Central Oregon Coordinated Human Services Transportation Plan - 2018

A Plan to Coordinate Funding and Transportation Services to Improve Access to Vital Destinations in Central Oregon
Approved as recommended this 70th day of June 2018.

On Behalf of Crook County:

CROOK COUNTY COURT

Seth Crawford, Judge
Date: 6-20-18

Jerry Brummer, Commissioner
Date: 6-20-18

Brian Barney, Commissioner
Date: 6-20-18

On Behalf of Deschutes County:

DESCHUTES COUNTY BOARD OF COUNTY COMMISSIONERS

Anthony DeBone, Chair
Date: 11-1-18

Phil Henderson, Commissioner
Date: 11-1-18

Tammy Baney, Commissioner
Date: 10-31-18
On Behalf of Jefferson County:

JEFFERSON COUNTY BOARD OF COUNTY COMMISSIONERS

Wayne Fording, Commission Chair
Date: 6/27/18

Mae Huston, Commissioner
Date: 6/27/18

Mike Ahern, Commissioner
Date: 6/27/18

On Behalf of the Confederated Tribes of Warm Springs:

Placeholder
WHEREAS, The Central Oregon Intergovernmental Council (COIC) was retained by the State of Oregon to prepare a Central Oregon Coordinated Human Services Transportation Plan ("Coordination Plan") for Central Oregon, including Crook, Deschutes, and Jefferson Counties and the Confederated Tribes of Warm Springs; and,

WHEREAS, COIC has produced a Coordination Plan including a stand-alone section of local priorities for the Confederated Tribes of Warm Springs Reservation as determined by the Warm Springs Special Transportation Fund (STF) Committee; and,

WHEREAS, Any STF agency, including the Confederated Tribes of Warm Springs, receiving certain state and federal public transportation funding sources (Special Transportation Funds and Federal Transit Administration 5310 funds), must expend those funds in a manner consistent with their adopted Coordination Plan; and,

WHEREAS, COIC’s Central Oregon Coordination Plan meets all of the requirements specified by the State of Oregon and the U.S. Secretary of Transportation; now, therefore

BE IT RESOLVED, By the (27th) Tribal Council of the Confederated Tribes of the Warm Springs Reservation of Oregon, pursuant to Article V, Section 1 (a), (l), (p), (u), of the Tribal Constitution and By-Laws of the Confederated Tribes of Warm Springs of Oregon, that the Central Oregon Coordination Plan is approved as the Coordinated Human Services Transportation Plan for the Confederated Tribes of Warm Springs; and,

BE IT FURTHER RESOLVED, By the Tribal Council that the Chairman, Vice-Chairman or Secretary-Treasurer/CEO are hereby authorized to sign the Coordinate Human Services Transportation Plan, attached as Exhibit “A” to this resolution, on behalf of the Tribe.

CERTIFICATION

The undersigned, as Secretary-Treasurer/CEO of the Confederated Tribes of the Warm Springs Reservation of Oregon, hereby certifies that the Tribal Council is composed of 11 members of whom 9 constituting a quorum, were present at the meeting thereof, duly and regularly called, noticed, convened and held this 29th day of October, 2018; and that the foregoing resolution was passed by the affirmative vote of 5 members, 3 members abstained (2 out of room), the Chairman not voting; and that said resolution has not been rescinded or amended in any way.
NOTED:

Floy L. Anderson
Superintendent 11-2-18

ATTACHMENT: Exhibit "A"

cc: Secretary-Treasurer/CEO
    Superintendent
    Administrative Services Center
Purpose of the Coordinated Human Services Transportation Plan

Regulatory Requirements

Beginning in FY 2007, as a condition of Federal assistance, the ODOT Public Transit Division must certify to the U.S. Secretary of Transportation that projects selected for funding derive from locally developed coordinated plans. Also in 2007, Oregon statute requires that Special Transportation Fund (STF) Agencies -- including Central Oregon counties and the Confederated Tribes of Warm Springs-- must complete a plan for their STF programs. These two planning requirements are very similar in intent and timing. To meet these planning requirements, STF Agencies must complete a single coordinated plan that meets the state and federal requirements.

Plan Purpose and Intent

The purpose of the coordinated plan is to improve transportation services for people with disabilities, seniors, and individuals with lower incomes by identifying opportunities to coordinate existing resources; provide a strategy to guide the investment of financial resources; and guide the acquisition of future grants. The coordinated plan may include elements that address the unique needs of one population, but the guidelines also recognize that transportation needs cross population groups, and that individuals frequently fall within several population categories. The plan should address coordination of resources and services, including general public services available in the area, so as to minimize the duplication of effort, enhance services and encourage the most cost-effective transportation feasible. The plan should consider, to the maximum extent feasible, other similar plans in the regional area, resulting in regional opportunities to coordinate services.

The 2007 and 2009 Coordination plan update resulted in separate plans for each county. This 2018 update combines the strategies and needs into one regional plan with additional strategies for each county and the Tribe. The primary purpose of the plan is to identify priorities that are used to direct state and federal funds.

Funding Sources Affected

ODOT Public Transit Division Discretionary Grant programs and projects funded by STF local formula allocations must be consistent with and derived from the Coordinated Plan. ODOT Discretionary Grant programs include: Formula Program for Elderly Persons and Persons with Disabilities (§5310); and Discretionary STF funding.
Definitions

Following are definitions for common terms used in this plan. The definitions are in alignment with Oregon Department of Transportation terminology:

**Public Transportation**: Any form of passenger transportation by car, bus, rail or other conveyance, either publicly or privately owned, which provides service to the general public on a regular and continuing basis. Such transportation may include services designed to meet the needs of specific user groups, including the elderly, people with disabilities, and for purposes such as health care, shopping, education, employment, public services and recreation. This planning process does not seek to address needs or priorities related to transportation system infrastructure such as roads, streets, highways or bridges.

**Coordination**: Cooperation between government, providers, businesses, individuals and agencies representing people unable to drive, low income, the elderly, and/or people with disabilities, to more effectively apply funding and other transportation resources to meet common transportation needs. Coordination actions may reduce duplication of services, reduce cost, increase service levels or make services more widely available in communities.

**Special or Target Populations**: Low income individuals and households, seniors, and people with disabilities.
As the Coordination Plan was developed with the engagement of dozens of valued partners, including those who served on the Regional Steering Committee, community meeting attendees, and others that provided input via surveys or other means. Thank you!

