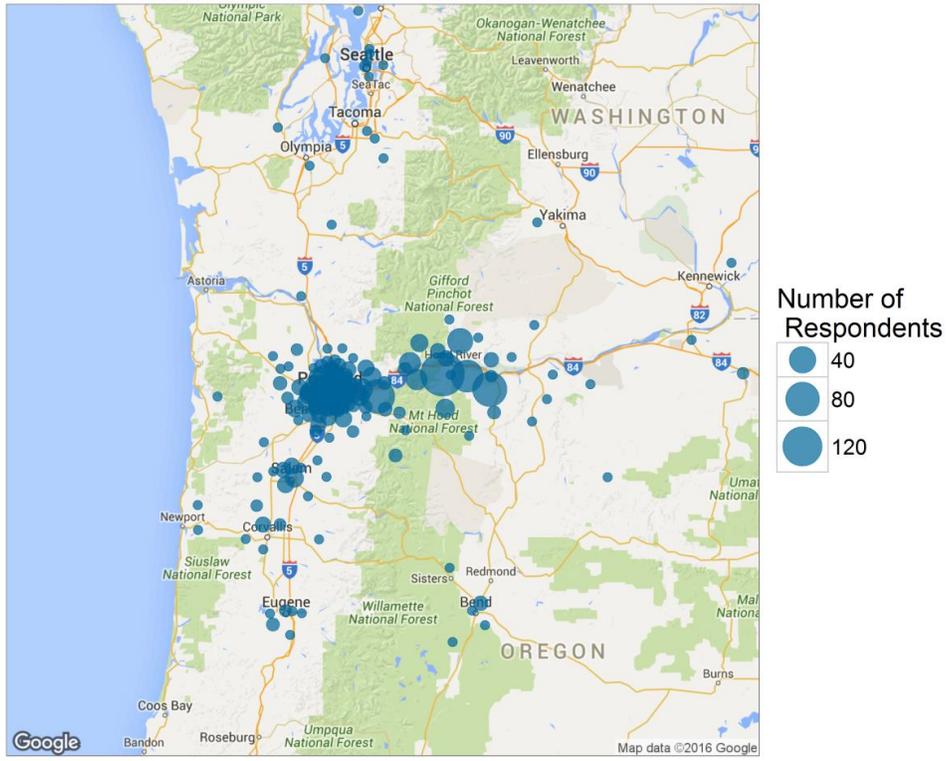
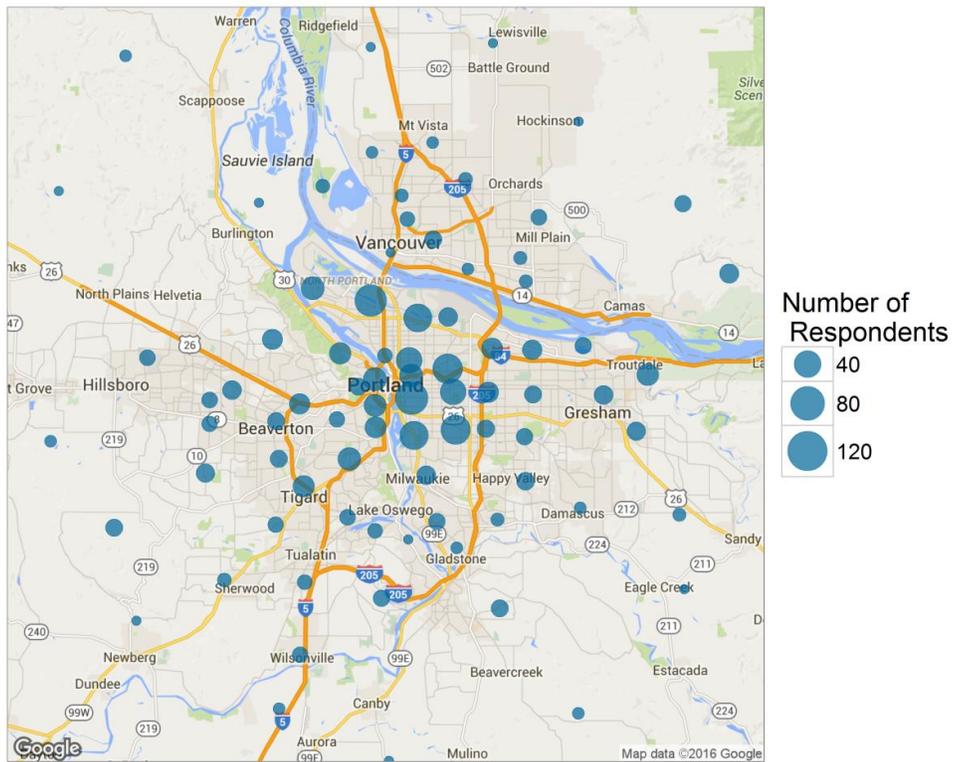


Figure 4-8 Geographic Respondent Distribution (Portland Area)



Respondent Demographics

Respondents were asked a series of demographics questions in order to understand the types of people taking the survey. Respondents were primarily white and concentrated in the 30-65 year age range. They also generally belonged to higher-income households and the majority were not disabled.

