



Travel Washington Intercity Bus Program

2019 PLAN UPDATE



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ABOUT THIS STUDY

The Washington State Department of Transportation delayed publishing the Travel Washington Study during 2020 because of the COVID-19 pandemic's effect to the intercity bus program's ridership and connectivity.

As such, the study reflects the program's service in 2019. We expect that it will take some time until the program returns to that same level of service. We also realize that it is currently unrealistic to expand the program to include a fifth bus route because we are using all available funding to maintain existing routes through the pandemic.

We decided to not delay publication of the study any further to document the status of the program at the time when:

- Our consultant completed their research on the program.
- The advisory committee wrapped up activities.
- Community groups and the public participated in public meetings and gave comments.
- Current and potential riders provided ideas.

We realize the information in the study may not reflect the current program. However, we thought it was important to share it with you at this time.

The technical memorandums and addendums are available by request from the WSDOT Public Transportation Division at don.chartock@wsdot.wa.gov or 360-705-7928.

We would like to acknowledge the staff at KFH Group, Inc., who contributed their knowledge, experience and expertise with intercity bus programs in Washington state and throughout the country. Their research, recommendations and inclusion of ideas from the advisory committee, current and potential riders, local and regional planning organizations, elected officials, bus operators and Travel Washington contractors made this study possible. Planengineering, LLC, played a key role in outreach and summary of findings based on interviews with service providers and surveys with stakeholders, riders and general public.

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OVERVIEW

Chapter 1 provides an overview of the Travel Washington intercity bus program and its routes. Located in four different areas of Washington, the routes connect small towns and rural areas with the national intercity bus network, local transit, intercity rail passenger service and commercial air service available at major metropolitan destinations. This chapter also shows that the Washington State Public Transportation Plan reflects the state’s intercity bus goals.

Chapter 2 is a review of the entire intercity bus network and changes that have taken place over the past decade.

Chapter 3 assesses the access provided by the intercity bus network. This analysis addresses the general population and specific groups who are more likely to need or use intercity bus services.

Chapter 4 includes ridership experiences and recommendations for the Travel Washington system from passengers and other stakeholders, such as the study advisory committee, current and potential riders, local and regional planning organizations, elected officials, bus operators and Travel Washington contractors.

Chapter 5 gives a performance evaluation of the existing Travel Washington routes.

Chapter 6 is recommendations for service alternatives developed through the analysis and input documented in the previous chapters. This chapter also prioritizes potential expansion based on measures aligned with the goals of the Washington State Public Transportation Plan.



CHAPTER 1

INTRODUCTION

Study Purpose

Over 10 years ago, the Washington State Department of Transportation (WSDOT) developed the first public/private partnership model in the country for a rural intercity bus program. Called Travel Washington, this innovative program partners with transportation companies to provide in-kind (non-monetary) contributions, such as aligning schedules so that passengers from rural areas can seamlessly connect to the nationwide bus and train network, airports and state ferries system.

The Federal Transit Administration (FTA) funds the Travel Washington program through the Section 5311(f) program for capital, planning and operating of public transportation services for rural areas with populations of less than 50,000 and where residents often rely on public transit to reach their destinations. WSDOT contracts with private operators, using the Section 5311(f) funds, to provide intercity bus service to rural communities. Every four years, FTA requires WSDOT to consult with intercity bus providers, stakeholders and riders to assess existing services and unmet needs.

The Travel Washington program can trace its beginnings to a WSDOT study in 2007¹. The study helped to develop policies and identify projects to support a network of transportation services to link rural towns and communities in Washington state to the national intercity bus system. The study:

- Provided an analysis of the existing intercity bus network.
- Compared existing services with locations of higher potential levels of need.
- Identified rural locations and corridors that were unserved.
- Identified rural communities along the corridor with the highest potential for unmet transportation needs.
- Prioritized rural corridors with unmet transportation needs.
- Ranked rural corridors eligible for intercity bus service.

ABOUT SECTION 5311(f)

Section 5311(f) requires that states must spend 15 percent of their overall Section 5311 funding allocation on rural intercity bus projects under Section 5311(f). States may forego this requirement by certifying to FTA that there are no unmet rural intercity needs, and that the state has determined that there are no needs as the result of a consultation process. The consultation process must include outreach to the intercity carriers and other stakeholders.

FTA program guidance for the rural intercity bus program is in FTA Circular 9040.1G (49 U.S.C. 5311 – Formula Grants for Other Than Urbanized Areas), Chapter VIII, Intercity Bus. The circular defines intercity bus service as:

“Regularly scheduled bus service for the general public operating with limited stops over fixed routes connecting two or more urban areas (2,500 persons is the Census definition of urban) not in close proximity, which has the capacity for transporting baggage carried by passengers, and which makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available.”

States may include package express service if they are incidental to passenger transportations.

Commuter, charter and tour bus services are not eligible under this program. The type of vehicle used (except for the requirement to carry baggage) does not define intercity service.

All vehicles providing services under this program must be fully compliant with the Americans with Disabilities Act (ADA).

¹ WSDOT, *Washington State Intercity and Rural-to-Urban Public Transportation Network Plan*; KFH Group in association with Landsman Transportation Planning and Community Mobility Solutions; Olympia, Washington; July 2007

The current study evaluates Travel Washington since its inception, and looks for areas for improvement and potential expansion of the system. The study:

- Examined routes operated by the existing program.
- Included extensive public and stakeholder engagement.
- Evaluated the need for potential new routes.
- Recommended changes in the program and services.

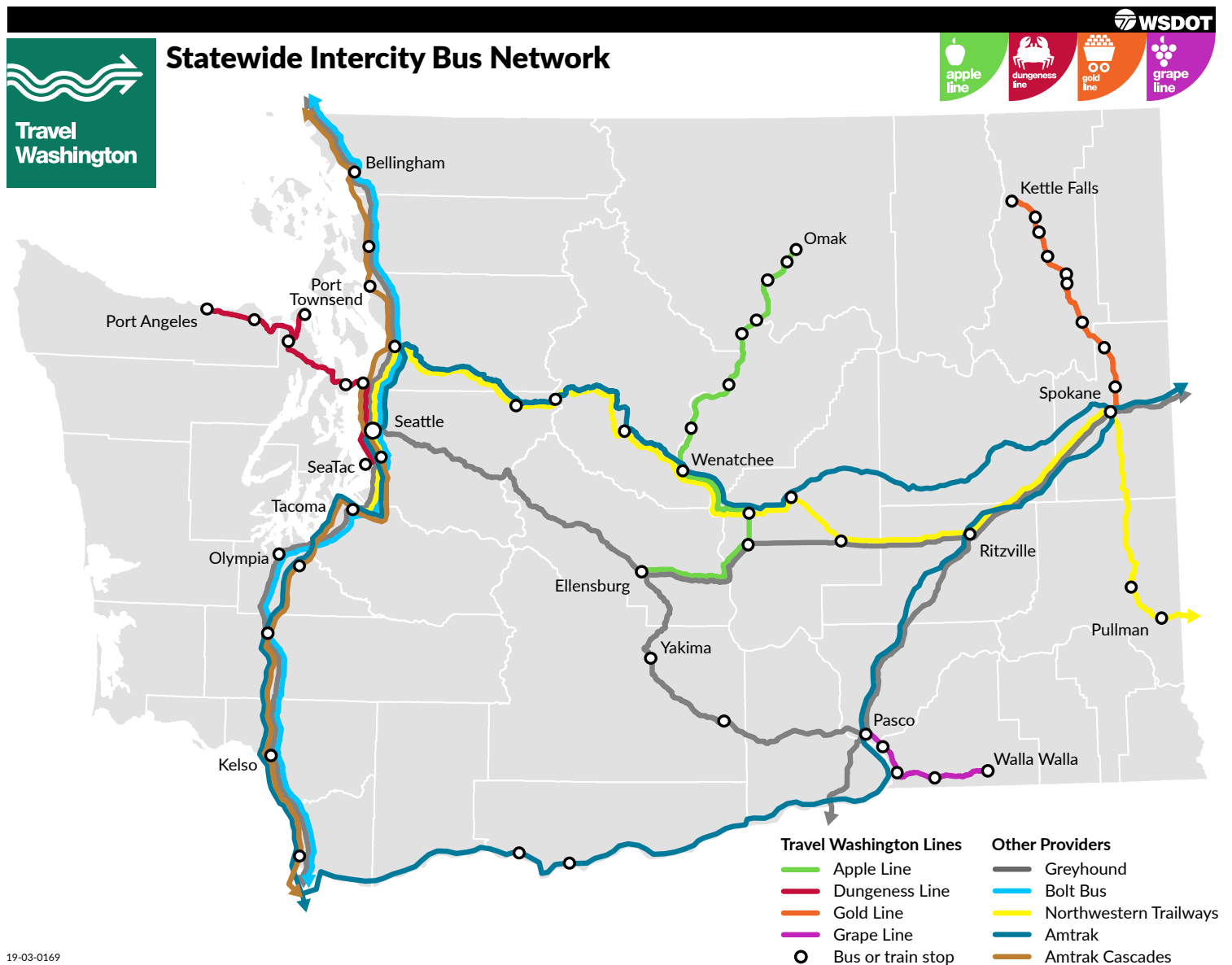
Travel Washington overview

WSDOT developed the Travel Washington program to provide service on routes connecting small towns with

major cities and urban hubs. WSDOT branded each of the routes with a name based on a regional theme. See Figure 1 and the following bullets:

- **Apple Line**
 - Omak to Ellensburg via Okanogan, Malott, Brewster, Pateros, Chelan Falls, Orondo, Wenatchee, Quincy and George (all in Washington)
 - One round-trip per day; daily service
- **Dungeness Line**
 - Port Angeles to Seattle via Sequim, Discovery Bay, Port Townsend, Edmonds, Virginia Mason,

Figure 1: Travel Washington Route Structure



Poly Clinic, Swedish Medical, Arnold Medical Pavilion, Harborview Medical Center, Seattle Amtrak, Seattle Greyhound, VA Hospital and SeaTac Airport (all in Washington)

- Two round-trips per day; daily service

- **Gold Line**

- Kettle Falls to Spokane via Colville, Arden, Addy Chewelah, Loon Lake, Deer Park, North Spokane, Spokane STA Plaza, Spokane Intermodal (Amtrak, Greyhound, Northwestern Trailways and Jefferson Lines connections), and Spokane Airport (all in Washington)
- Two round-trips per day; daily service

- **Grape Line**

- Walla Walla to Pasco (Tri-Cities) via College Place, Touchet, Wallula and Burbank (all in Washington)
- Three round-trips per day; daily service

Travel Washington passengers can purchase an interline ticket to connect to multiple modes on a single trip. This includes transferring from Travel Washington buses to national intercity bus networks (e.g., Greyhound Lines, Northwestern Trailways, Jefferson Lines and Amtrak).