Abby Leibowitz, Crook County Health Department
Alan Burke, St. Charles Health System
Angie Gilley, Crook County Veterans Services
Barb Frazier, Jefferson Co. STF Committee
Ben Bergantz, Pacific Crest Affordable Housing
Beverley Carlson, Crook Co. citizen
Bill Duerden, City of Redmond
Brenda Kappus, Deschutes County IDD
Carley Brause, Central Oregon Veterans Outreach
Carly Sanders, Neighbor Impact
Carolyn Ribeiro, CTWS Behavioral Health
Casey Bergh, OSU-Cascades
Chelsea Stanton, 1st Choice Assisted Car
Chris Watson, Warm Springs Community Action Team
Claudia Torres, COCOA
Colleen Ferguson, Crook Co. Administration & STF Comm.
Cora Burich, BestCare Treatment Services
David Amiton, ODOT Active Transportation
Deena Adams, Lutheran Community Services NW
Donna Mills, Central Oregon Health Council
Don Senecal, Jericho Road
Dyan Kuehn, NeighborImpact
Elaine Henderson, Jefferson County STF Committee
Elaine Knobbs, Mosaic Medical
George Heinz, NeighborImpact
George McCart, Crook County STF Committee
Heather Hopkins - Sleckta
Heather Lynch, DHS Vocational Rehabilitation
Helen Houts, Jefferson County STF Committee
Holly Wenzel, Crook County Public Health
Jean McPherson, COCOA
Jeff Monson, Commute Options
Joe Viola, COCC
John Livingston, Full Access High Desert
Joni Bramlett, ODOT Public Transit Division
Jordan Ohide, Disability Advocate
Josh Smith, City of Prineville
Judith Ure, Deschutes County*
Kathy Marston, Jefferson County*
Kathy Puckett, Crook County STF*
Katie Russell, CTWS Community Health Services
Keith McNamara, Deschutes County Veterans Services
Kelly Ervin, Deschutes County Behavioral Health
(*STF Coordinators)

Ken Fahlgren, Crook County Commissioner
Ken Wilhelm, United Way of Deschutes County
Kristina Winkler, PacificSource
Laura Hendricks, BestCare Treatment Services
Leanna Lakeridge, DHS
Levi Roberts, Crook Co. GIS
Lindsey Stailing, Mosaic Medical
Lori Ontko, City of Prineville
Lonny Macy, Confederated Tribes of Warm Springs*
Mary Lou Bernard Crook County STF Committee
Matt Verdieck, Central Oregon Council on Aging
Melinda Poitro, CTWS WIOA Services
Mia Shapiro, Full Access
Michelle Elliot, BestCare Treatment Services
Michelle Townsend, Deschutes County Health Services
Molly Viles, Crook County HS
Molly Taroli, Homeless Leadership Coalition
Muriel DeLaVergne-Brown, Crook County Public Health
Naomi Jacks, Jefferson County STF Committee
Neta Bruce, Full Access High Desert
Penny Pritchard, Deschutes County Health Services
Regina Macko, Jefferson County STF Committee
Reina Estimo, CTWS Health and Human Services
Renee Gibney, DHS Prineville
Renee McClure, Crook Co. citizen
Richard Ladeby, Madras City Councilor
Richard Ross, Cascades East Transit Public Transit Advisory Committee
Ron Cummings, Jefferson Co. STF Committee
Rosemary Alarcon, CTWS Social Services DB Coordinator
Shana Radford, CTWS HHS Branch
Sara Worthington, Deschutes County Health Services
Seth Johnson, Opportunity Foundation
Theresa Conley, ODOT Public Transit Division
Therese Helton, DHS Volunteer Services
Tim Johnson, Full Access High Desert
Tina Redd, COCC
Tom Machala, Jefferson County Public Health
Tom Weiss, Jefferson County Veteran Services,
Tory Flory, Central Oregon Veteran’s Outreach
Tyler Deke, Bend MPO
Wilson Wewa, CTWS Senior Services
COIC Staff:

Dylan Jackson, CET
Jackson Lester, CET
Judy Watts, CET
Karen Friend, COIC

Marty Hopper, CET
Michelle Rhoads, CET
Scott Aycock, COIC
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Executive Summary

The Central Oregon Coordinated Human Services Transportation Plan is the product of data analysis, stakeholder expertise and perspectives, and the outcomes of previous work such as the 2015-16 Central Oregon Regional Transportation Coordination Pilot. The Plan provides a blueprint for the use of public transportation funds to help meet the transportation needs of Plan target populations – senior citizens, people with disabilities, and low income populations.

This Coordination Plan is the first of its kind in Central Oregon – one plan for all of Central Oregon, including Crook, Deschutes, and Jefferson counties as well as the Warm Springs reservation. This is an appropriate scale for this plan, as Central Oregon is served by one coordinated public transportation system – Cascades East Transit – and target populations often must travel from their home community throughout the region for essential health and human services. The Coordination Plan therefore provides a set of region-scale priority strategies to guide transportation investments. However, as there are still variations in need across Central Oregon, each local area also has its own set of priorities (see Section 4: Prioritized Coordination Strategies for a complete set of all the Plan priorities).

The highest priority regional strategies are as follows:

1. **#1: Improve affordability of transit services to low-income individuals and veterans.** Provide subsidized fares for low income clients and veterans needing access to health and human services.

2. **#2: Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.** This includes a proposal to explore developing one regional STF Committee for Central Oregon with members from Crook, Deschutes, and Jefferson Counties and the Confederated Tribes of Warm Springs, and to use this group for high-level regional coordination activities.

3. **#3: Expand public transportation services to late in the evening and on weekends.** Work with human and health services stakeholders to identify priorities for expansion of services to later in the evenings and when/where to provide weekend services.

4. **#4: Education and Outreach.** Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.

5. **#5: Create a Dedicated Local Public Fund for Transit.** Identify priority geographies/communities and develop a local public tax base to provide additional services.

**Section 1: Coordination Plan Development** provides a brief overview of the process used in 2016 and 2017 to develop this Plan.

**Section 2: Existing Transportation Services and Resources** maps out all of the funding, transportation services, and transportation infrastructure that can be mobilized to meet needs.
Section 3: Needs Assessment provides a variety of demographic and mapping data, as well as survey results and other stakeholder input used to identify the priority transportation needs for the target populations.

Section 4: Prioritized Coordination Strategies provides all of the regional and local priority strategies for the use of funds. This section also contains a matrix (pp. 43-44) that shows how the regional and local priorities overlap (and how they do not).

This Plan should be treated as a work in progress – there are likely many more opportunities to better meet needs through efficient coordination of services and resources than are contemplated here. Priority Strategy #2 – Ongoing Coordination – provides a means for regional leaders to continue this process.
1. Coordination Plan Development

The Central Oregon Human Service Public Transportation Coordination Plan was built by the Central Oregon Intergovernmental Council with support from a Regional Steering Committee, and with the input and engagement of dozens of stakeholders across the region (see Attributions on p. iii for a list), as well as with the guidance of the Crook, Deschutes, and Jefferson County and Confederated Tribes of Warm Springs STF Committees.

This Coordination Plan was built using the process outlined in Table 1.