Figure 4-9 Respondent Ethnicity

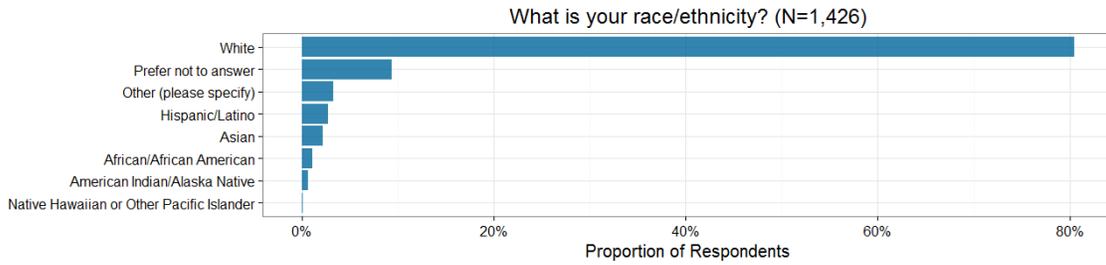


Figure 4-10 Respondent Age

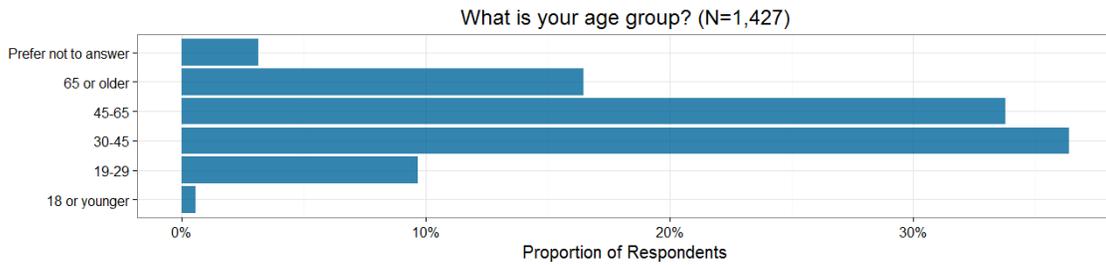


Figure 4-11 Respondent Income

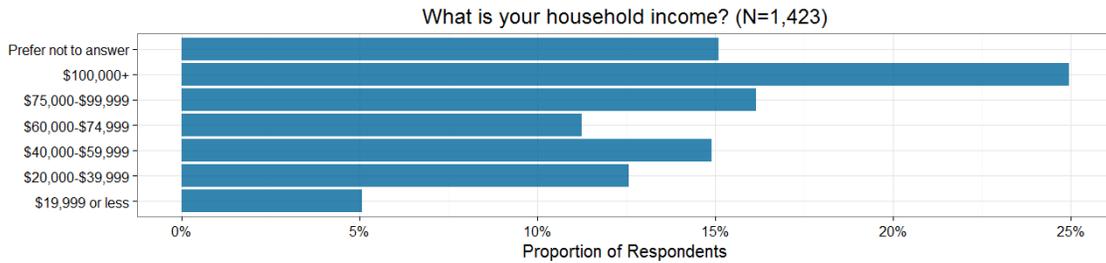
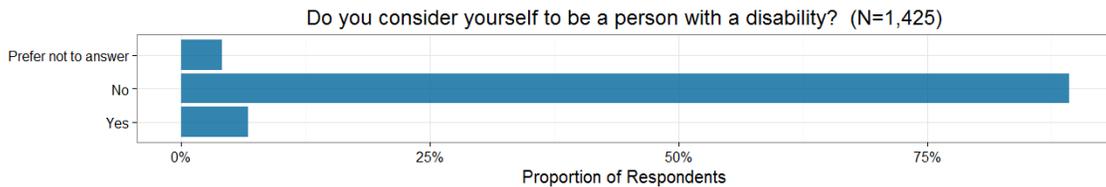


Figure 4-12 Respondent Disability Status



Visitors

Trip Preferences

Visitors were asked to describe their typical trips to the Gorge through a series of questions.

Figure 4-13 shows the distribution of visit duration among respondents who visit a particular location. The majority of visitors to Multnomah Falls stay at least one hour, which was surprising given the anecdotal knowledge that most Multnomah Falls visits are short – this may be a result of the respondent pool.