Travel Washington key elements

WSDOT is the Section 5311(f) grant recipient from FTA.

WSDOT uses request for proposals to contract with private for-profit companies to operate the Travel Washington routes. Each of the four intercity bus lines operates on a four-year contract with WSDOT, the most recent of which was renewed in July 2020.

WSDOT is a national leader in developing and implementing an innovative approach for providing the required local match for intercity services. Under the Section 5311 program, the required local match share of the net operating deficit of any funded service is limited to 50 percent of the operating cost. For Section 5311(f), this match comes from the unsubsidized connecting service provided by Greyhound. Careful attention to the design of the project allows the WSDOT to fund the net operating deficit of the subsidized segment with federal dollars.

Relationship to the Washington State Public Transportation Plan and Washington Transportation Plan

The Travel Washington intercity bus program is part of the integrated multimodal transportation system described in WSDOT's Washington State Public Transportation Plan². This 20-year public transportation plan is required in state law and described in WSDOT's overarching Washington Transportation Plan³ for multimodal transportation.

The Public Transportation Plan includes goals, strategies and near-term actions to advance a complete and integrated multimodal transit system. The plan's five goals, which support the vision and direction of Travel Washington, are:

- **Goal 1:** Thriving Communities
- **Goal 2:** Access
- **Goal 3:** Adaptive Transportation Capacity
- **Goal 4:** Customer Experience
- **Goal 5:** Transportation System Guardianship

² Washington State Department of Transportation; *2016 Washington State Public Transportation Plan*; Olympia, Washington; 2016.

³ Washington State Department of Transportation; *Washington Transportation Plan*; Olympia, Washington; 2018.

CHAPTER 2

INVENTORY OF EXISTING SERVICES

This chapter identifies and defines the current network of intercity bus services and the geographic areas they serve in Washington, Oregon, Idaho and British Columbia.

Existing intercity bus services

Based on 2018 research from two national databases, Greyhound Bus Line’s website and Amtrak timetables, four types of intercity bus services were identified:

- **Traditional (Legacy)** – Examples include Greyhound Lines, Northwestern Trailways, Bellair Charters & Airporter, CanTrail and Jefferson Lines
- **Regional** – Examples include Link Transit, Community Transit, Grays Harbor Transit, Clallam Transit System, County Connector and Yakima-Prosser Connector
- **Rural** – Examples include Travel Washington Intercity Bus Program
- **Long-Distance Curbside** – Examples include Bolt Bus and Wheatland Express

(Note: Amtrak national timetables were reviewed because Amtrak Thruway bus connections depend on existing intercity bus services.) Also, researchers collected data from intercity operators serving Washington’s non-urbanized and urbanized cities, such as timetables, cities served and web links. More information follows about each type of intercity bus service.

Each of the four types of intercity bus services as well as the map showing intercity bus routes and bus stops are described in the following information.

Traditional “Legacy” bus service

This category includes services provided by Greyhound Lines, Northwestern Trailways, Bellair Charters & Airporter, CanTrail and Jefferson Lines:

- **Greyhound Lines**
 - Timetable 601: Service between Seattle, Vancouver (B.C.), Portland and Los Angeles:
 - Two local trips from Vancouver to Seattle

- One local trip from Vancouver through Seattle and Portland, and on to Los Angeles
- Two local trips from Seattle through Portland to Los Angeles
- Three local trips from Los Angeles to Portland, Seattle and Vancouver (B.C.)
- One Friday-only local trip from Portland to Seattle

- Timetable 502:

- One round trip per day between Spokane and Portland

- Timetable 509:

- Two local round trips between Seattle and Spokane
- Two local round trips between Seattle and Stanfield

- **Jefferson Lines**

- Two daily round trips between Spokane and Missoula

- **Northwestern Trailways**

- Timetable 7840:

- One trip each way per day between Spokane and Tacoma via Stevens Pass

- Timetable 7842:

- One round trip per day between Lewiston and Spokane via Pullman, and one trip each way between Boise and Spokane

- **Bellair Charters and Airporter**

- Central Washington Airporter:

- Five round trips per day from Yakima to Ellensburg to Chelan to North Bend to SeaTac Airport and Link Light Rail network

- Western Washington Airporter:

- Eleven round trips per day along the northern I-5 corridor to SeaTac with a spur route to Anacortes

- **Cantrail Coach Lines**

- Three southbound and four northbound trips per day from Vancouver (B.C.) to Seattle

Regional intercity services

Local and regional services are operated by one or more local or regional transit systems and often connect small urban clusters to an intercity transfer opportunity in a larger city. None of these services offer interline ticketing with the National Bus Traffic Association intercity network, and not all of them connect at intermodal facilities that also serve as intercity bus stops. They represent additional intercity access and could potentially feed into the national intercity transit network.

- **Grays Harbor Transit**

- Route 40:
 - Seven round trips per day on weekdays and four on weekends from East County to Olympia
- Route 45:
 - Four daily round trips weekdays from Oakville to Rochester to Centralia

- **Link Transit**

- Route 20:
 - Five round trips per day from Wenatchee to Orondo to Manson
- Route 21:
 - Twelve round trips per day from Wenatchee to Entiat to Manson
- Route 22:
 - Twenty round trips per day from Wenatchee to Leavenworth
- Route 25:
 - Five round trips per day from Wenatchee to Waterville
- Route 26:
 - Five round trips per day from Wenatchee to Ardenvoir

- **Clallam Transit System**

- The Strait Shot:
 - Two round trips per day, Port Angeles to the Bainbridge Island Ferry Terminal

- **County Connector**

- Network of regional routes jointly operated by Island Transit, Skagit Transit, and the Whatcom Transportation Authority
- Route 80X:
 - Nine weekday round trips from Bellingham to Mt. Vernon
- Route 90X:
 - Eleven daily weekday trips from Bellingham to Mt. Vernon

- **Community Transit**

- Route 230:
 - Two daily round trips from Darrington to Smokey Point with one stop at the Smokey Point station and the other stop at Arlington
- Route 280:
 - Twenty-four weekday daily round trips from Granite Falls to Everett

- **People For People**

- Three round trips per weekday from Yakima to Prosser Community Connector

- **Skamania County Public Transit-Gorge West End Transit (WET)**

- Two daily weekday round trips and additional midday trip on Fridays from Stevenson to Vancouver

- **Mount Adams Transportation Service**

- Four daily weekday round trips from Goldendale to The Dalles
- Ten weekday daily round trips from White Salmon to Bingen to Hood River

Rural Intercity Section 5311(f) services – Travel Washington

The four WSDOT Travel Washington routes – Apple Line, Dungeness Line, Gold Line and Grape Line – are the rural intercity services in the state. Refer to Chapter 1 for more information.

Long-distance curbside intercity services

- **BoltBus**

- Four round trips per day from Vancouver (B.C.) to Seattle; two continue to Portland
- Four round trips per day from Seattle to Portland; one continues to Eugene

Amtrak Thruway bus service

Amtrak contracts with bus carriers to operate connecting intercity bus services and expand the coverage of the intercity rail passenger network. Called Amtrak Thruway, the service provides a ticket for a bus and Amtrak train as part of a single trip. Amtrak Thruway bus services include:

- **Seattle to Vancouver (B.C.)**

- Three daily southbound and four northbound Amtrak Thruway bus trips between the Seattle Amtrak Station in Washington and Pacific Central Station in Vancouver (B.C.) – operated by Cantrail

- **Bellingham-Seattle**

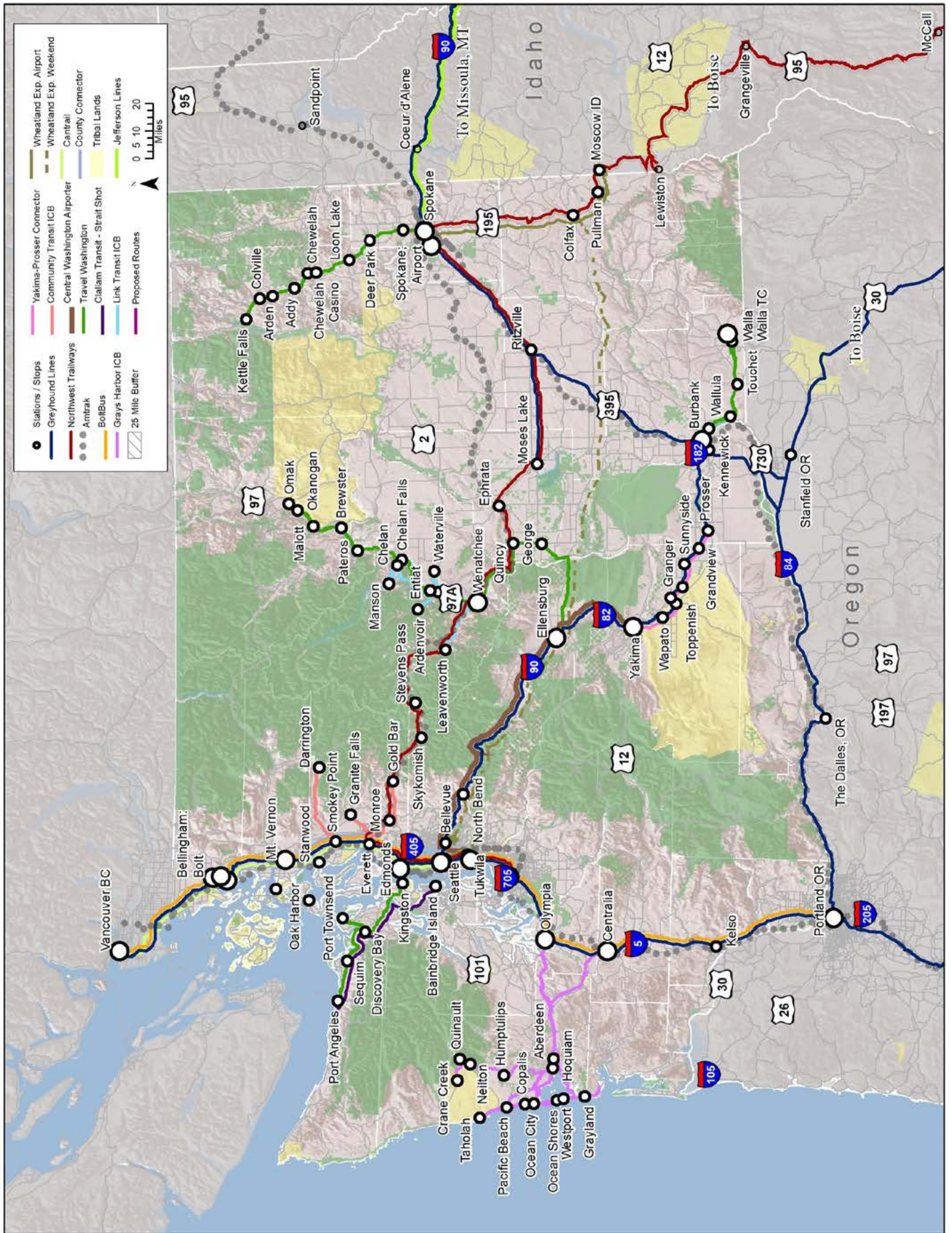
- One northbound trip on Saturdays, Sunday and holidays connecting from Train 502, and one daily southbound trip connecting to Train 507 between Bellingham and Seattle – operated by MTR Western

Conclusions

This inventory of intercity bus services is a comprehensive network of services that can be used to take intercity trips across the state and to destinations elsewhere. The unsubsidized legacy and curbside bus services focus on the major population centers in the north-south corridor between Vancouver (B.C.) and Portland. Also, Greyhound and Northwestern Trailways operate key east-west connections across the state. The Amtrak rail passenger services are part of the comprehensive intercity bus program. The four Travel Washington routes connect rural areas to these basic networks, and can be accessed for information and ticketing through either Greyhound or Amtrak systems.