Table 1. Coordination Plan Development Process

<table>
<thead>
<tr>
<th>Plan Development Step</th>
<th>Time Frame</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Steering Committee Meeting 1: Kickoff</td>
<td>May 10, 2016</td>
<td>Confirmed goals and process</td>
</tr>
<tr>
<td>Regional stakeholder survey</td>
<td>May 2016</td>
<td>Appendix A</td>
</tr>
<tr>
<td>Gathered and analyzed “Existing Regional Plans”</td>
<td>Summer 2016</td>
<td>Section 2</td>
</tr>
<tr>
<td>Developed “Existing Transportation Services” Info</td>
<td>Summer 2016</td>
<td>Section 2</td>
</tr>
<tr>
<td>Gather Demographic Data and Build Transit Propensity Index (TPI) Maps</td>
<td>July-August 2016</td>
<td>Section 3</td>
</tr>
<tr>
<td>Regional Steering Committee Meeting 2</td>
<td>Sept. 14, 2016</td>
<td>Review all info since the May 10 meeting</td>
</tr>
<tr>
<td>Generated draft Needs and Strategies</td>
<td>Oct. – Dec. 2016</td>
<td>Based on survey results, RSC meetings to date, and Coordination Pilot project findings Section 3</td>
</tr>
<tr>
<td>Built Wikimapping Tool</td>
<td>Fall 2016</td>
<td>Section 3</td>
</tr>
<tr>
<td>Regional Steering Committee Meeting 3</td>
<td>January 5, 2017</td>
<td>Review all info since last meeting; performed the Wikimapping exercise. Prioritized list of Regional Strategies. Section 3</td>
</tr>
<tr>
<td>Created final Regional Priority Strategies</td>
<td>January 2017</td>
<td>As per outcomes of RSC meeting Section 4</td>
</tr>
<tr>
<td>Local Area Meeting: Crook County STF and stakeholder meeting</td>
<td>January 19, 2017</td>
<td>Reviewed Regional Priority Strategies, generated new local strategies, and created priorities. Section 4</td>
</tr>
<tr>
<td>Local Area Meeting: Jefferson County STF and stakeholder meeting</td>
<td>Feb. 2, 2017</td>
<td></td>
</tr>
<tr>
<td>Local Area Meeting: Deschutes County STF and stakeholder meeting</td>
<td>Feb. 28, 2017</td>
<td></td>
</tr>
<tr>
<td>Local Area Meeting: CTWS STF and stakeholder meeting 1</td>
<td>Feb. 28, 2017</td>
<td></td>
</tr>
<tr>
<td>Local Area Meeting: CTWS STF and stakeholder meeting 2</td>
<td>Sept. 21, 2017</td>
<td></td>
</tr>
<tr>
<td>Finalized all plan sections; formatting</td>
<td>Winter 2017-2018</td>
<td>Staff turnover delayed this outcome</td>
</tr>
<tr>
<td>Regional Steering Committee Meeting 4</td>
<td>December 8, 2017</td>
<td>Reviewed Final Draft Coordination Plan Needs and Strategies</td>
</tr>
<tr>
<td>Regional STF meeting</td>
<td>April 9, 2018</td>
<td>Recommended final plan with revisions</td>
</tr>
<tr>
<td>Crook County STF meeting</td>
<td>May 17, 2018</td>
<td>Recommended final plan with revisions</td>
</tr>
<tr>
<td>Adoption by Crook County Court, Deschutes County Commission, Jefferson County Commission, and CTWS Tribal Council</td>
<td>Dates</td>
<td>Dates</td>
</tr>
</tbody>
</table>
2. Existing Transportation Services and Resources

The following survey of existing transportation services and resources lays the foundation for understanding how transportation (or lack thereof) impacts the provision of human services in Central Oregon. The section on funding resources lays out potential sources of funding that could be leveraged to address these needs. Those funding resources include both public and private sources, and are organized as such. The sections on public and private transportation services currently available in Central Oregon contribute to this fuller understanding of the available resources, as better utilizing existing fleets and services has the potential to be ‘low hanging fruit’ – actions that can be undertaken relatively inexpensively to meet identified needs. A thorough inventory of the current services and resources creates a foundation from which needs and strategies can be discussed, analyzed, and acted upon.

2.a Funding Resources

This section provides information on transportation funding that could be mobilized to address needs. Funding resources listed here include both transportation-specific funding as well as human services funding that can be used to transport clients.

2.a.i Public Transportation Discretionary Grant Funding

_Elderly & Disabled Transportation Assistance (Sec. 5310)_

This is a federally-funded, state-administered grant program for the purpose of meeting the special mobility needs of seniors and people with disabilities. Funds may be used to pay for up to 80% of the costs of vehicles and other capital equipment or purchase-of-service agreements. ODOT consolidates this and other funding sources through a competitive grant program known as the discretionary grant process. ODOT provides 10.27% of costs through Surface Transportation Program (STP) funds, leading to an effective local match of 9.73%. Traditionally, program funds have been available to nonprofit and government agencies. Both state and federal governments now require the development of a coordinated human services transportation plan before Section 5310 funds can be released.

Previously, applicants applied directly into a statewide competition for consideration to receive these funds, although the local Special Transportation Fund (STF) Committees and Governing Bodies would review the applications and make comments/recommendations. As of the 2009-2010 Discretionary Grant program, each STF Agency (Transit Districts, Tribes, Counties) will receive a formula allocation from the state and the local STF Committee will recommend projects for funding to the Governing Bodies (e.g. Jefferson County Board of County Commissioners,) which will then make final project funding decisions.

_Discretionary Special Transportation Fund (STF)_

The STF for Elderly and Disabled was established by the legislature in 1985, and is administered by the Public Transit Division of the Oregon Department of Transportation. Revenues come from two sources: a tax on cigarettes and the General Fund budget. Discretionary STF funds become available when ODOT
Section 2: Existing Transportation Services and Resources

ODOT’s Rural Transit Program has more State money than originally anticipated. This occurs when the Legislature awards more money than ODOT’s Rural Transit Program projected when initially awarding the STF Formula Funds for the biennium. ODOT tends to add any STF funds left unspent from the previous biennium into this funding opportunity when and if the Legislature provides surplus funds. There are no Discretionary STF opportunities on the immediate horizon.

2.a.ii State and Local Funds

**STF Formula Funds**
The Special Transportation Fund (STF) for Elderly and Disabled was established by the legislature in 1985, and is administered by the Public Transit Division of the Oregon Department of Transportation. Funds can be used for the purchase or replacement of vehicles and other capital equipment, operations, planning and development. Revenues come from two sources – a tax on cigarettes and the General Fund budget. Three quarters of the STF is distributed by formula to each county. The remaining 25% of STF funds will be administered via the new discretionary grant process described in the 5310 Discretionary Grant section above. The amount of formula funds allocated to each county is based on population. The minimum any county receives is $134,000 under the STF allocation process. The County Board of Commissioners is responsible for the distribution of these formula funds, which are therefore considered to be local. Typically, $2,000 of the STF Agency’s allocation is used for administration per year.

As of 2005, recognized Indian tribes receive STF formula funds directly instead of having to compete for a share of county allocations. Tribal governments are responsible for allocating funds and administering the program. The Confederated Tribes of Warm Springs currently receives $134,000 under the STF allocation process.

For the 2017-2019 Biennium, the STF Committees made the following funding recommendations. At the time of this plan, these recommendations still need to be approved by the governing bodies of those areas. Note that COIC funding is used here to provide transit service through Cascades East Transit (CET.)