Figure 4-13 Visitor Destinations and Length of Visit

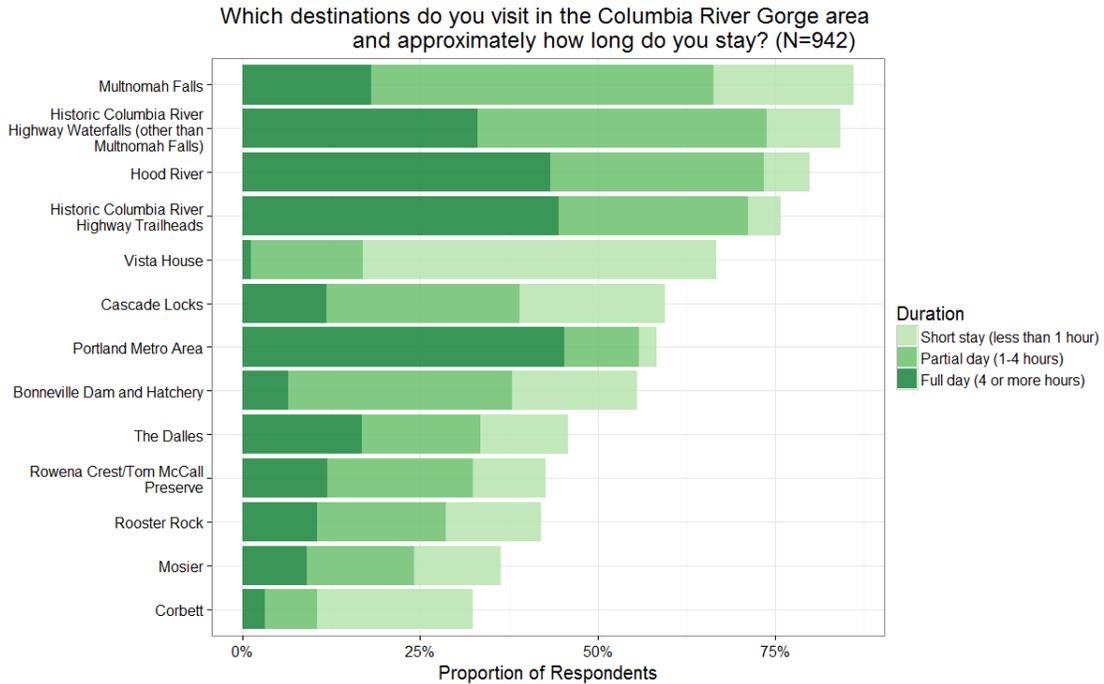
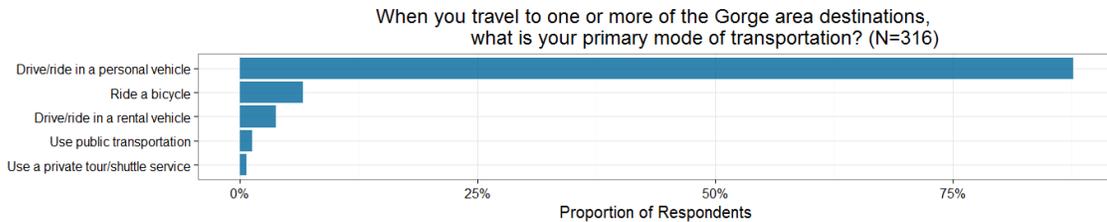


Figure 4-14 shows the mode of transportation that respondents identifying as visitors generally use to visit the Gorge. 88% of respondents typically drove in a personal vehicle. 7% of respondents indicated they rode a bicycle, which is likely inflated due to bias in the respondent pool (Portland’s commute bicycle mode share is ~7%²³ for comparison), but nonetheless illustrates the desire for bicycle access in the Gorge.

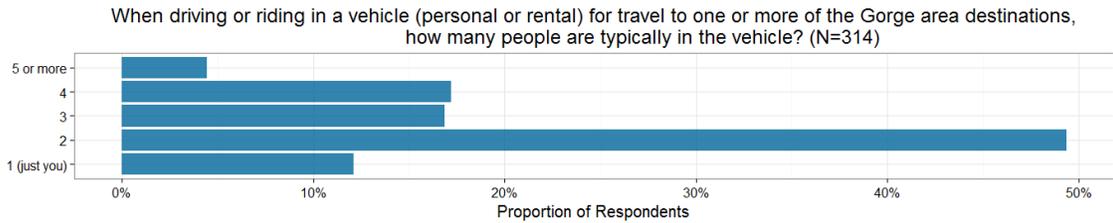
Figure 4-14 Mode of Transportation (Visitors)



Nearly half of respondents travel in groups of two, as illustrated in Figure 4-15. Only 12% of respondents travel alone, with the remainder traveling in groups of three or more.

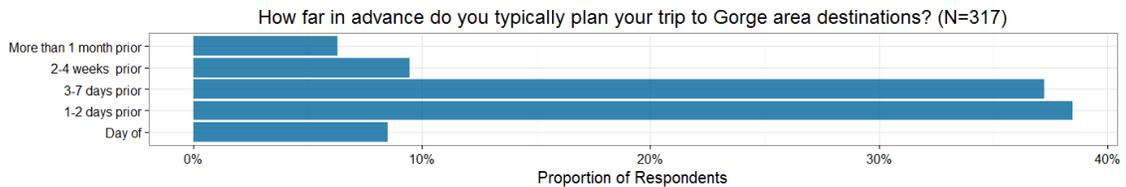
²³ 2014 American Community Survey 1-Year Estimate

Figure 4-15 Group Size (Visitors)



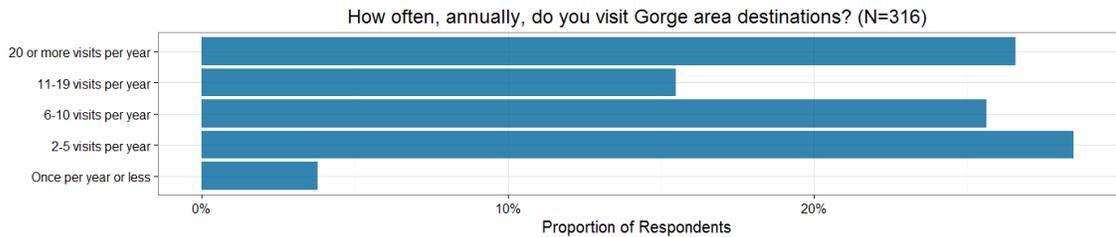
The majority of Gorge visits (84%) are planned seven days or less in advance as illustrated in Figure 4-16. This result shows that many Gorge visits (within the respondent pool) are relatively casual or spontaneous occurrences, rather than trips planned weeks or months in advance.