There are a number of other long-distance regional transit services that can be used to reach the intercity bus and rail networks, but their role as intercity connectors is not clearly defined because they do not always connect at the same stations and interline ticketing is not available. Information about potential intercity connectivity is only available if the carriers supplied General Transit Feed Specification (GTFS) data about services to allow Google Transit and similar services to provide trip planning information.

Figure 2: Washington Intercity Bus Routes and Station Stops



CHAPTER 3

NEEDS ASSESSMENT

This chapter examines the extent to which Washington's intercity bus network meets potential public need for intercity connections. Another element is descriptions of areas with high-relative need based on the density and percentage of potentially transit-dependent populations. Also, the study identifies places that are likely to be intercity bus destinations, including commercial airports, correctional facilities, educational institutions, medical centers, military installations and tribal lands. By overlaying the existing bus network with potential origin areas of high need and potential destinations, the analysis reveals gaps in intercity network coverage. The current network is generally responsive to the needs identified within this chapter.

Demographic analysis

The need for any type of public transportation is largely based on an area's population density, relative age and economic characteristics. Using data from five-year estimates in the 2010 Census and the 2012-2016 American Community Survey, this analysis focused on the following population categories:

- Young adults (persons ages 18 to 24)
- Older adults (persons ages 65 and older)
- Persons living at or below the poverty line
- Autoless households (i.e., no vehicles at residence)

These four categories were combined into aggregate measures of need, based on density and percentage of the population. The scale used for the demographic analysis ranges from low to very high, reflecting demographic characteristics in relation to the statewide average.

Population density

Approximately seven million people live in Washington, according to the five-year estimates. Washington's population densities range from less than 1 person per square mile in rural areas to over 50,000 persons per square mile in urban King County. This urban clustering of population indicates that a majority of Washington's

population lives within the service area of an intercity bus stop. Approximately 76.7 percent of Washington residents live within 10 miles of an intercity bus stop or station, and 95.6 percent live within 25 miles. Refer to Figure 3 on the following page.

Autoless households

Of the areas with very high levels of autoless homes, there are three in Washington that are more than 25 miles from the intercity transit network: Forks, Republic and Long Beach. Additionally, some block groups have higher numbers of autoless households that are more than 25 miles from the intercity transit network. Several areas show very high numbers of autoless households and are between 10 and 25 miles from the intercity transit network.

Young adult population

For the young adult population in Washington state, there are five Census block groups in Washington that are at least 25 miles from the nearest intercity transit stop and have more than twice the statewide average of young adult (ages 18 to 24) population.

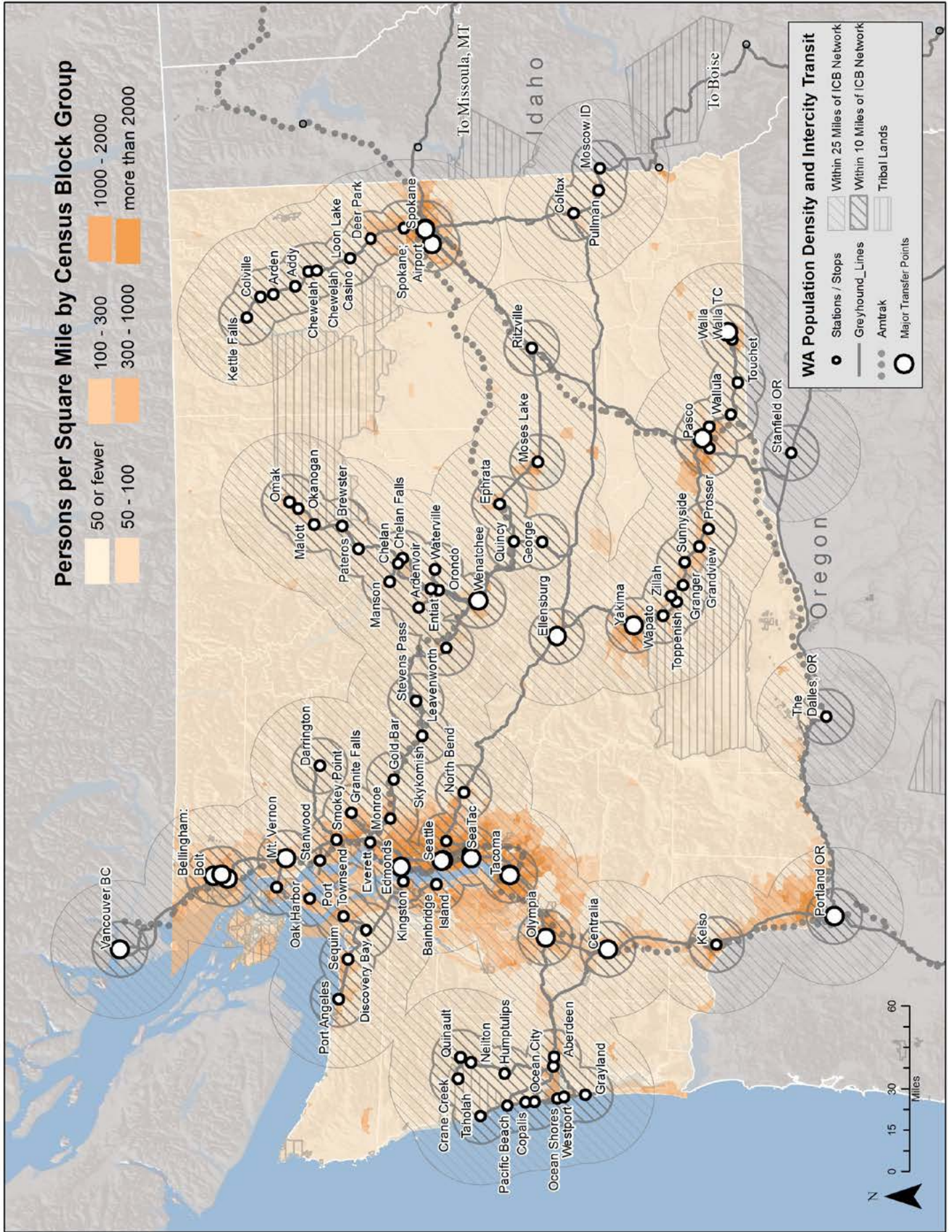
Transit Dependent Index based on density of high-needs population

The Transit Dependent Index (TDI) shows the population of a given area (relative to the larger study area) that relies on public transit for their needs (Figure 3). Given the low-population density of much of Washington, most of the state is classified as a low need.

There is one higher-need block group outside of the 25-mile intercity transit service area: Long Beach. The following areas show higher levels of transit need, and are between 10 and 25 miles from the nearest intercity transit station/stop in Washington:

- Vancouver and Battle Ground to northeastern Portland
- Raymond
- Shelton
- Wauna

Figure 3: Washington Population Density and Proximity to Intercity Bus Network



- Lynden, Nooksack and Semiahmoo Peninsula
- Benton City
- Othello
- Interstate 90 corridor between Spokane and the Idaho border

Destinations and facilities

The analysis of demographic data addressed the potential origin areas for intercity trips. Another consideration is whether the current routes serve the places that are likely to be attractors for potential destinations of intercity bus ridership. These include colleges and universities, military bases, major medical centers, correctional facilities and commercial airports. These destinations are mapped in Figure 4 on the following page.

Nearly all identified intercity trip generators in Washington are located within 25 miles of an intercity transit station or stop. There are some exceptions, such as the following intercity trip generators that are more than 25 miles from the nearest intercity transit stop in Washington:

- Clallam Bay Corrections Center and Makah Reservation near the northwestern tip of the Olympic Peninsula
- Coyote Ridge Corrections Center (capacity 2,468) in Connell (Amtrak and Greyhound pass through without stopping)

The following intercity trip generators are between 10 and 25 miles from the intercity transit network and could potentially generate transit ridership:

- Airports – commercial service, primary (over 10,000 annual enplanements)
 - Friday Harbor Airport in San Juan County
 - Nez Pierce County Airport in Lewiston
- Washington State Department of Corrections prisons
 - Cedar Creek Corrections Center in Thurston County – capacity 480
 - Larch Corrections Center in Clark County – capacity 480
 - Mission Creek Corrections Center in Mason County – capacity 305
 - Washington Corrections Centers in Mason County – capacity 1,268

- Olympic Corrections Center in Jefferson County – capacity 378
- Washington Corrections Center for Women in Pierce County – capacity 738
- Colleges and universities in Washington
 - Green River College – enrollment 18,900
 - Colockum Research Unit of Washington State University – primarily a wildlife area
- Hospitals and medical centers in Washington
 - Madigan Army Medical Center – 240 beds
 - American Lake Veterans Hospital – 230 beds
 - Eight additional locations with 25 beds or less

Aside from the Makah Reservation on the tip of the Olympic Peninsula, tribal lands in Washington are at least partially within the intercity transit network service area. In addition, 46 percent of the area of the Colville Reservation, 52 percent of the Yakama Reservation, and 66 percent of the Spokane Reservation are within 25 miles of the intercity transit network.