**Confederated Tribes of Warm Springs (17/18 & 18/19 combined): $134,000**
- Confederated Tribes of Warm Springs: $130,000
- STF Administration Allotment: $4,000

**Crook County (17/18 & 18/19 combined): $134,000**
- COIC: $130,000
- STF Administration Allotment: $4,000

**Deschutes County (17/18 & 18/19 combined): $829,350**
- COIC: $701,548
- Opportunity Foundation: $80,000
- Abilitree: $43,802
- STF Administration Allotment: $4,000

**Jefferson County (17/18 & 18/19 combined): $134,000**
- COIC: $130,000
- STF Administration Allotment: $4,000

2.a.iii  Summary: 2017-2019 Biennium STF, 5310, and FTA Allocation Funds
The following table outlines the expectedFY 2017-2019 STF, 5310, and FTA direct formula allocations to Crook, Deschutes, and Jefferson Counties, and the Confederated Tribes of Warm Springs.

Table 2. Summary: 2017-2019 Biennium Allocations of STF, 5310, and FTA Allocation Funds

<table>
<thead>
<tr>
<th>Area</th>
<th>STF</th>
<th>5310 and FTA Allocation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confederated Tribes of Warm Springs</td>
<td>$134,000</td>
<td>$101,978</td>
<td>$235,978.00</td>
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<tr>
<td>Crook County</td>
<td>$134,000</td>
<td>$184,821</td>
<td>$318,821.00</td>
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<tr>
<td>Deschutes County</td>
<td>$829,350</td>
<td>$1,152,758</td>
<td>$1,982,108.00</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>$134,000</td>
<td>$163,223</td>
<td>$297,223.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,231,350</td>
<td>$1,602,780.00</td>
<td><strong>$2,834,130.00</strong></td>
</tr>
</tbody>
</table>

2.a.iv  (New) State Transportation Improvement Fund (STIF)
Section 122 of Keep Oregon Moving (Oregon House Bill 2017), which went into effect on October 6, 2017, established a new dedicated source of funding for expanding public transportation service in Oregon. This new funding source is called the Statewide Transportation Improvement Fund, or STIF.

The funding mechanism is a new state payroll tax of one-tenth of 1 percent; the average employee will contribute less than $1 per week to generate $115 million per year for better public transportation. The new revenue will be allocated across four programs:

- Ninety percent of the STIF will be distributed by formula to qualified entities across the state, including allocations for all Central Oregon counties.
- Five percent of the STIF will be distributed through a competitive grant program to public transportation service providers (most likely for capital needs).
- Four percent of the STIF will be distributed through a competitive grant program to public transportation service providers to improve public transportation between two or more communities.
- One percent of the STIF will establish a statewide public transportation technical resource center to assist public transportation providers in rural areas with training, planning, and information technology.

STIF formula allocation estimates are provided in the table below.
Table 3. Estimated STIF Formula Allocations

<table>
<thead>
<tr>
<th>Area</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confederated Tribes of Warm Springs</td>
<td>$50,000</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Crook County</td>
<td>$100,000</td>
<td>$225,000</td>
<td>$254,000</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>$1,183,000</td>
<td>$2,685,000</td>
<td>$3,037,000</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>$88,000</td>
<td>$200,000</td>
<td>$226,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,421,000</td>
<td>$3,210,000</td>
<td>$3,617,000</td>
</tr>
</tbody>
</table>

2.a.v Other Federal Funds

**Rural Transit Assistance Grants (Sec. 5311)**
This federally-funded, state-administered grant program is the primary source of federal funding for the operation of public transit programs in rural communities with populations smaller than 50,000 residents. ODOT allocates the funds to eligible rural counties through a formula based on revenue miles and ridership. Funds may be used to cover administrative, capital, or operating costs of providing transportation to the general public. Funds may also be used to provide intercity service between rural communities or between small towns and urban areas. Grantees must provide a 50% local match to receive these federal funds for operations or capital costs or 20% for program administration. Recipients can be public bodies, nonprofit organizations, or tribal agencies.

**Rural Transportation Assistance Program (RTAP) Section 5311(b)**
The Rural Transportation Assistance Program (RTAP) provides training and technical assistance to rural counties and to meet the needs of smaller transit agencies. ODOT’s Public Transit Division may use RTAP funds to help pay for training at the Oregon Transportation Association Conference and other conference or training events.

**Tribal Transit Program (Section 5311)**
Under the recently adopted SAFETEA-LU federal transit legislation, tribal governments are now eligible to become direct recipients of Section 5311 funds. Beginning in FY 2006, tribes could apply for grants to support their public transit program through both the federal as well as state governments.

2.a.vi Human Services Transportation Funding
There are a number of social service agencies that receive funding for client transportation, either on agency-operated transportation systems, or to help pay client’s private transportation costs (e.g. gas and maintenance). In some cases, these funds could be used to contract for client transportation on public transportation services, thereby supporting the local general public transportation system.

In some cases, such as the Medicaid transportation funding described below, some of this funding is already being invested in the overall public transportation network. In other cases, more coordination
may be feasible and has the potential to benefit the entire community, including the beneficiaries of those services when traveling for non-related trips. This can further the positive impact of human services organizations by applying their resources to promote general mobility while also serving their clients’ needs.

**Non-Emergent Medical Transportation (Title XIX)**
Under Medicaid, states are required to assure that recipients can get to and from covered medical services. In Oregon, Medicaid funds are managed by the Department of Medical Assistance Programs (DMAP). Medicaid transportation for Medicaid recipients in Central Oregon is provided by the Central Oregon Intergovernmental Council through the Cascades East Ride Center (CERC), a medical ride brokerage. The CERC has a call center staff of 16 who schedule medical rides and also take reservations and perform dispatch services for the CERC. The CERC works actively to move more of their clients to publicly available transportation options to provide rides more efficiently and support the growth of public transportation infrastructure in Central Oregon. By improving access to transportation outside of NEMT rides, CERC also hopes to support improved health outcomes.

**Medicaid Non-Medical Transportation (Title XIX)**
Under Medicaid’s Home & Community-Based Services (HCBS) programs, certain non-medical services can be provided to Medicaid recipients who might be institutionalized without transportation and other support services. Currently, a significant part of the employment and other non-medical transportation services provided to elderly and disabled Medicaid recipients is supported through the HCBS or long-term care waiver program. These programs serve a variety of targeted populations groups, such as people with intellectual or developmental disabilities, physical disabilities, and/or mental illnesses.

**Other Agencies Providing Transportation Resources**
The following is an incomplete list of agencies that currently provide client-based transportation funding in Central Oregon. In some cases, the agency is already coordinating fully with public transportation services (e.g. OSU Cascades,) or is experimenting with such (e.g. the Opportunity Foundation, Abilitree, and DHS):

- Abilitree
- Boys and Girls Clubs
- Bureau of Indian Health
- Central Oregon Community College
- Central Oregon Council on Aging
- Crooked River Ranch Seniors
- Head Start
- Oregon Department of Human Services
- Opportunity Foundation of Central Oregon
- School Districts
- Veteran’s Administration-supported agencies
Redmond Proficiency Academy
OSU Cascades
St. Charles Health Center
Mosaic Medical

Some specific examples of other agencies’ contributions to public transportation in Central Oregon are as follows:

**Bend Transit Expansion Pilot.** In 2015, Cascades East Transit and the City of Bend, Central Oregon Community College, Oregon State University-Cascades, and St. Charles Health Systems, entered into a pilot program to significantly expand fixed route service in Bend for a three-year period. Highlights included the development of new routes, more frequent service on many routes, and later service on weekdays. The partnership provided over $1 million/year in new funding for CET services in Bend, and as of this writing the partners were assessing outcomes and determining whether or not the pilot will continue.