Figure 4-16 Visit Lead Time (Visitors)



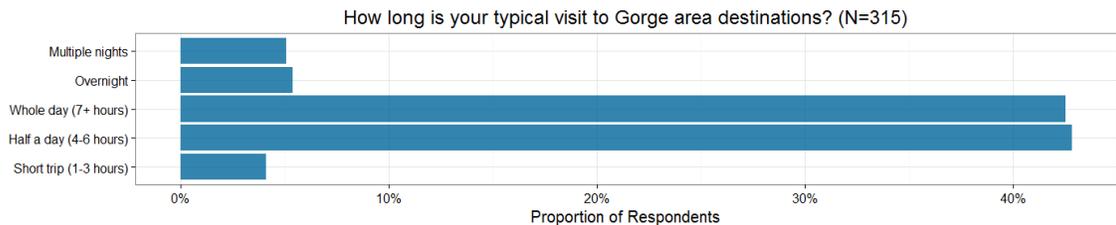
Many of the respondents visited the Gorge frequently as illustrated in Figure 4-17; approximately one quarter each fell into the 2-5, 6-10, or 20 or more visits per year categories. With such a high average number of visits per year, there is a greater potential for some of those auto trips to be replaced by transit.

Figure 4-17 Visit Frequency (Visitors)



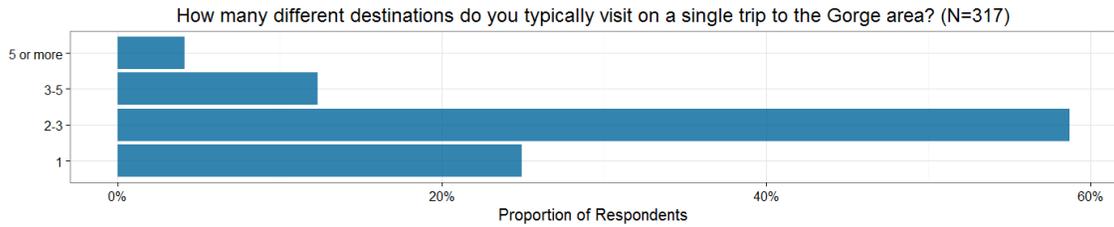
Most respondents spent at least four hours on a trip to Gorge area destinations, as illustrated in Figure 4-18.

Figure 4-18 Visit Duration (Visitors)



More than three quarters of respondents visit multiple destinations on a trip to the Gorge, as illustrated in Figure 4-19. This indicates that trip chaining is a prevalent behavior among Gorge visitors in the respondent pool.

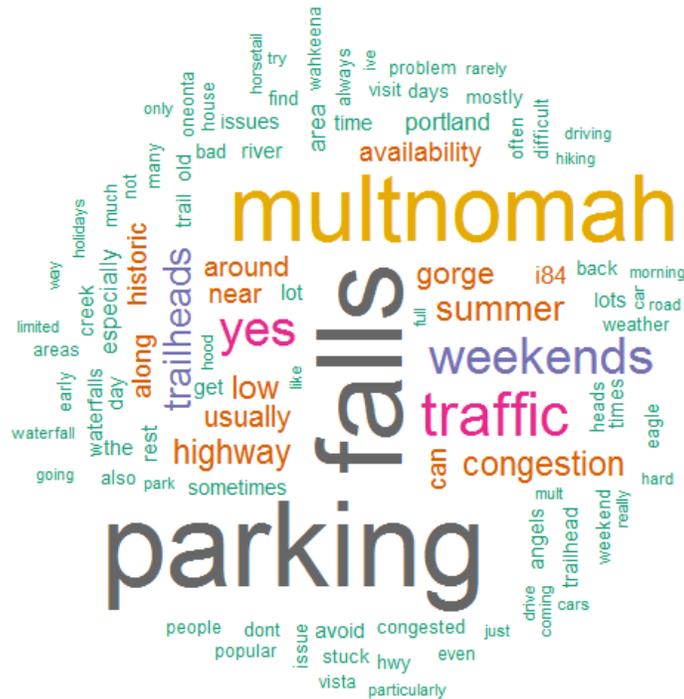
Figure 4-19 Number of Destinations per Visit (Visitors)



Congestion Issues

Respondents were asked to describe the location and nature of congestion related issues they experienced while traveling in the Gorge. A word frequency analysis (illustrated using a word cloud in Figure 4-20) reflects congestion issues related to traffic congestion and parking availability, especially near Multnomah Falls (and other waterfalls) and trailheads.

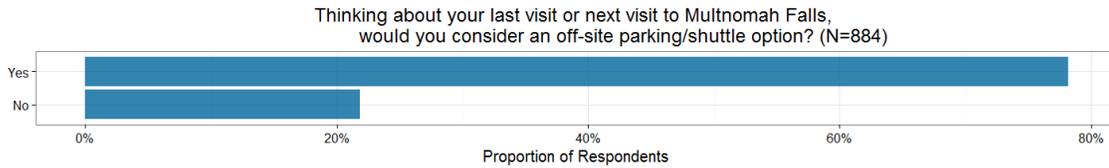
Figure 4-20 Congestion Issues Word Cloud (Visitors)²⁴



Next after asking about congestion issues, survey participants were asked if they would consider using parking shuttle to reach Multnomah Falls; approximately 80% of respondents indicated they would (Figure 4-21).