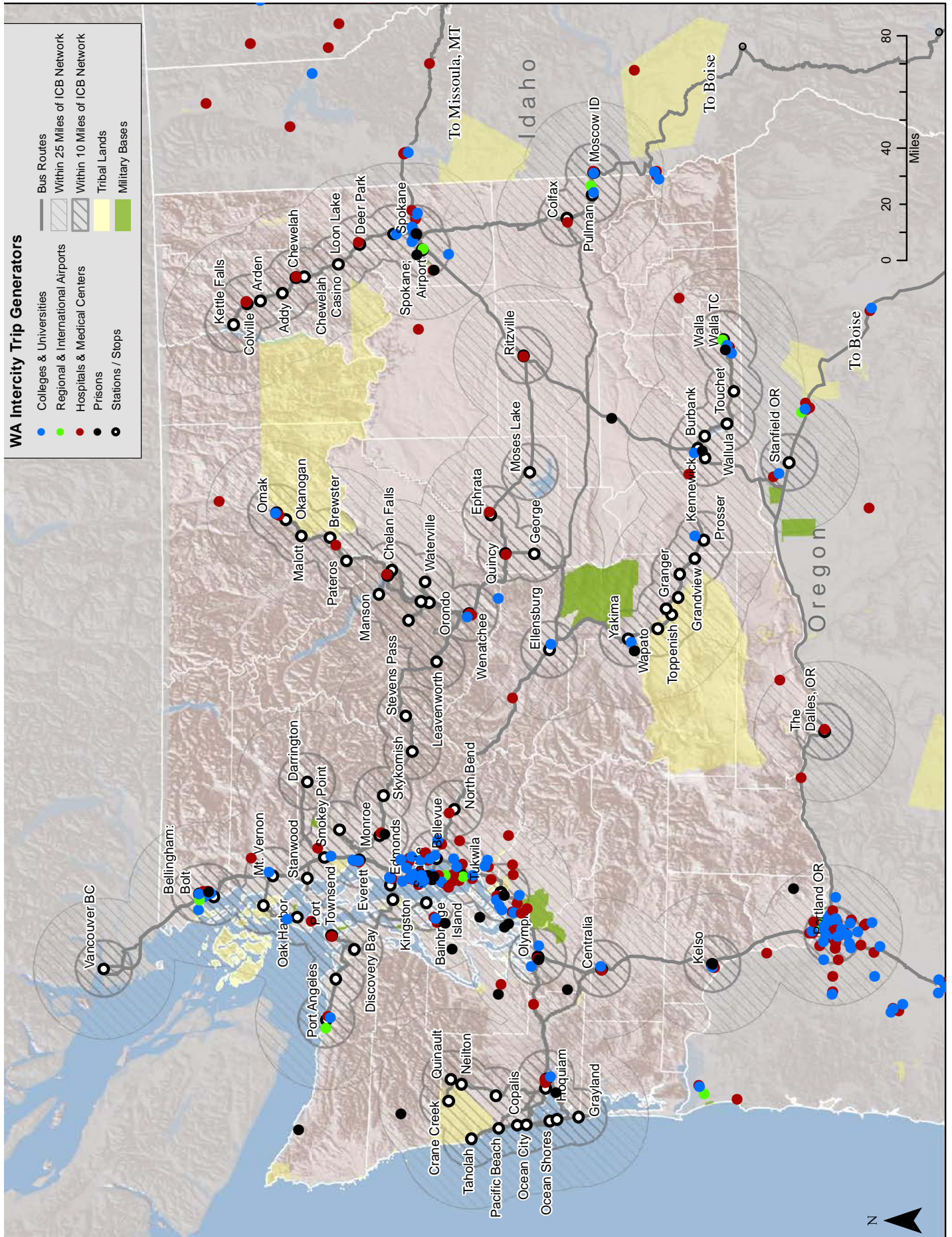
Summary

In terms of coverage, the current intercity network (broadly defined to include some regional transit routes) provides a high degree of coverage to Washington's population. Approximately 76 percent of Washington residents live within 10 miles of an intercity bus stop or station, and 95 percent live within 25 miles. This suggests that there are no large areas that are completely lacking in access to intercity service, and that expansion routes in rural areas may add relatively few people to the population covered by the network.

Other considerations of expansion or changes may need to focus on the 20 percent of the population living in the band between 10 and 25 miles. In many cases, these areas are served by existing public transit service. If connections to the intercity stops are made by local transit providers, this population could be considered as having access to the intercity network without necessarily having to develop new intercity services.

Another consideration is that the analysis of coverage does not really address the possible need for new linkages that could cut travel times between places that are already served. Ideally, any proposals for new services would accomplish improved connectivity and address gaps in coverage.

Figure 4: Washington Intercity Trip Generators and Proximity to Intercity Bus Network



CHAPTER 4

CONSULTATION AND OUTREACH

This chapter presents key findings and themes from WSDOT’s multi-faceted approach to stakeholder engagement and consultation for the plan update.⁴

Outreach methods included:

- **Study advisory committee with 21 members:**
 - Amtrak
 - Central Washington Airporter
 - Community Transportation Association of the Northwest
 - Cowlitz-Wahkiakum Council of Governments/ Southwest Washington Regional Transportation Planning Organization
 - Grant Transit
 - Greyhound Bus Lines
 - Northeast Washington Regional Transportation Planning Organization
 - Northwestern Stage Lines
 - Olympic Bus Lines
 - Palouse Regional Transportation Planning Organization
 - Spokane Tribe of Indians
 - Twin Transit
 - Washington State Transit Association
- **Eight community meetings around the state:⁵**
 - Aberdeen
 - Centralia
 - Colville
 - Mount Vernon
 - Omak
 - Port Angeles
 - Walla Walla
 - Yakima
- **Interviews with current and former Travel Washington service providers:**
 - Bellaire Charters (current operator of Gold Line and Grape Line)
 - Greyhound Bus Line (current operator of Dungeness Line)
 - Northwest Trailways (current operator of Apple Line)
 - Olympic Bus Lines (former Dungeness Line operator)
- **Eighteen stakeholder surveys:**
 - Benton-Franklin Council of Governments
 - Chelan-Douglas Transportation Council
 - Cowlitz-Wahkiakum Council of Governments and Southwest Washington Regional Transportation Planning Organization
 - Grays Harbor Council of Governments
 - Island Regional Transportation Planning Organization
 - Lewis-Clark Valley Metropolitan Planning Organization
 - Northeast Washington Regional Transportation Planning Organization
 - Palouse Regional Transportation Planning Organization
 - Peninsula Regional Transportation Planning Organization
 - Puget Sound Regional Council
 - Quad-County Regional Transportation Planning Organization
 - Skagit Council of Governments

⁴ See Technical Memorandum 4, which is available by request from the WSDOT Public Transportation Division, for more details about the approach, findings from the survey of riders on the existing Travel Washington lines, and an exploration of key themes from input and feedback from stakeholders during the consultation process.

⁵ WSDOT sent invitations for the community meetings to regional planning agencies, transit agencies, human service agencies, tribes, Northwest Motor Coach Association, universities, health departments, statewide group email system managed by WSDOT, and tribal transportation email distribution list. Each meeting included a presentation on WSDOT’s Travel Washington Intercity Bus Program, followed by a discussion of needs, issues and ideas for improving intercity service in their areas.

- Southwest Washington Regional Transportation Council
- Spokane Regional Transportation Planning Council
- Thurston Regional Transportation Planning Council
- Walla Walla Valley Metropolitan Planning Organization and Sub-Regional Transportation Planning Organization
- Whatcom Council of Governments
- Yakima Valley Conference of Governments
- **Project website regularly updated and linked to WSDOT’s Travel Washington webpage**
- **Rider survey on Travel Washington buses with 352 responses**
- **Carrier surveys to Travel Washington service providers**
- **General public online survey with 16 responses:**
 - Olympic Peninsula: Port Angeles, Port Townsend and Sequim
 - Southwestern Washington: Morton, Raymond, Ocean Park and Cathlamet
 - Eastern Washington: Colville, Pullman and LaCrosse
 - Southcentral Washington: Yakima
- **Email notifications and updates to transit systems statewide**



- Household income over \$60,000 – 26 percent (including 17 percent from household incomes over \$80,000)
- Student – 9 percent
- Employed full – or part-time – 41 percent
- Unemployed – 10 percent
- Retired – 32 percent

Ethnic backgrounds

Riders roughly reflect the ethnic breakdown of Washington’s population overall. However, survey results slightly underrepresented people of color.

Ethnicity

- Caucasian – 76 percent
- Hispanic – 6 percent
- Asian or Pacific Islander – 7 percent
- Black or African American – 2 percent
- Native American – 4 percent
- Other – 5 percent

Language

- English as a first language – 94 percent
- Spanish speaking – 2 percent
- Other – 4 percent

Rider characteristics and insights from the rider survey

The following information describes rider characteristics and insights based on responses to the rider surveys on the four Travel Washington bus lines.

Passenger socio-demographics

Socio-economic spectrum

Riders represent a cross-section of the socio-economic spectrum. Many are older or from lower-income households.

- 55 years or older – 47 percent
- Lower-income household (\$40,000 per year or less) – 58 percent

Insights from the rider survey

Critical travel niche

Travel Washington fills a critical travel niche for people who do not drive or do not have access to a vehicle.

- Did not have a driver’s license – 22 percent
- Did not own a vehicle, their vehicle was not available, or the vehicle was not in adequate condition to make the trip – 57 percent

- Would not have made the trip if the Travel Washington bus was not available – 25 percent

Traveling solo

Most riders travel on their own.

- Traveling on their own – 86 percent
- Traveling with one companion – 16 percent
- Traveling with two companions – 3 percent
- Traveling in groups of more than three people – 2 percent

Visiting with family and friends

Visiting with family and friends is a top trip purpose for riders.

- Traveling on the intercity bus to visit friends and relatives – 51 percent
- Intercity bus service is important to Native Americans because tribal members maintain close relationships, often familial, with members of other tribes across the state. Also, tribal events sometimes require long-distance travel.

Travel distance

About one-fourth of riders travel a significant distance (25 miles or more) to reach an intercity bus station.

- Live within 5 miles of an intercity bus station – 55 percent
- Traveled 6-25 miles to board the bus – 23 percent
- Traveled over 25 miles to reach an intercity bus station – 22 percent

Family members pick up and drop off

Many riders rely on friends and family to get them to the Travel Washington bus and pick them up at the other end of their journey.

- Driven to meet their bus by someone other than an official transportation company or agency – 57 percent
- Met and picked up by someone they knew at the other end of the trip (excluding those who were destined for the airport) – 36 percent
- Reached the intercity bus station using local transit services – 9 percent

- Took local transit to continue their trip after exiting the intercity bus – 17 percent

Single bus route

Many trips have both origin and destination within the service area for a single Travel Washington bus route.

- Indicated they would not make a transfer during their trip – 61 percent
- Transferring to other carriers to reach their ultimate destination with a single transfer – 27 percent
- Traveled further afield to destinations requiring two or more transfers – 13 percent

Online and over-the-phone ticketing

Online ticketing is popular, but over-the-phone ticketing remains an important option.

- Purchased online – 41 percent
- Purchased over phone – 21 percent
- Purchased directly from bus driver as they boarded – 24 percent
- Purchased at a bus station or other ticketing location – 14 percent

Webpages as a resource

Webpages maintained by Travel Washington contractors are a primary source of information for riders.