**Redmond Proficiency Academy (RPA).** RPA provides regional group bus passes to all of their students, ensuring students can travel to RPA from across Central Oregon. This group pass program, which began in the Spring of 2017, was the first regional group pass program and funded an additional daily trip on Route 22 that improves accessibility for all travelers between Bend and Redmond.

2.a.vii  **Private Transportation Funding**
Various local businesses and entities make investments in customer or employee transportation. In some cases, the businesses have worked with organizations like Commute Options to secure public transportation resources to create vanpools or to organize carpools. In other cases, there is little to no coordination with the public transportation network to provide employee or customer transportation. Some examples of private transportation funding in Central Oregon are:

**Mt. Bachelor Resort** – Provides funding to cover costs not covered by private passenger fares and provides employee transportation at no cost to the employees. This provides winter seasonal access to the ski hill from Bend, as well as access to Meissner SnoPark when conditions are appropriate for Nordic skiing. Mt. Bachelor also operates employee vanpools from Bend and La Pine. Within Bend, the publicly-available service serves the Mt. Bachelor Park and ride and Hawthorne Station.

**Black Butte Ranch** – Offers a vanpool program for employees, if and when a sufficient number of employees need transportation services.

**OSU-Cascades** – Sponsors an ongoing vanpool program to connect Redmond employees to the Bend campus.
2.b Public Transportation Services
This section summarizes all of the subsidized public transportation services available within Central Oregon or that provide service to and from Central Oregon.

2.b.i Regional Public Transportation Services (services within Central Oregon)

Cascades East Transit (CET) is the public transportation provider for Central Oregon. CET is operated by Central Oregon Intergovernmental Council, a Council of Governments organized under ORS 190 to provide services to Crook, Deschutes, and Jefferson Counties and all Central Oregon communities. CET operates maintenance facilities in Bend and Redmond as well as Hawthorne Station in Bend, the main bus station for the city. In addition to CET services, Hawthorne Station also serves intercity bus services like Greyhound. CET also operates a call center in Redmond, where the general public can call for information, schedule Dial-A-Ride trips, and leave comments about CET. CET offers six primary types of service:

Bend Fixed Route Bus Service
CET provides fixed route bus service in Bend, the only Central Oregon community with local fixed route service. Bend fixed route services are provided on 10 routes, all but one of which (Route 12) “hub” at Hawthorne Station, the central transfer point. Bus service in Bend operates from 6:00am to 7:30pm Monday to Friday and on Saturdays from 7:30am to 5:30pm. Bus frequencies range from every 30 minutes to every 45 minutes Monday to Friday, with hourly service on Saturdays.

Bend Dial-A-Ride
Dial-A-Ride in Bend is a paratransit service providing rides to the disabled community and to low-income seniors who do not live near a fixed route bus stop. Riders must submit an application to become eligible to use Bend Dial-a-Ride. Bend Dial-a-Ride operates from 6:00am to 7:30pm Monday to Friday, 7:30am to 5:30pm on Saturday, and 8:30am to 3:15pm on Sunday. Rides may be scheduled up to 14 days in advance by calling CET’s call center from 7:00am to 5:00pm, Monday to Friday.

Rural General Public Dial-A-Ride
Dial-A-Ride service is also offered in La Pine, Redmond, Prineville, and Madras as a local general public transit service, meaning that there is no eligibility criteria. There are no fixed routes, and rides must be scheduled in advance through the CET call center, in the same way as Bend DAR. Service areas typically conform to community city limits, although some DAR services are offered to higher-density areas outside city limits (e.g. outside La Pine and to the Juniper Canyon area in Crook County). Services are offered Monday through Friday with varying hours from community to community.
Community Connector Shuttles

Community Connector routes serve routes linking the major cities in Central Oregon. Routes include La Pine to Bend, Bend to Sisters, Bend to Redmond, Redmond to Sisters, Redmond to Prineville, Redmond to Madras (with additional service to Culver and Metolius), and Madras to Warm Springs. Community Connector Shuttles operate on a fixed schedule and serve limited, fixed stops. Community Connector service is offered daily from Monday to Friday, with some shuttles starting as early as 5:30 am and going as late as 7:30pm.

Cascades East Transit Route 20

Route 20 is a hybrid transit service that combines characteristics of a commuter bus, a local fixed-route bus, and demand-responsive service. Route 20 serves as a Community Connector bus when it travels between Warm Springs and Madras, and acts as a local bus running on defined routes in both communities. Additionally, passengers who call ahead can request to be picked up or dropped off anywhere within ¼ of a mile of the route in Warm Springs or Madras.

Recreation and Visitor Transit

CET operates several seasonal recreation-focused transit routes in Deschutes County. In the summer months, CET provides bus transportation from the Lava Lands Visitor Center to the summit of Lava Butte in the Newberry National Volcanic Monument (part of the Deschutes National Forest). In Bend, summer recreational transit also includes the Ride the River shuttle service for recreationists floating the Deschutes, and the Ride Bend shuttle, which operates as a circulator in downtown Bend and nearby neighborhoods. In the winter, CET partners with the Mount Bachelor ski area to provide service from Bend to the ski resort, with stops at snow parks for Nordic skiers, seven days a week.

For more information, all CET service routes, areas, and schedules can be viewed at www.cascadeseasttransit.com

Cascades East Ride Center

COIC also operates the Cascades East Ride Center (CERC), a call center that offers information about local transportation options available in Central Oregon. CERC also schedules rides for several kinds of local transportation and processes travel reimbursements for OHA/DHS clients. CERC arranges rides to medical appointments for eligible Medicaid (OHP) clients when they have no other way to get to their covered Medicaid services. The service area covered for the scheduling of medical transportation rides includes the following counties: Crook, Deschutes, Jefferson, and four communities in Northern Klamath County; Gilchrist, Crescent, Chemult, and Crescent Lake.
Figure 1. CET Community Connector Services
Section 2: Existing Transportation Services and Resources

2.b.ii  Inter-Regional Public Transportation Services (services to and from Central Oregon)

**Amtrak**
Amtrak passenger train service connects to Central Oregon via the Coast Starlight line which runs from Seattle, Washington to Los Angeles, California. Passengers traveling via the Coast Starlight can disembark at the station in Chemult, Klamath County and travel north into Deschutes County via the Thruway Shuttle operated by Amtrak.

**Central Oregon Breeze**
Offers daily bus service from Bend to Portland with stops in Redmond, Terrebonne, Madras, Warm Springs, as well as points along US 26 and in the Portland metropolitan area.

**Fronteras Del Norte**
Offers long-distance bus service from Yakima, Washington to San Ysidro, California, with stops in Central Oregon along US 97, including Madras, Redmond, and Bend.

**Grant County People Mover**
The Grant County People Mover offers bus service between rural Grant County and Bend, Redmond, and Prineville. On Mondays, Wednesdays, and Fridays Grant County People Mover offers round-trip service from Prairie City to Bend via John Day, Mitchell, Prineville, and Redmond. On Wednesdays and Fridays, the People Mover offers service from Monument to Bend via Dayville, Prineville, and Redmond.