²⁴ Size and color of words are scaled to word frequency. Larger words with darker colors indicate higher frequency words in the survey responses.

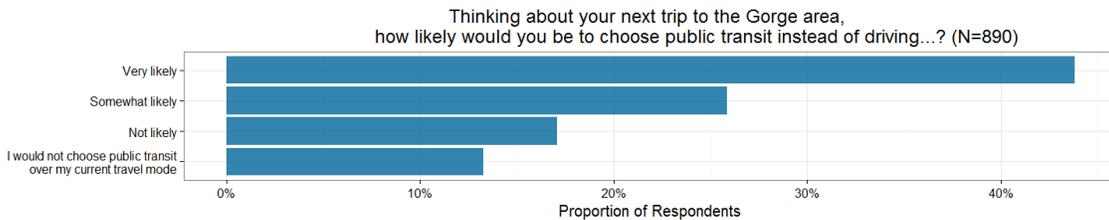
Figure 4-21 Parking Shuttle Willingness (Visitors)



Transit Service

Respondents were asked how likely they would be to use public transit; approximately 70% of respondents (Figure 4-22) were very or somewhat likely to use public transit instead of driving if it were available.

Figure 4-22 Public Transit Willingness (Visitors)



Respondents ranked potential locations for accessing Gorge transit service based on convenience; the results are illustrated in Figure 4-23. Respondents gave Downtown Portland the most ‘1’ convenience rankings, but (as presented in Figure 4-24), Gateway Transit Center was the highest potential connection location ranked on average.

Figure 4-23 Stop Convenience Ranking (Visitors)

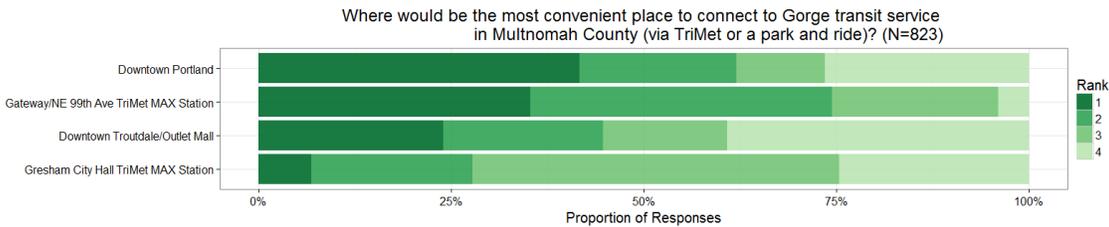


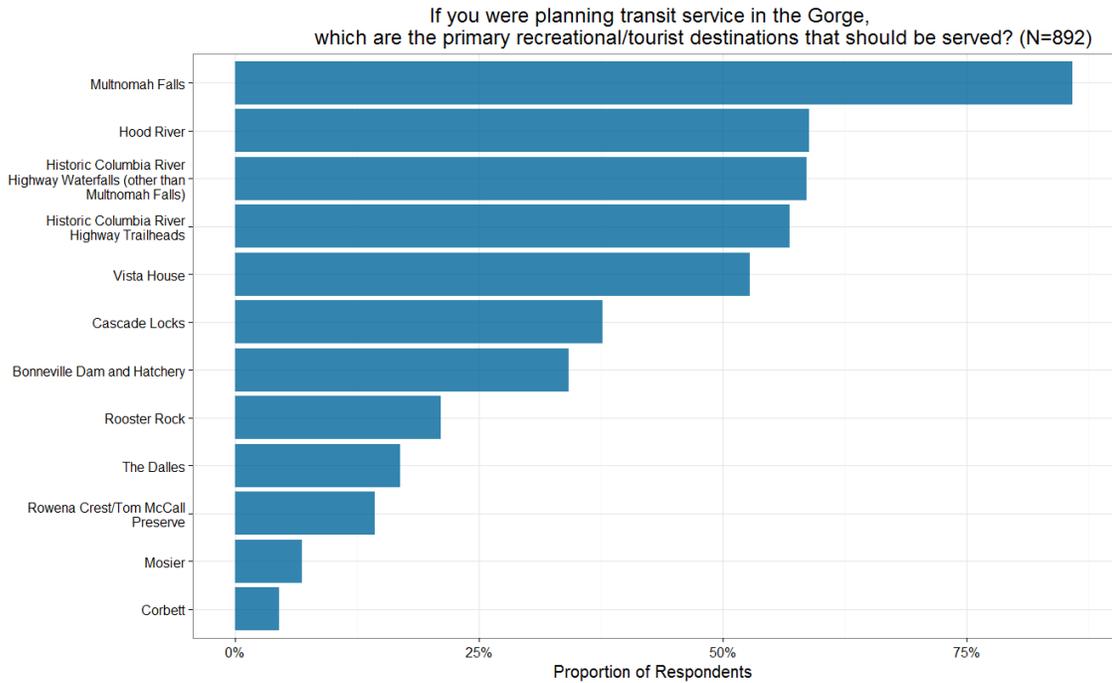
Figure 4-24 Stop Convenience Ranking – Average Scores (Visitors)

Location	Average Score ²⁵
Gateway/NE 99th Ave TriMet MAX Station	3.06
Downtown Portland	2.77
Downtown Troutdale/Outlet Mall	2.30
Gresham City Hall TriMet MAX Station	2.10

²⁵ Rank 1 = 4 Points, Rank 2 = 3 Points, Rank 3 = 2 Points, Rank 4 = 1 Point

Respondents also selected the primary destinations that they would like to see served by transit, as illustrated in Figure 4-25. Multnomah Falls, Hood River, and the Historic Columbia River Highway waterfalls and trailheads were the top 4 destinations.