- Obtained information from the website developed for the specific bus line they were riding – 42 percent
- Found information for their trip on Greyhound's website – 15 percent
- Used Google Transit to plan their trip – 8 percent

Quality of services, features and facilities

Riders perceive that services, features and facilities offered by Travel Washington contractors are high quality.

- Riders ratings were 4 to 4.5 stars (with 5 as the highest rating)
- Nearly all riders surveyed would recommend the Travel Washington intercity bus service to others

Summary of themes from consultation and outreach

General program observations

Groups and markets with potential service needs

Stakeholders identified three market segments as populations with potentially underserved needs in most areas of the state:

- Veterans in rural areas accessing medical service centers run by the U.S. Department of Veterans Affairs
- University students making intercity trips
- Corrections facility visitors and internees

Additional market observations for specific geographic areas are in the geographic-specific input section on the following page.

Terminals, transfers and connections

Timed connections with intermodal transportation services

Stakeholders generally acknowledged the need for Travel Washington schedules to coincide with connecting intercity bus services such as Greyhound. They also said that Travel Washington service providers should consider Amtrak, ferry and airline schedules when creating timetables for the Travel Washington routes.

Bicycles on buses

All Travel Washington buses have a bicycle rack that can accommodate two bicycles. However, some stakeholders felt that it is important for travelers with bicycles to have confidence that they will be able to board the bus with their bicycle, even if the rack is full.

Intercity bus demand and funding issues

Subsidies

Providers consulted during the planning process confirmed that travel demand in most rural areas is not adequate to support free-market service, and they would not be able to provide intercity bus service without a public subsidy.

Providers also felt that it is important for WSDOT to monitor each market where the agency applies

subsidies for intercity bus service. This would ensure that the agency does not use limited public funds in markets where the private sector can profitably provide unsubsidized intercity service.

Dependence of service expansion on Greyhound

Because Greyhound provides in-kind match for the Travel Washington program, any reductions in Greyhound service frequencies and routes could curtail the potential for expanded Travel Washington services. As such, Travel Washington service providers were cautious about expansion of their existing routes.

Fluctuating travel demand

Travel Washington service providers observed that gas prices and the economy largely drive ridership. Fluctuations in ridership can make it challenging for service providers to accurately forecast potential revenue when responding to WSDOT's request for proposals.

Increased service frequencies

In nearly all areas, Travel Washington riders expressed a desire for more frequent service. However, Travel Washington operators noted that greater frequencies often spread the same rural ridership over more trips, resulting in a need for higher subsidies.

Federal 5311(f) funding flexibility

Local transportation service providers recommended flexibility on types of projects and services eligible for 5311(f) funding awarded by WSDOT. An example is allowing public transit agencies to use 5311(f) funding for intercity connections. Another is using 5311(f) funding for demand-response connecting service or fixed-route service that operates less than five days per week to link rural areas to the intercity bus network.

Pricing and ticketing

Seamless service

Stakeholders expressed an interest in exploring how regional public transit providers could interline with the Travel Washington network to provide more seamless service. This includes interlining ticket sales with Greyhound. However, stakeholders were concerned that public transit providers may need additional employees to help with ticket sales.

Fare consistency

Some stakeholders were confused with the difference in fares and pricing structures for each of the four Travel Washington lines. They were also confused about fares being different on public transit system routes when compared to those of Travel Washington.

Marketing and information needs**Online information**

Rider surveys indicated that many people visit the Travel Washington service providers' webpages to get information about their trip. Across all regions, stakeholders noted that service providers could improve these websites. Additionally, stakeholders suggested that service providers work with local public transit agencies to add Travel Washington links to their websites.

Community outreach

Stakeholders appreciated the opportunity to interact with WSDOT program managers during the development of the Travel Washington Intercity Bus Program Study. They asked for more ongoing outreach to stay up to date on the Travel Washington program. Additionally, stakeholders indicated that continued participation in regional planning organization meetings, periodic informational presentations for local elected bodies, and education for mobility managers would be beneficial.

Raising awareness

Stakeholders had several suggestions for promoting the Travel Washington program to help attract riders and raise general awareness:

- Advertisements on local public transportation buses and in theaters
- Advertisements for students and university populations
- Public service announcements (radio and television)
- Intercity bus information on Washington's 2-1-1 system, which is a free, confidential community service and one-stop connection to local services with a database of over 27,000 resources

Geographic-specific input

Because stakeholders are familiar with the regions in which they live and work, much of the input received during consultation and outreach relates to specific geographic areas of the state.

Issues related to connections between WSDOT regions is in the Inter-Regional section of this chapter.

Northwestern Washington

- Improved connections for rural areas east of the I-5 corridor
- Additional intercity service for new commercial air service in Everett
- Improved connections for Whidbey Island
- Additional service for northwestern Washington

Olympic Peninsula**Improvements to existing Dungeness Line:**

- Later departure from Port Townsend to connect better with local transit services
- Bus stop at the University of Washington Medical Center, which has a Link Light rail station for access to SeaTac
- Alternate route options when traveling from Port Townsend toward the Kingston ferry terminal to capture more passengers (e.g., route through Poulsbo)
- Extension to Tacoma
- Improved access to communities on the I-5 corridor for tribal members and residents on the Quinalt Indian reservation
- Service connecting Seattle area with the Clallam Bay Corrections Center in Clallam Bay and the Olympic Corrections Center in Forks
- New intercity route to connect Port Angeles, Bremerton and Tacoma

Southwestern Washington

- Improved access to the intercity bus system for Vancouver
- Coastal connections
- Connection across the Columbia River Gorge

Northcentral Washington

- Improvements to existing Apple Line:
 - Schedule change to lessen the layover time for Spokane-bound passengers
 - Addition of a midday run from Pateros to Wenatchee
 - Route shortened by moving the northern terminus to Pateros and increasing regional transit services for access to Omak
 - Extend route to Tonasket (Okanagan County) and potentially to Ferry County
- Multimodal transit center for Ellensburg.
- Route for college students at private universities in Toppenish and Terrace Heights
- Route connecting Cle Elum, Roslyn and Ronald, potentially with a weekly connector to Easton
- Route connecting Ellensburg to Kittitas and Vantage
- Shared stop in Quincy for Northwestern Trailways and Grant Transit, providing connections with Ephrata, which is losing its Northwestern Trailways stop
- Regional commuter service between Cle Elum and Ellensburg

Eastern Washington

- Improvements to existing Gold Line:
 - Extend the route to Republic
 - Alter the route to swing off US 395 to pick up passengers in Valley and Springdale; then return to US 395
- Lower fares or voucher program for human service agency clients and low-income residents
- Greater travel options from multiple directions for the Pullman/Moscow area

- More service for US Highway 2 corridor communities
- Additional funding support for existing intercity services if changes occur in ridership or costs in the future, such as for these routes:
 - Northwestern Trailways: Spokane to Pullman to Boise
 - Greyhound: Spokane to Pasco to Portland

Southcentral Washington

- Improvements to existing Grape Line:
 - Earlier departure time from Walla Walla so that passengers can make connections with Amtrak in the Tri-Cities
 - Multimodal transit center for Yakima
 - Intercity bus stop for Connell
- Additional service to Columbia, Kittitas and Walla Walla counties, which is currently limited to only Medicaid transport
- Additional service to rural areas, specifically Dayton and Waitsburg

Inter-Regional

- Addition of an eastern to southcentral line that includes stops in Pullman, Colfax and Connell (state corrections facility)
- Addition of a southwest to southcentral line that connects Centralia to Yakima via U.S. Highway 12
- Addition of a southwest region line that connects to Oregon from Yakima to Portland
- Addition of cross-state travel along the I-90 Corridor from Seattle to the Idaho state line with intermediate stops at North Bend, Cle Elum and Moses Lake

CHAPTER 5

EVALUATION OF TRAVEL WASHINGTON SERVICES

This chapter evaluates the coverage, schedule convenience, customer satisfaction and performance the current Travel Washington routes.

Network coverage

The four Travel Washington lines are an important part of addressing unmet needs in areas where the private market does not provide bus service.

Using Geographic Information System tools, WSDOT's analysis revealed that the Travel Washington service adds 366,017 persons to the population within 10 miles of an intercity stop, or 5 percent of the state's population of 7,073,146. The added population within 25 miles of the additional stops of the Travel Washington routes is 1,195,361, or 17 percent of the total state population.

Same-day round trip

WSDOT designed the Travel Washington routes to provide for a same-day round trip. When combined with the unsubsidized services and the long-distance transit routes, many places have this level of service available. See Figure 5 for the route segments that allow same-day round trips.

Quality of service

WSDOT surveyed passengers on the Travel Washington routes. The survey included questions about customer satisfaction and desired improvements. The results for each line are in Technical Memorandum 5, which is available upon request from the WSDOT Public Transportation Division.

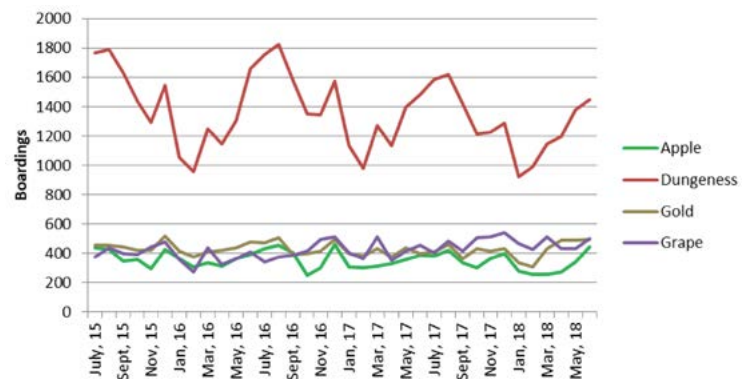
Overall, satisfaction with the routes was high. Nearly 100 percent of all surveyed riders would recommend Travel Washington to others.

In general, surveyed riders identified weaknesses with onboard amenities, such as lack of wireless internet.

Ridership: actual and predicted

WSDOT collects Travel Washington ridership data from service provider invoices. The agency summarizes the data by route and schedule on a monthly and annual basis. See Figure 6 for monthly ridership by route.

Figure 6: Travel Washington ridership – monthly boardings by route, July 2015-June 2018



Overall, Travel Washington's Dungeness Line has a much higher basic level of demand than the other routes. The other routes – Grape Line, Gold Line and Apple Line – have similar levels of demand that have stayed relatively constant over the two-year period. The difference is that the Grape Line offers three round trips per day; Gold Line offers two round trips per day; and Apple Line offers a single daily round trip.

Readers should note that other unsubsidized carriers do not report ridership data to WSDOT. Additionally, Travel Washington service providers do not report ridership on unsubsidized routes or services.