**The POINT / Pacific Crest Bus Lines**
The POINT is a statewide intercity bus service managed and funded by the Oregon Department of Transportation. Two POINT routes and the Eugene-Bend route converge at Hawthorne Station in Bend. The Eastern POINT route travels daily from Bend to Ontario via Burns. The HighDesert POINT route travels from the Redmond Airport to the Chemult Amtrak Station with stops in Bend, Sunriver, and La Pine. The Eugene to Bend Pacific Crest Bus Line operates daily in both directions and offers a stop in Sisters.

**The Valley Retriever**
The Valley Retriever offered daily bus service from Bend to Newport via Salem, Albany, and Corvallis until the Spring of 2017, when the company closed. As of the fall of 2017, bus service along this route remains unavailable. Passengers travelling from Central Oregon to Salem, Albany, Corvallis, or Newport must transfer in Portland or Eugene.
Section 2: Existing Transportation Services and Resources

Roberts Field, Redmond Municipal Airport

The Redmond Airport, operated by the City of Redmond, is currently served by four air carriers: American Airlines, Alaska Air, Delta Air, and United and United Express. These airlines offer 23 daily flights in total to seven western cities: Portland, Seattle, San Francisco, Los Angeles, Salt Lake City, Phoenix, and Denver. Ground transportation to the airport is available through most of the transportation providers that serve Deschutes County, including the transportation network companies Lyft and Uber.

2.b.iii Administrative Capacity

There are a number of entities in Central Oregon that are qualified and available to receive and administer public transportation funding to help meet the transportation needs of underserved populations.
Regional Administrative Capacity
This section highlights the different types of administrative capacity that are available within Central Oregon to administer and manage state, federal, or other transportation funds.

COIC/ CERC/ CET Administration

Central Oregon Intergovernmental Council operates both Cascades East Transit and Cascades East Ride Center. COIC’s administrative offices are located at Hawthorne Station in Bend. Hawthorne Station also serves as the main bus hub for the city of Bend, connecting CET’s local service to Community Connector service as well as intercity bus service like Greyhound. COIC also operates vehicle maintenance facilities in Bend and Redmond that include office space for CET administrative, planning, dispatch, and call center staff. COIC is an approved direct recipient of Federal Transit Administration (FTA) funds, and has capacity to administer and monitor state, federal, and any other sources of funds.

COIC also administers the Cascades East Rider Center (CERC), which is described above in section 2.b.i.

ODOT Region 4

The Oregon Department of Transportation (ODOT) Region 4 Headquarters is located in Bend. ODOT provides many transportation services, including transportation planning, project development, and transportation facility construction and maintenance. Region 4 also has staff in the Active Transportation (bike and pedestrian) and ODOT Public Transit Division units. Region 4 regularly manages significant amounts of state and federal funding, and is highly regarded for its ability to identify partnership projects with local governments and CET.

Central Oregon Area Commission on Transportation (COACT)

COACT was formed in 1998 to serve as a forum for the discussion, understanding, and coordination of transportation issues affecting the Central Oregon region. COACT membership includes representatives from each Central Oregon City and County government, ODOT, the Confederated Tribes of Warm Springs, the private sector and various regional organizations.

COACT is a regional advisory committee to the Oregon Transportation Commission, and helps determine transportation infrastructure needs, capital investments, and project priorities in the Central Oregon region. Other COACT functions include advocating for Central Oregon transportation issues to neighboring regions, area legislators and other interested organizations, and advising the Oregon Transportation Commission on state and regional policies affecting Central Oregon’s transportation system. COACT meets on the second Thursday of alternating months.

Confederated Tribes of Warm Springs

The Confederated Tribes of Warm Springs (CTWS) is a confederation of the Wasco, Warm Springs, and Paiute tribes residing on the Warm Springs reservation. CTWS is a sovereign nation, and receives and administers multiple types of transportation funding, including public transportation resources. CTWS is
responsible for determining transportation needs and priorities on the reservation, and currently partners with CET to deliver transit services on and off the reservation.

The Warm Springs Tribal Council is also one of the adopting agencies for the Coordination Plan.

**Local Administrative Capacity**

Central Oregon contains three counties (Crook, Deschutes, and Jefferson) and eight incorporated cities (Bend, Culver, La Pine, Madras, Metolius, Prineville, Redmond, and Sisters). Each of the counties is responsible for administering and/or making recommendations for the use of public transportation funding targeting seniors and persons with disabilities, including the state Special Transportation Fund and the federal 5310 funding. Central Oregon cities and counties have transportation policy, planning, project development, construction, and maintenance services, and are eligible to receive and utilize public transportation dollars. All Central Oregon cities that have applied for public transportation dollars contract for service with CET.

**2.c Other Transportation Services in Central Oregon**

In addition to public transportation service provided by CET, the region has other types of transportation services that may be used by target populations to reach important destinations, including cab companies, specialized medical transports, client transportation services, and transportation network companies (TNCs) like Uber and Lyft. The following sections summarize these services; a full list of non-public transportation services in Central Oregon, by community, is included in Appendix B.

**2.c.i Cab Companies**

There are a wide variety of cab companies offering services in Central Oregon, from economy taxis to niche services such as green energy transportation to towncar and limousine providers. Every community in Central Oregon is served by at least one of these providers.

**2.c.ii Transportation Network Companies (TNCs)**

Transportation network companies (TNCs) use an online-enabled platform to connect passengers with drivers using their personal, non-commercial vehicles. Two TNCs, Lyft and Uber, started operating in Central Oregon in May of 2017. Lyft currently serves the Deschutes County cities of Bend, Redmond, and Sisters and the communities of Terrebonne, Tumalo, Deschutes River Woods, and Sunriver. Lyft also serves Prineville in Crook County and the community of Powell Butte. Uber serves the entirety of Crook, Deschutes, and Jefferson Counties, including the entire area served by Lyft as well as the cities of Madras, Warm Springs, and La Pine.

**2.c.iii Client Transportation**

An array of non-profits and agencies serving target populations offer transportation services for their own clients. This list includes organizations serving youth (e.g. school districts and private schools, boys and girls clubs, and head start), the elderly (e.g. senior centers), persons with mental disabilities (e.g. OFCO and Abilitree), veterans (e.g. Disabled American Veterans), medical facilities (e.g. Indian Health Services), and others.
2.c.iv  Medical Transport
Several companies offer specialized medical transportation services for persons needing to access medical services within Central Oregon or in Portland. These services are specialized to meet medical needs, including ambulance transportation and stretcher cars.

2.c.v  Hotel Shuttles
Central Oregon has a wide array of hotels and destination resorts, and many of these businesses provide free shuttle services for guests.

Please see Appendix B for additional detail and a list of non-public transportation services in Central Oregon.

2.d  Transportation Infrastructure
This section provides an overview of public transportation fleets and other related infrastructure.

2.d.i  CET Fleet and Infrastructure
Cascades East Transit’s physical infrastructure assets can be broken down into three categories: the vehicle fleet, buildings and facilities, and other supporting equipment.