Figure 4-25 Destination Preferences (Visitors)



Local Residents

Residents of Gorge area communities were asked a series of questions in order to understand how improved transit mobility might be useful to them as well as visitors.

Residents were first asked to select their regular or occasional destinations within the Gorge area and then indicate their visit frequency and typical trip purpose. As illustrated in Figure 4-26, residents' top three destinations were the Portland Metro Area, Hood River, and The Dalles. Historic Columbia River Highway trailheads and waterfalls were also cited as destinations by residents at higher proportions than other Gorge area communities, though reported visitation frequencies were significantly lower for these destinations. Figure 4-27 presents trip purpose when traveling to those destinations.

Figure 4-26 Gorge Destinations by Duration (Residents)

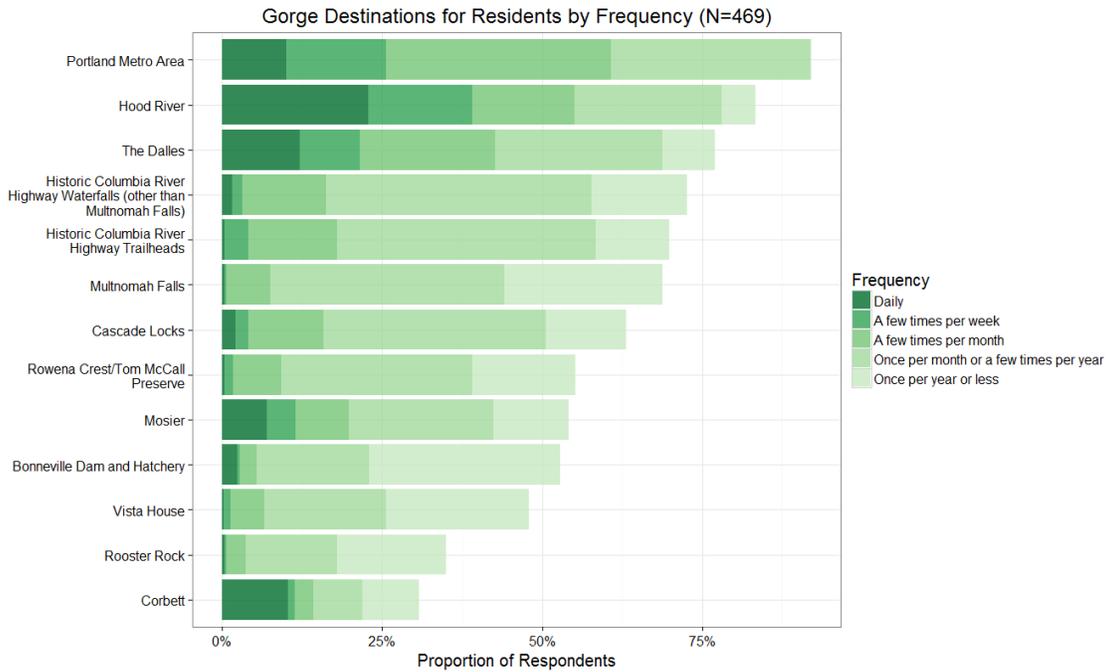
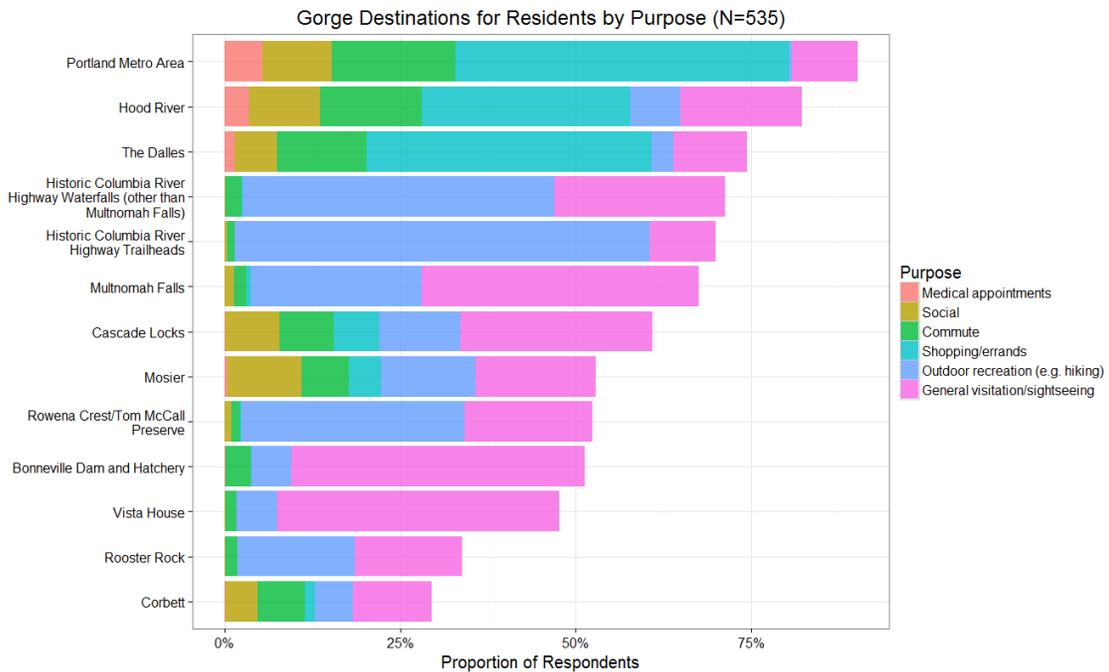