Estimated demand

To determine whether Travel Washington ridership was comparable to that of Section 5311(f) rural routes in other states or if there was latent demand, WSDOT used the rural intercity bus demand model from the TCRP Report 147⁶ by the Transit Cooperative Research Program with updated population statistics from the 2010 census. WSDOT then used the characteristics of

⁶ Frederic D. Fravel, Reyes Barboza and Jason Quan of the KFH Group, Inc, and Jason K. Sartori of Integrated Planning Consultants, LLC; TCRP Report 147: Toolkit for Estimating Demand for Rural Intercity Bus Services; Transportation Research Board, Washington, D.C. 2011.

Table 1: Travel Washington route demand using Transit Cooperative Research Program Research Report 147 model updated with 2010 Census data

Bus Line	2017 Ridership	2010 Population	Average Population per Stop	Estimated Demand		
				Regression	Trip Rate	Mean
Apple Line	4,296	47,900	4,790	7,100	2,500	4,800
Dungeness Line	16,824	127,686	21,281	14,000	11,600	12,800
Gold Line	5,098	15,960	2,280	10,600	2,300	6,450
Grape Line	5,023	74,620	14,924	6,600	4,700	5,650

the four routes as an input to estimate the demand. See Table 1 above for the results.

Overall, Travel Washington’s Dungeness Line has a much higher predicted ridership (12,800) than the other routes. The Dungeness Line also performs well above this predicted level, with nearly 17,000 riders in FY2017. For the other routes, the actual ridership is slightly below the predicted mean value.

This analysis shows that there is a need to maintain the service level and quality of the Dungeness Line to retain its higher-than-projected ridership and revenue. Additionally, an expanded scope could increase ridership on other routes.

One Travel Washington service provider interviewed for the study identified the impact that the economy and gas prices have on Travel Washington ridership. Most of the data used to calibrate the Transit Cooperative

Research Program Research Report 147 demand model reflected 2008-2009, which was during the Great Recession. During that time, gas prices were also high. It may be that since the recession, some riders have shifted trips to their personal vehicles.

Operating data

Table 2 presents basic operating statistics for the four Travel Washington routes for the 12-month period from July 2017-June 2018.

Note: The “line operating cost plus profit” reflects WSDOT’s definition of this term as the amount invoiced by the carrier less the gross operating expense and plus the fare revenue. This combines the revenue and the difference between the invoice amount and the gross operating cost. As such, the billable costs of the program is \$1,511,070.62.

Table 2: Travel Washington operating statistics: July 2017-June 2018

Line	Riders	Revenue miles	Vehicle trips	Operating cost ⁽¹⁾	Revenue	Net operating cost ⁽²⁾
Apple Line	4,054	134,340	726	\$ 278,083.00	\$ 91,696.00	\$ 186,387.00
Dungeness Line	15,433	161,009	1,460	\$ 1,031,982.00	\$ 585,415.00	\$ 446,567.00
Gold Line	5,046	131,040	1,460	\$ 295,469.00	\$ 66,267.00	\$ 229,202.00
Grape Line	5,631	119,570	2,190	\$ 312,215.00	\$ 63,445.00	\$ 248,770.00
Total	30,164	545,959	5,836	\$ 1,917,749.00	\$ 806,823.00	\$ 1,110,926.00
				Operating cost plus “profit” ⁽³⁾		\$ 1,580,015.00
				Billable cost		\$ 1,511,070.62

⁽¹⁾ Gross operating expense

⁽²⁾ Gross operating expense less revenues

⁽³⁾ Invoiced amount less gross operating expense plus fare revenue

Table 3: Travel Washington route performance: July 2017-June 2018

Line	Net Operating Cost ⁽¹⁾	Cost per Mile	Revenue per Mile	Subsidy per Mile	Cost per Rider	Revenue per Rider	Subsidy per Rider	Boardings per Trip	Farebox Recovery
Apple Line	\$186,387.00	\$2.07	\$0.68	\$1.39	\$68.59	\$22.62	\$45.98	5.58	32.97%
Dungeness Line	\$446,567.00	\$6.41	\$3.64	\$2.77	\$66.87	\$37.93	\$28.94	10.57	56.73%
Gold Line	\$229,202.00	\$2.25	\$0.51	\$1.75	\$58.56	\$13.13	\$45.42	3.46	22.43%
Grape Line	\$248,770.00	\$2.61	\$0.53	\$2.08	\$55.45	\$11.27	\$44.18	2.57	20.32%
Total	\$1,110,926.00	\$3.51	\$1.48	\$2.03	\$63.58	\$26.75	\$36.83	5.17	42.07%

⁽¹⁾ Gross operating expense

Performance and potential standards

Route performance

WSDOT uses data on ridership, revenue and operating cost to compute performance measures for each route. The combined effect of the ridership, revenue and operating costs by route is in Table 3.

In terms of performance and cost-effectiveness, the Travel Washington Apple, Gold and Grape lines have productivity and cost recovery typical of rural transit. The Dungeness Line has higher ridership, costs, revenues and farebox recovery than the other lines. This may be because the Dungeness serves a higher income area, has a major airport as the endpoint, allows riders to avoid transfers to/from ferries, and avoids urban congestion. On the other side of the spectrum, the Grape Line has the most frequent service and the fewest riders per trip, but its farebox recovery and subsidy per passenger are comparable to the other rural routes.

WSDOT conducted another version of this analysis using the costs of the newly renewed contracts that also included vehicle costs. The result was an increase in all of the measures involving costs for the Apple, Gold and Grape lines. For the Dungeness Line, the new cost per mile was lower. With reduced costs, if the Dungeness Line retains its ridership and revenue, there may not be a need for a subsidy from WSDOT and FTA 5311(f) funding.

Performance standards

Based on the current and projected performance of the Travel Washington routes, proposed standards for route performance may include:

- Minimum farebox recovery of 10 percent
- Maximum subsidy per passenger of \$100
- Minimum average boardings of two riders per trip

If WSDOT adopted these performance standards for Travel Washington, the current routes would all be considered acceptable. However, the Grape Line would be close to the thresholds. Potentially, a decline in ridership or an increase in costs could bring the Grape Line in conflict with one or more of the standards. This would raise the question of whether a change in service design would make sense, such as a reduction from three to two daily round trips.

Summary

WSDOT evaluated the four Travel Washington routes in several ways to assess their contribution to mobility in the state and their cost effectiveness.

The Travel Washington program addresses unmet needs in areas where the private market does not provide bus service. People in rural areas can make same-day round trips to larger urban areas as well as connect to the national intercity bus network and Amtrak rail passenger services.

Through Travel Washington, an additional 5 percent of the state’s population is served within 10 miles of an intercity stop and an additional 17 percent of the state’s population is served within 25 miles of an intercity stop.

Based on surveys, users of the service on all four lines gave a nearly 100 percent satisfaction rating and said they would recommend Travel Washington to others. Generally, two-thirds of the riders rated almost all service attributes as of the highest quality. However, there were some weaknesses with on-board amenities (primarily the lack of wireless internet), schedules (desire for more frequency), and stop location/cleanliness (more or different stops).

Ridership patterns show a clear distinction between the Apple, Gold, and Grape lines compared to the Dungeness Line. The Apple, Gold and Grape lines have similar annual ridership levels (around 5,000 trips per year), show little seasonality, and have been stable over the past two years. The Dungeness Line has a higher level of ridership and is very seasonal, with ridership peaking during the summer travel season.

Comparing actual ridership to predicted ridership using the updated Transit Cooperative Research Program Research Report 147 demand model, WSDOT could expect the Dungeness Line to have significantly higher ridership, but it has been outperforming even the higher predicted level. The other three lines have slightly lower ridership than the demand model predicts, suggesting there might be potential for modest increases in ridership, particularly if gas prices rise or if there is an economic downturn.

The analysis suggests potential performance standards for all four lines:

- Minimum farebox recovery of 10 percent
- Maximum subsidy per passenger of \$100
- Minimum average boardings of two people per trip

Proposed Travel Washington routes would need to meet the above performance standards to be included in the prioritization. Refer to Chapter 6 for more information on the prioritized list of potential new routes.

CHAPTER 6

TRAVEL WASHINGTON PROGRAM RECOMMENDATIONS

This chapter presents route alternatives developed from the needs assessment in Chapter 3, input from the consultation process in Chapter 4, and review of current services in Chapter 5.

This chapter also includes an assessment of the funding capacity of the Travel Washington program, and the amount of funding potentially available for service expansion and other program needs. It also addresses the issue of in-kind match availability, and the potential for using toll credits as match.

This chapter also describes potential needs for additional program changes, including the need for improved traveler information, additional marketing and staffing support.

Potential route alternative – new population coverage

WSDOT identified 22 Travel Washington route expansion alternatives based on the needs assessment, public and stakeholder input, and service provided by the current Travel Washington routes. See Figure 7 on the following page for potential route expansion alternatives.

Currently, the population coverage of existing unsubsidized intercity routes, the four Travel Washington routes, and selected long-distance transit routes is:

- Within 10 miles of a stop – 77.5 percent of the state’s population
- Within 25 miles of a stop – 96.9 percent of the state’s population

If WSDOT implemented all 22 Travel Washington route expansion alternatives, the population coverage would be:

- Within 10 miles of a stop – 84.2 percent of the state’s population
- Within 25 miles of a stop – 98.4 percent of the state’s population

As described above, the bus coverage by the Travel Washington program would increase for people living within 10 miles of a stop. For people living within 25 miles of a stop, additional coverage would have little impact.

Methodology

WSDOT used the following criterion to assess the 22 route expansion alternatives:

1. Population served.
2. Degree to which the alternative served previously unserved populations.
3. Potential demand using the updated Transit Cooperative Research Program Research Report 147 demand model.
4. Potential revenue using demand estimates.
5. Potential annual operating costs.
6. Net operating deficit.
7. Potential performance of each alternative.
8. Degree to which the alternative provided new service or whether another operator or combination of operators already serve the route.

WSDOT derived a score for each criteria. The agency further weighted the score for each assessment to represent identified priorities.