CET Fleet
The Federal Transit Administration understands the useful remaining life of a transit vehicle in terms of both its age and the number of miles it has driven. Full fleet information is included in Appendix B.

Table 4. CET Fleet Characteristics

<table>
<thead>
<tr>
<th>Service Type</th>
<th># of vehicles</th>
<th>Passenger capacity (seated)</th>
<th>Average % of useful life remaining</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>under 20</td>
<td>20-30</td>
</tr>
<tr>
<td>Bend Fixed Route</td>
<td>16</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Bend Dial-A-Ride</td>
<td>13</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Rural Dial-A-Ride</td>
<td>24</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>Community Connectors</td>
<td>8</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Recreational Transit</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>total</td>
<td>68</td>
<td>37</td>
<td>7</td>
</tr>
</tbody>
</table>

CET Facilities
Hawthorne Station
Hawthorne Station (334 NE Hawthorne Ave, Bend) serves as the primary bus station for Bend. The station serves as a transfer point for all but Bend local fixed route, all Community Connector shuttles that come to Bend, and also serves as a terminal for intercity buses travelling to and from Central Oregon. Passengers can purchase tickets, get information, and check luggage for intercity travel. There is also a waiting area, restrooms, vending machines, and a lost-and-found available for public use.
Additionally, there are administrative offices for COIC located at Hawthorne Station as well as a break room for bus drivers.

**Bend Bear Creek, Redmond Antler, and Redmond Transit Hub Facilities**
The Bear Creek facility in Bend (1250 NE Bear Creek Road) serves as administrative offices for CET staff, as a maintenance and washing facility for CET buses, and as the operations hub for CET service in Bend. Paratransit, the contractor that runs CET’s bus service in Bend, also operates out of the Bear Creek facility.

The Redmond Antler facility (343 E Antler Avenue) is the headquarters for Cascades East Ride Center and also houses CET’s customer service and call center. This facility is not open to the public.

A dedicated transit hub for CET in Redmond is currently under construction (as of April 2018) and will be located near downtown Redmond, at 777 SW Kalama Avenue. The Redmond hub will serve as the Community Connector shuttle hub for all services to and from Redmond, and between the shuttles and local Dial-A-Ride services. Once completed, this facility will offer dedicated bus bays, restrooms, and an outdoor waiting garden. Until the Transit Hub opens (expected in June 2018) the portion of SW Deschutes Avenue in front of the Redmond Library serves as the transfer point in Redmond.

**Transit Stops**
There are 276 stops throughout the entire CET system. Of those, the majority (223) are located in Bend to serve the fixed-route system. The remainder of the stops serve the Community Connector system: 32 stops are located in Jefferson County; 7 in Crook County; and 14 in Deschutes County outside of Bend. Most stops across the system are only equipped with a sign and a pole, but higher usage stops have benches and/or a transit shelter.

**Other Infrastructure**
In addition to buses, facilities, and bus stops, CET owns several vehicles and vehicle attachments that are used in support of transit operations.

Additional information on transit stops and other transit infrastructure is provided in Appendix A.
3. Needs Assessment

This section outlines the various ways in which transportation needs were assessed to build the Coordination Plan, including demographic data analysis, a stakeholder survey and public meetings, and mapping processes.

3.a Demographic Data
Much of Central Oregon, and the United States more generally, has experienced a period of sustained economic growth since the economic recession that began in 2007-2008. This post-recession economic growth has not been experienced equally across all Central Oregon communities as well as demographic sub-populations. Populations of residents with dependence on human services organizations’ resources and public transportation services has grown in recent years in Central Oregon, indicating increased needs for the provision and efficiency of these services in Central Oregon.

The following section demonstrates the changes in demographics within Crook, Deschutes, and Jefferson Counties along with the Confederated Tribes of Warm Springs.¹ This information is displayed as data tables and Transit Propensity Index (TPI) maps describing populations that have a high propensity for relying on human services and public transportation including:

- Low-income,
- Elderly adults, and
- Disabled individuals

3.a.i Central Oregon Population
The Central Oregon region is still a predominately rural area, with mainly small communities separated by large expanses of open space, agricultural and ranching land uses, and dispersed rural development. The cities of Bend and Redmond are the only communities exceeding 20,000 in population. However, the region has been experiencing enormous population growth in the last few decades, with Deschutes County leading the way in terms of overall numbers and percentage growth, and the Warm Springs reservation a close second in growth rate. This trend is expected to continue, with the regional population forecasted to grow 60% between 2020 and 2050.

¹ Demographic data for the Confederated Tribes of Warm Springs in this report is often displayed separately because the Portland State University Center for Population Research does not tabulate population information for CTWS distinctly from Jefferson and Wasco Counties and because the Census Bureau reports 5-year averages of surveys from CTWS rather than discrete 1-year information owing to the relatively small population therein.
## Table 5. Central Oregon Population and Growth Rates - Counties

<table>
<thead>
<tr>
<th>Year</th>
<th>Crook County</th>
<th>Deschutes County</th>
<th>Jefferson County</th>
<th>Region</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>20,978</td>
<td>157,733</td>
<td>21,720</td>
<td>200,431</td>
<td>3,831,074</td>
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<td>2014</td>
<td>20,780</td>
<td>166,400</td>
<td>22,205</td>
<td>209,385</td>
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<td>2015</td>
<td>21,085</td>
<td>170,740</td>
<td>22,445</td>
<td>214,270</td>
<td>4,013,845</td>
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<tr>
<td>2016</td>
<td>21,580</td>
<td>176,635</td>
<td>22,790</td>
<td>221,005</td>
<td>4,076,350</td>
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<tr>
<td>2017</td>
<td>22,105</td>
<td>182,930</td>
<td>23,190</td>
<td>228,225</td>
<td>4,141,100</td>
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</table>

Source: Portland State University Center for Population Research, 2015

### Population Growth Rate

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population growth</td>
<td>5.4%</td>
<td>16.0%</td>
<td>6.8%</td>
<td>13.9%</td>
</tr>
<tr>
<td>2010-2017</td>
<td></td>
<td></td>
<td></td>
<td>8.1%</td>
</tr>
<tr>
<td>Average annual</td>
<td>2.1%</td>
<td>3.2%</td>
<td>1.5%</td>
<td>2.9%</td>
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<tr>
<td>2014-2017</td>
<td></td>
<td></td>
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<td>1.5%</td>
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Source: Portland State University Center for Population Research, 2018

## Table 6. Population and Growth Rates, Warm Springs Reservation

<table>
<thead>
<tr>
<th>Year</th>
<th>Total population</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>3,976</td>
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<tr>
<td>2014</td>
<td>4,207</td>
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<tr>
<td>2015</td>
<td>4,429</td>
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<tr>
<td>2016</td>
<td>4,548</td>
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### Population Growth Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Pop. growth rate 2010-2016</th>
<th>Average annual growth rate 2014-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2016</td>
<td>14.4%</td>
<td>4.0%</td>
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</table>