Figure 4-27 Gorge Destinations by Purpose (Residents)



To clarify the preferences of residents of the two largest Gorge area communities (Hood River and The Dalles), plots of destination trip frequencies and purposes by city of residence are presented in Figure 4-28 and Figure 4-29. Residents of either community make most of their trips within their communities, with some infrequent trips to the other community (e.g., Hood River residents traveling to The Dalles), the Portland area, or other destinations. The Dalles, Hood River, and

Portland are primarily destinations for shopping/errand trips (for residents of Hood River or The Dalles).

Figure 4-28 Resident Destinations by Trip Frequency (for Hood River and The Dalles Residents)



Figure 4-29 Resident Destinations by Trip Purpose (for Hood River and The Dalles Residents)



Residents indicated their travel preferences, auto availability, and transit awareness in Figure 4-30, Figure 4-31, and Figure 4-32, respectively. Most residents drove alone, though a considerable proportion of residents indicated they typically traveled by carpooling, walking, or bicycling. Most residents (over 85%) had their own vehicle. Over 50% of residents were aware of transit in the Gorge, but did not use it, and over 40% of residents were not aware of transit service in the Gorge.

Figure 4-30 Mode of Transport (Residents)

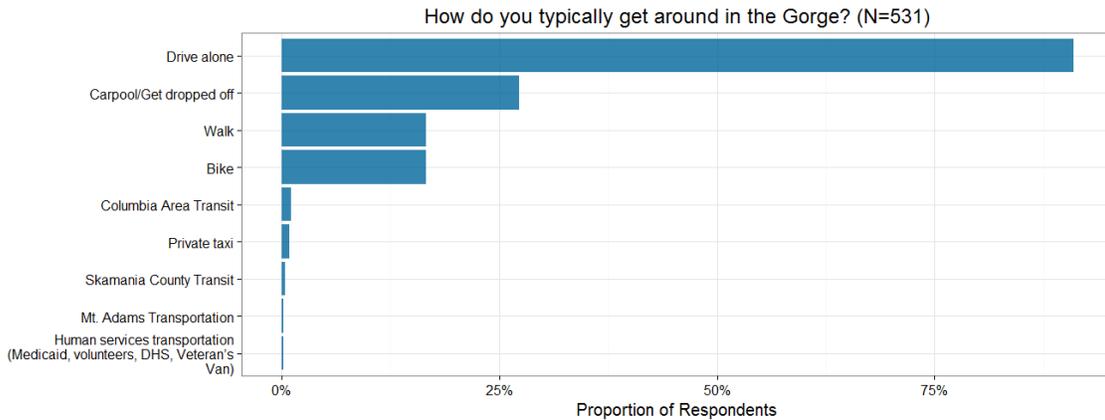


Figure 4-31 Car Availability (Residents)

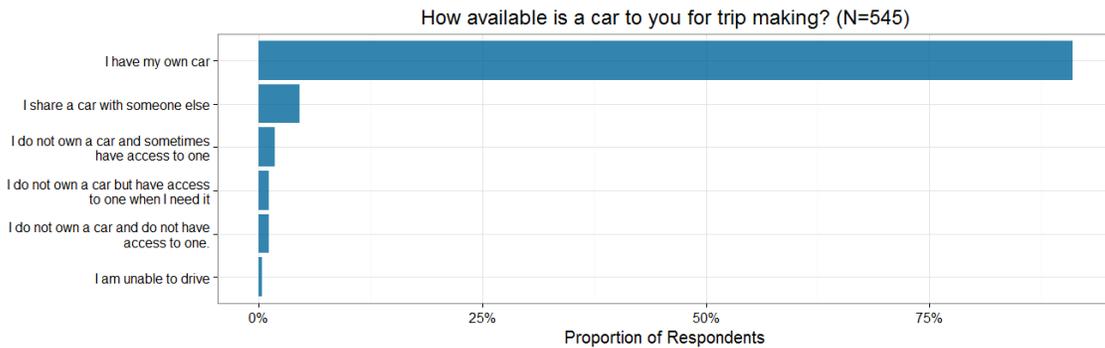
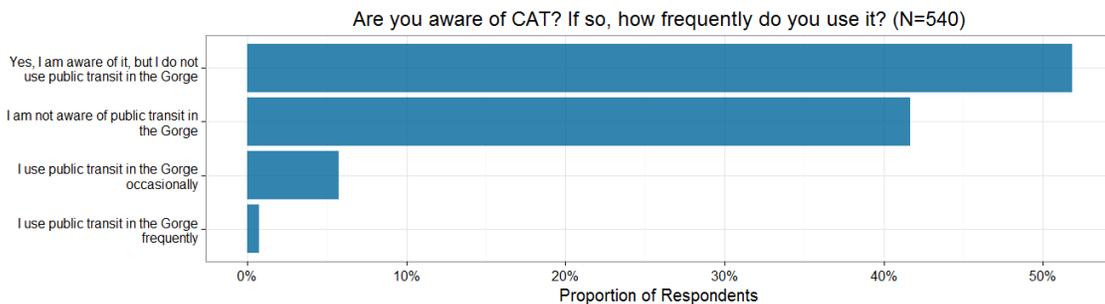