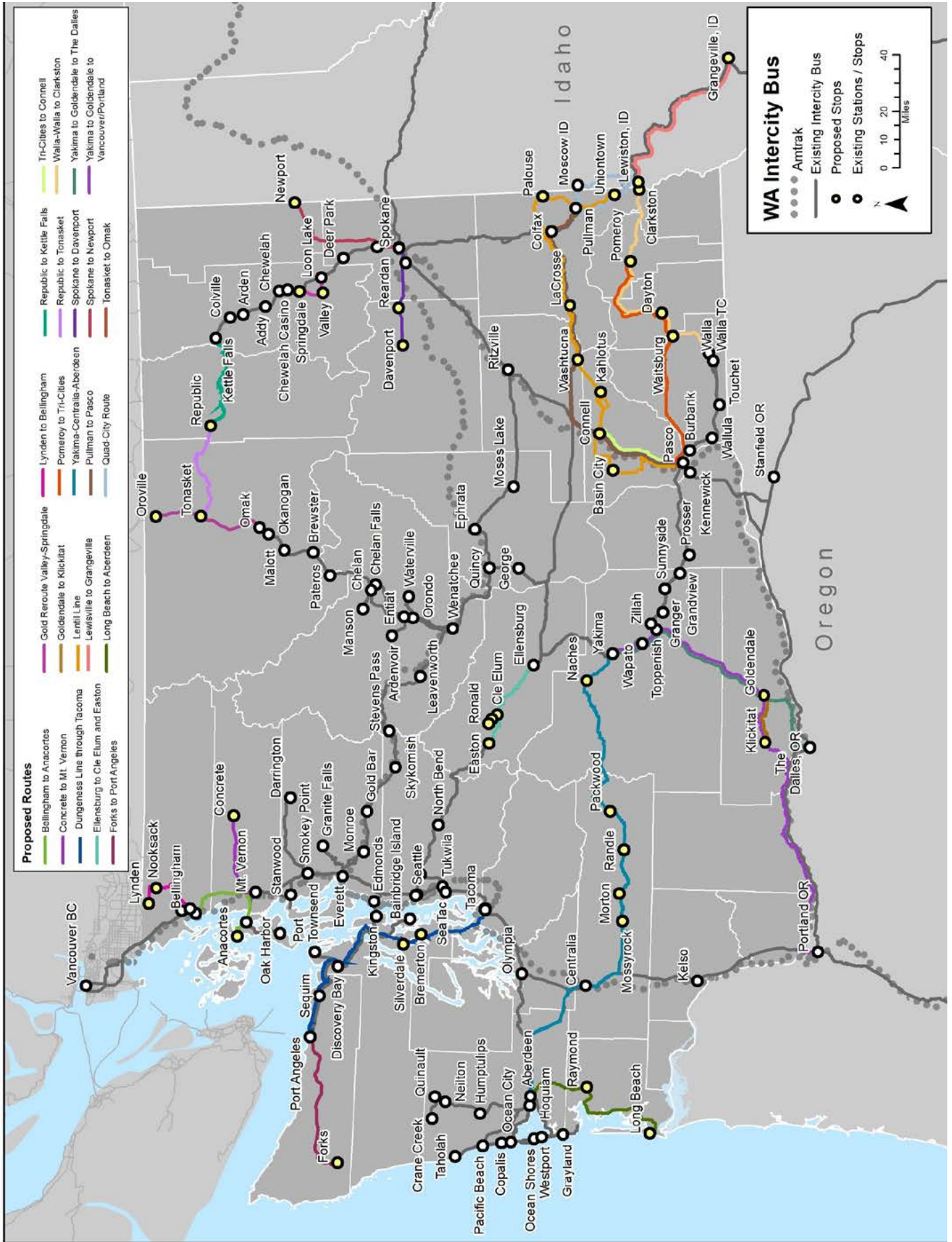
Prioritization of proposed routes

The criteria in the Methodology section falls into two groups:

1. Cost effectiveness (performance).
2. Degree to which each route provides new access (service).

Because not all criteria have equal importance, WSDOT designed a process to weight the score for each criteria.

Figure 7: Potential route alternatives



Tables 4 and 5 below show the criteria scores and weights that WSDOT applied to prioritize the 22 route expansion alternatives. The weights reflect the state’s goals in the Washington State Public Transportation Plan, input from the Travel Washington Study Advisory Committee, and input from stakeholders during the community engagement phase of the Travel Washington study.

Input from the plan and groups favored new coverage of unserved areas to increase access and serve more riders. As such, the service criterion of providing new population coverage, serving more previously unserved people (mean demand), and serving underserved routes (existing service score) all have a weight of three. The combined value of the three performance assessments

(subsidy per passenger trip, farebox recovery, boardings per trip) all have a weight of one.

Table 6 shows a summary of the results when the scoring of each criterion is multiplied by its weight and summed. Technical memorandum 6, which is available by contacting the WSDOT Public Transportation Division, provides the complete prioritization table.

There are opportunities for one or more Travel Washington route expansion alternatives that fit the state’s priorities for transit. WSDOT may need to develop these alternatives further. Additionally, the

Table 4: Performance – evaluation criteria and weighting

	Subsidy per passenger trip	Farebox recovery	Boardings per trip
Scoring rubric	0 = Over \$100	0 = Negative impact on farebox	0 = Less than one to negative impact
	1 = \$50 to \$100	1 = Under 30%	1 = Under 5
	2 = \$20 to \$50	2 = 30% - 50%	2 = 5 to 8
	3 = Under \$20	3 = Over 50%	3 = 8 and above
Criterion weight	1	1	1

Table 5: Service – evaluation criteria and weighting

	New population coverage	Mean demand	Existing service score
Scoring rubric	0 = Under 2,500	0 = Under 1,000	0 = Over entire route
	1 = 2,500 - 5,000	1 = 1,000 - 3,000	1 = Requires 1 transfer
	2 = 5,000 - 15,000	2 = 3,000 - 5,000	2 = Requires 2+ transfers
	3 = Over 15,000	3 = 5,000 and up	3 = No existing service
Criterion weight	3	3	3

Table 6: Summary of weighted scoring of route expansion alternatives

Proposed Route	Sum of Weighted Scores
Tri-Cities to Connell	33
Walla-Walla to Clarkston	32
Yakima to Goldendale to Vancouver/Portland	32
Pasco-Pullman via Connell-Washtucna-Colfax	30
Bellingham to Anacortes Ferry Station	28
Lentil Line (Pasco to Pullman/Uniontown)	26
Ellensburg to Cle Elum and Easton	23
Quad-City Route*	21
Gold Reroute Valley-Springdale	20
Lynden to Bellingham	19
Yakima-Centralia-Aberdeen	19
Yakima to Goldendale to The Dalles	17
Long Beach to Aberdeen	15
Dungeness Line through Tacoma	14
Clarkston-Lewiston-Moscow-Pullman-Spokane	14
Republic to Tonasket (extension of Gold Line)	13
Spokane to Davenport	13
Spokane to Newport	13
Oroville-Omak-Wenatchee-Ellensburg	10
Republic to Kettle Falls (extension of Gold Line)	10
Forks-Port Angeles-Port Townsend-Seattle-SeaTac	8
Concrete to Mt. Vernon	7

final choice of alternatives depends on the availability of in-kind match and whether the actual timetables can provide the needed connections with the existing national network.

Among the top-scoring alternatives, several considerations affect operational and funding feasibility:

Tri-Cities to Connell: This route scores high because there is currently not a bus operator serving Connell. The demand model also includes a significant positive effect from serving a town with a prison.

Tri-Cities/Walla Walla to Pullman/Lewiston/Clarkston: Among the top-scoring routes, there are three different routings that address the gap in the current network between the Tri-Cities (Pasco) and Pullman/Lewiston/Clarkston.

Another high-scoring route is the Quad Cities proposal that includes Moscow.

The only likely source of in-kind match for any of these routes is the Northwestern Trailways route from the Washington/Idaho state line to Spokane (two-round trips per day), and potentially a portion of the Northwestern Trailways route from Spokane to Seattle.

Yakima to Goldendale to Vancouver to Portland: This proposal scored well because it would provide new service to a rural area (i.e., Goldendale) and the population on the Washington side of the Columbia River.

Revisions to the existing Travel Washington routes: In many cases, when WSDOT added significant miles on multiple frequencies to the existing Travel Washington routes to serve towns with very small populations, this did not add significant coverage. Additionally, the performance measures for the routes worsened.

However, the deviation of the Gold Line to Valley and Springdale may be worthwhile. It would also have minimal effect on the route's schedule. WSDOT could use a pilot project to test the ridership impact.

Other options: One option mentioned by stakeholders that is not on the list is the potential for a second round-trip on the Apple Line. The trip would leave Omak later in the morning and return later in the day.

Another expansion of the branding and interline connections would be the inclusion of Grays Harbor Transit Route 40 in the network in an informational and ticketing sense. However, this does not expand coverage.

Potential funding for expansion

There are two key funding concerns for potential expansion of Travel Washington.

The first concern is that the program receives the entirety of its funding through Section 5311(f). This amount is, at a minimum, 15 percent of the state's overall Section 5311 allocation. WSDOT could opt to spend more than the 15 percent, but only if flexibility with available funding existed in the Intercity Bus program that could be considered for that purpose. However, for planning purposes, the 15 percent is effectively the budget.

The second concern is the availability of in-kind match miles.

WSDOT Section 5311(f) funding availability

WSDOT's evaluation of the Section 5311(f) account showed that the agency could potentially expand the Travel Washington program.

While the total for the new contract rates for the four existing routes in 2018 was \$1,875,903, which is close to the 15 percent allocation of \$2,001,816 allowed through Section 5311(f), Travel Washington has been spending less than the full allocation. In fact, the program is just now using FY 2016 funding, and allocations for 2017 and 2018 are backlogged.

One strategy WSDOT could use is to increase spending. However, this creates a scenario in the future where the program allocation no longer covers all current and expanded services, depending on the extent of expansion.

Table 7 shows a model of Section 5311(f) funding and assumes the addition of a \$400,000 expansion route. The table also assumes 3 percent growth in the Section 5311 funding and in the costs of the existing and expansion services.

Starting from the current Section 5311(f) account status, the addition of a \$400,000 expansion route would result in a continuing program balance through 2028 at least.

Table 7: WSDOT Section 5311(f) funding scenario with \$400,000 expansion

Year	Apportionment ⁽¹⁾	Funding Requirement for Current Routes ⁽²⁾	Fund Additions	Cumulative Backlog at Current Spending Rate	Cost of New Route(s) ⁽³⁾	Available Balance
2016	\$1,898,751	\$1,898,751				
2017	\$1,927,125	\$1,600,000	\$327,125	\$2,225,876		
2018	\$2,001,816	\$1,600,000	\$401,816	\$2,627,692		
2019	\$2,061,870	\$1,875,903	\$185,967	\$2,813,659		
2020	\$2,123,727	\$1,875,903	\$247,824	\$3,061,483	\$400,000	\$2,661,483
2021	\$2,187,438	\$1,875,903	\$311,535	\$3,373,018	\$400,000	\$2,573,018
2022	\$2,253,062	\$1,875,903	\$377,159	\$3,750,177	\$400,000	\$2,550,177
2023	\$2,320,653	\$1,932,180	\$388,473	\$4,138,650	\$412,000	\$2,526,650
2024	\$2,390,273	\$1,990,145	\$400,127	\$4,538,778	\$424,360	\$2,502,418
2025	\$2,461,981	\$2,049,850	\$412,131	\$4,950,909	\$437,091	\$2,477,458
2026	\$2,535,841	\$2,111,345	\$424,495	\$5,375,404	\$450,204	\$2,451,750
2027	\$2,611,916	\$2,174,686	\$437,230	\$5,812,635	\$463,710	\$2,425,271
2028	\$2,690,273	\$2,239,926	\$450,347	\$6,262,982	\$477,621	\$2,397,997

Source: WSDOT

⁽¹⁾ Actual Section 5311(f) Apportionments for FY 2016-2018, after that assumed to increase 3% per year.

⁽²⁾ Annual operating costs for four existing Travel Washington Routes, new contract rates applied for FY 2019-2022, after that assumed to increase 3% per year.

⁽³⁾ Assumed annual cost for a hypothetical route increases 3% per year beginning in FY 2023.

It is possible that some expansion using \$400,000 would also work. However, a test run at \$650,000 expansion eliminates the balance and goes negative in 2028.

The overall implication of the model is that there is some scope for expansion. However, the expansion is likely to be limited to one or two routes.

Relationship to out-of-boundary transit needs

The focus in this study is on regional connections to the intercity network. WSDOT developed route expansion alternatives with this goal in mind. As such, all but four of the route expansion alternatives cross county boundaries.

Because Section 5311(f) prohibits funding commuter services, the methods and analysis in this study have not focused on work trips. This study also does not

focus on human service transportation or long-distance medical trips, though WSDOT has considered these needs in reference to intercity bus services. As such, readers should consider the route expansion alternatives additions to the needs identified in the 2016 study.

Information and marketing

WSDOT may also choose to use available funding for improvements to information and marketing about Travel Washington.

While WSDOT does not intend this study to make recommendations for improved marketing and information systems, areas the agency may consider include:

- A single website featuring all Travel Washington routes and their connections with other services.

- Consistent websites for each of the Travel Washington routes linked to the single, unified website above.
- Inclusion of Travel Washington and other intercity services in developing information and travel planning sites (e.g., iTransitNW Connexionz effort underway in eastern Washington).

Staffing

State-run intercity bus programs vary considerably in staff time assigned to program management.

WSDOT originally started the Travel Washington program with one staff member dedicated almost full time to the program. However, in 2018, the staff person dedicated no more than 10 percent of their time to Travel Washington because of other responsibilities with WSDOT. This is below the 50 percent of a staff person’s time that WSDOT estimated for 2018 to successfully maintain the program (e.g., contract updates, monitoring service, grants management, reporting, etc.).

Expanding information and marketing, planning and implementing an additional route, working with contractors and the other providers on connections, and responding to changes in the industry would likely expand the staffing needs to a full-time position. WSDOT could fund 100 percent of this position through Section 5311(f), since this is part of the 10 percent share that the agency funds at 100 percent federal funds.

Recommended strategy

Given the available funding for expansion, the lack of in-kind match in the eastern part of the state, and the potential additional program elements, the recommended strategy for Travel Washington is:

- Expand staffing capacity.
- Work with Idaho and Oregon to develop a coordinated approach to intercity/regional connections serving southeastern Washington, using Section 5311(f) funding to maintain or expand services. Funding of new services in one state should support those in adjoining states, avoiding negative effects on existing services.
- Consider retaining funding capacity to address potential need for support to maintain currently unsubsidized services, such as the Spokane to Pullman segment of the Spokane to Boise service operated by Northwestern Trailways, or Greyhound’s Spokane to Pasco to Portland route.
- Work on implementing a Greyhound stop at Connell, as well as incorporating the Grays Harbor Route 40 into the interline ticketing system for Travel Washington.
- Develop improved websites and an enhanced marketing plan.
- Initiate planning for route expansion alternatives in Table 8.

Table 8: Likely candidates for Travel Washington expansion

Proposed route	Estimated annual cost ⁽¹⁾	Net operating deficit	Contingency factor (50%)	Preliminary budget
Walla-Walla to Clarkston	\$413,180	\$173,762	\$86,881	\$260,643
Pasco-Pullman via Connell-Washtucna-Colfax	\$397,120	\$168,640	\$84,320	\$252,960
Clarkston-Lewiston-Moscow-Pullman-Spokane	\$350,400	\$170,400	\$85,200	\$255,600
Yakima to Goldendale to Vancouver/Portland	\$548,960	\$273,728	\$136,864	\$410,592
Lentil Line (Pasco to Pullman/Uniontown)	\$528,520	\$367,792	\$183,896	\$551,688

⁽¹⁾ Based on one-round trip per day at \$4.00 per revenue-mile, 356 days per year.

Of these five high-scoring route expansion alternatives, three provide a link between the Tri-Cities and Pullman (Figure 8):

- Walla Walla to Clarkston
- Clarkston to Lewiston to Moscow to Pullman to Spokane
- Pasco-Pullman via Connell-Washtucna-Colfax

WSDOT will need to work with local and regional planners to determine which alternative would best meet the needs of the local communities.

Refer to the following descriptions for a potential southeastern route for Travel Washington.

Walla Walla to Clarkston

The Walla Walla to Clarkston route would require passengers headed for Seattle or Portland to transfer to the Grape Line, and then transfer again in Pasco. These transfers would be inconvenient and detrimental to intercity ridership. At the eastern end of the route, there is no direct connection (as proposed) to Pullman, where Washington State University is located. The route would also serve an incremental population of only 5,000. Additionally, in-kind match could not come from Greyhound, as there is no direct connection, unless WSDOT integrates the route with the Apple Line.

Clarkston to Lewiston to Moscow to Pullman to Spokane

The Clarkston to Lewiston to Moscow to Pullman to Spokane route is an alternative for WSDOT to consider if Idaho contracts with a different operator for the Moscow to Boise service. If this occurs, WSDOT would need to fund its segment of the route. WSDOT designed the route expansion alternatives to serve the immediately adjacent population and university centers in Idaho as a means of addressing regional goals and increasing ridership. Coordination with Idaho is desirable.

Pasco to Pullman

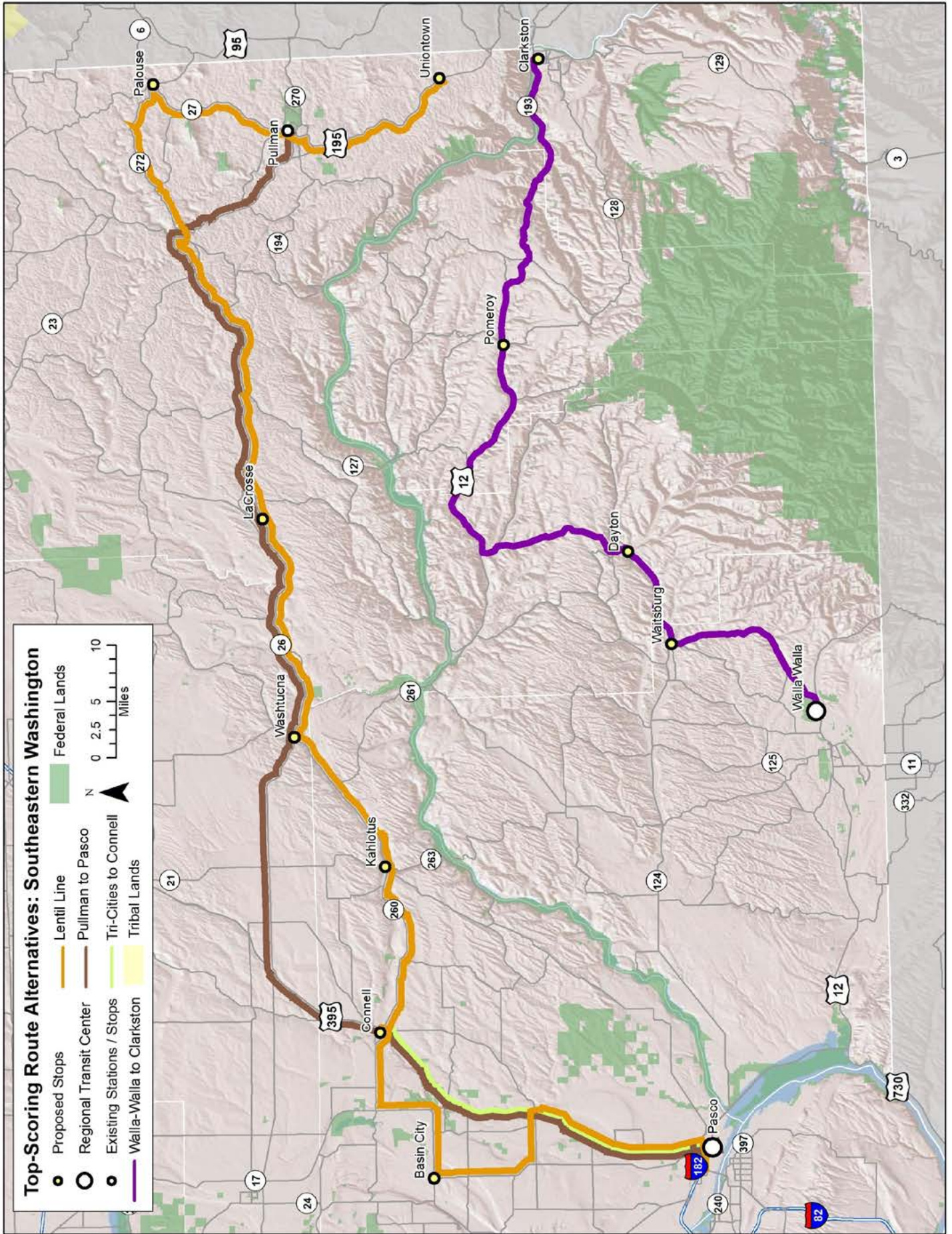
There are two route expansion alternatives from Pasco to Pullman. Both add service to Connell, which is an identified need. Both also provide new service to more people. As proposed, one route (i.e., Lentil Line) is significantly longer with route extensions to Basin City on the west end and Uniontown on the east end. The Lentil Line option ranked lower on the Transit Cooperative Research Program Research Report 147 model because costs would increase and ridership would decrease on a significantly longer route. The alternative route that would be shorter and faster with a lower projected deficit is Route 26 and 395. A regional preferred alternative may be a combination that adds service to Palouse.

Yakima to Goldendale to Vancouver to Portland

The Yakima to Goldendale to Vancouver to Portland route (Figure 9) connects the central part of Washington with Portland, providing a single-seat ride for the Columbia Gorge Washington side. It also brings intercity bus service back to Vancouver. Though it is a long route with higher costs, it potentially has offsetting revenue from higher ridership. It also could potentially obtain Greyhound in-kind match, and may be easier to implement.

Ultimately, the decision to select the Yakima to Portland line will depend on the amount of funding WSDOT can allocate for expansion. WSDOT's final selection would depend on the operational and in-kind feasibility. The Yakima to Portland line appears to have a net operating deficit (including a 50 percent contingency) and most likely has in-kind match available from Greyhound.

Figure 8: Potential Southeastern Washington routes





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