Figure 4-32 CAT Awareness (Residents)



Residents indicated why and where they would take transit; these results are illustrated in Figure 4-33 and Figure 4-34. One-third of residents said they would use transit for recreational trips, and over a quarter of residents said they would use transit for shopping/errand trips. Less than 30% indicated they would not use transit, which means over 70% of residents would consider using transit for some trip type. The Portland area was the most desired destination for transit (even with connections to other transit services to complete the trip), with Hood River and The Dalles being the second and third most popular, respectively.

Figure 4-33 Transit Trip Purposes (Residents)

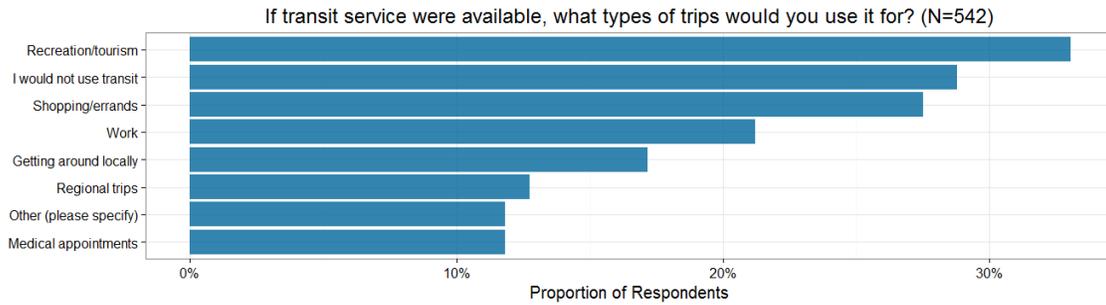
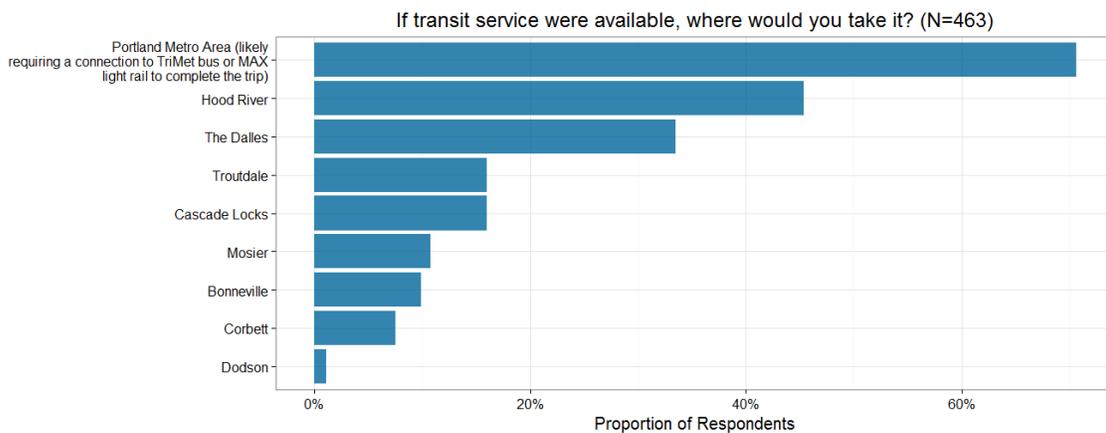


Figure 4-34 Transit Destinations (Residents)



Key Findings

All Respondents

- Respondents were generally concentrated in the Portland metropolitan area and the Columbia River Gorge communities, suggesting the survey reached the geographically targeted audience.
- The demographics of respondents were generally not those of typical transit-dependent populations, suggesting that the respondent pool is primarily made up of discretionary riders. Transit service will likely need to be relatively high performing to be utilized by these types of riders.

Visitors

- Traffic congestion and parking availability issues are most acute at Multnomah Falls (and other waterfalls) and trailheads. This aligns with the general consensus around congestion issues in the Gorge area.
- 70-80% of respondents indicated they would consider using a parking shuttle or public transit to reach Gorge area destinations. This lends support to the viability of recreational transit service.
- The majority of visitors travel in groups of two. Small groups may be the target audience for transit service, as large groups would likely making driving more convenient.

- Visitors generally take trips to multiple destinations over a total duration of several hours or more. Transit service would need to support this desire to be viable.

Residents

- The vast majority of resident responses make daily trips only within their own community. This indicates, at least among respondents, that intercity commuting is not the norm among Gorge residents.
- Approximately 70% of resident responses indicated a willingness to use transit for various trip making activities. Over 90% were either aware of and don't use or not aware of public transit in the Gorge. These results imply there is unmet demand for transit among residents.
- The result that residents would take transit to the Portland Metro Area was not surprising. The surprising part was that the question clearly stated that the service would likely require a transfer to TriMet MAX LRT, indicating a willingness to make quality connections to the regional system