Source: US Census, American Community Survey

18

**Section 3: Needs Assessment**
Table 7. Forecast of Population Change - Counties

<table>
<thead>
<tr>
<th></th>
<th>Crook County</th>
<th>Deschutes County</th>
<th>Jefferson County</th>
<th>Region</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>23,528</td>
<td>199,793</td>
<td>24,139</td>
<td>247,460</td>
<td>4,252,100</td>
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<td>2025</td>
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<td>220,708</td>
<td>25,273</td>
<td>270,775</td>
<td>4,516,200</td>
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<tr>
<td>2030</td>
<td>26,565</td>
<td>244,018</td>
<td>26,375</td>
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<td>2035</td>
<td>28,179</td>
<td>266,840</td>
<td>27,323</td>
<td>296,958</td>
<td>4,995,200</td>
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<tr>
<td>2040</td>
<td>29,571</td>
<td>289,225</td>
<td>28,145</td>
<td>346,941</td>
<td>5,203,000</td>
</tr>
<tr>
<td>2045</td>
<td>30,894</td>
<td>310,827</td>
<td>28,828</td>
<td>370,549</td>
<td>5,398,800</td>
</tr>
<tr>
<td>2050</td>
<td>32,277</td>
<td>334,042</td>
<td>29,528</td>
<td>395,847</td>
<td>5,588,500</td>
</tr>
</tbody>
</table>

Forecast Growth Rates

<table>
<thead>
<tr>
<th></th>
<th>Growth rate 2020-2050</th>
<th>Avg. 5-year growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crook County</td>
<td>37.2%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>67.2%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>22.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Region</td>
<td>60.0%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Oregon</td>
<td>31.4%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Source (Counties & Region): Portland State University Center for Population Research, 2018
Source (Oregon): Oregon Office of Economic Analysis, Long-Term County Forecast, 2013

3.a.ii Central Oregon Age Classes

The percentage of persons in different age classes varies across the region. Warm Springs has a very high percentage of residents under 14, indicating that there could be a higher need for transportation to child care or child medical services than other areas of the region. At the other end of the spectrum, Crook County has a significantly higher incidence of persons over 65 than the rest of the region.

Table 8. Central Oregon Age Classes - 2010 & 2015

<table>
<thead>
<tr>
<th>Age</th>
<th>Crook County</th>
<th>Deschutes County</th>
<th>Jefferson County</th>
<th>Warm Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 &amp; under</td>
<td>18.1% 16.1%</td>
<td>18.0% 19.1%</td>
<td>20.8% 20.5%</td>
<td>28.7 28.9</td>
</tr>
<tr>
<td>15 to 19</td>
<td>5.9% 5.8%</td>
<td>5.8% 6.1%</td>
<td>7.1% 6.8%</td>
<td>9.7 8.6</td>
</tr>
<tr>
<td>20 to 29</td>
<td>8.8% 8.2%</td>
<td>11.1% 11.6%</td>
<td>11.2% 11.4%</td>
<td>18.9 19.3</td>
</tr>
<tr>
<td>30 to 39</td>
<td>11.0% 10.8%</td>
<td>12.6% 13.1%</td>
<td>11.3% 11.5%</td>
<td>12.2 11.0</td>
</tr>
<tr>
<td>40 to 49</td>
<td>12.4% 11.5%</td>
<td>13.4% 13.8%</td>
<td>13.7% 12.0%</td>
<td>11.5 11.9</td>
</tr>
<tr>
<td>50 to 59</td>
<td>15.7% 15.4%</td>
<td>14.4% 14.7%</td>
<td>13.6% 14.5%</td>
<td>10.5 7.6</td>
</tr>
<tr>
<td>60 to 64</td>
<td>8.2% 8.7%</td>
<td>7.4% 6.8%</td>
<td>6.8% 6.5%</td>
<td>4.0 5.7</td>
</tr>
<tr>
<td>65 and over</td>
<td>20.1% 23.5%</td>
<td>17.4% 14.9%</td>
<td>15.3% 17.0%</td>
<td>5.7 7.3</td>
</tr>
</tbody>
</table>

Source: US Census, 2010 Decennial Census and 2015 American Community Survey

3.a.iii Senior Population Projections within Study Area

Table 8 demonstrates the forecast extraordinary growth of persons aged 65 or older, in whole numbers and as a percentage of overall population, from 2015 through 2050. Crook County is expected to continue to lead the way, with fully 40% of the population in this age group by 2050. This indicates that there will likely be a higher need for transportation services suitable for older populations for medical care and other essential services.
Table 9. Forecast of Central Oregon Senior Population Growth – Persons 65+

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crook County</td>
<td>4,980</td>
<td>5,749</td>
<td>7,621</td>
<td>8,883</td>
<td>10,243</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>31,050</td>
<td>39,871</td>
<td>54,618</td>
<td>64,006</td>
<td>75,798</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>4,208</td>
<td>5,242</td>
<td>7,412</td>
<td>8,877</td>
<td>9,753</td>
</tr>
<tr>
<td>Tri-County Total</td>
<td>36,030</td>
<td>50,862</td>
<td>69,651</td>
<td>81,766</td>
<td>95,794</td>
</tr>
<tr>
<td>% of Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crook County</td>
<td>23.6%</td>
<td>26.5%</td>
<td>32.8%</td>
<td>36.2%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Deschutes County</td>
<td>18.2%</td>
<td>20.9%</td>
<td>23.7%</td>
<td>23.9%</td>
<td>24.9%</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>18.5%</td>
<td>21.7%</td>
<td>27.5%</td>
<td>30.7%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Tri-County Total</td>
<td>16.8%</td>
<td>21.5%</td>
<td>24.8%</td>
<td>25.4%</td>
<td>26.6%</td>
</tr>
</tbody>
</table>

Source: Portland State University Center for Population Research, 2014

3.a.iv Impoverished Residents within Study Area
Poverty rates for the entire population, as well as for children under 18, generally rose from 2000 through 2013. 2016 rates show some relief from this trend, but Crook and Jefferson counties and Warm Springs all continue to have significantly higher poverty rates than the Oregon and U.S. averages. Children under 18 experience poverty at a higher rate than the rest of the population.

Table 10. Regional Poverty Rates, 1993-2016

<table>
<thead>
<tr>
<th></th>
<th>Crook</th>
<th>Deschutes</th>
<th>Jefferson</th>
<th>Warm Springs</th>
<th>Oregon</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Population in Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>10.9%</td>
<td>10.6%</td>
<td>17.4%</td>
<td>13.2%</td>
<td>15.1%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>12.0%</td>
<td>9.6%</td>
<td>13.9%</td>
<td>10.6%</td>
<td>11.3%</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>11.8%</td>
<td>10.3%</td>
<td>14.4%</td>
<td>12.0%</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>14.0%</td>
<td>10.5%</td>
<td>20.1%</td>
<td>14.0%</td>
<td>15.3%</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>19.5%</td>
<td>14.5%</td>
<td>19.8%</td>
<td>16.2%</td>
<td>15.4%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>17.7%</td>
<td>13.9%</td>
<td>20.3%</td>
<td>30.2%</td>
<td>15.7%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Percent of Children Under 18 in Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>14.0%</td>
<td>14.7%</td>
<td>23.5%</td>
<td>18.3%</td>
<td>22.7%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>17.6%</td>
<td>13.8%</td>
<td>22.3%</td>
<td>15.1%</td>
<td>16.2%</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>18.4%</td>
<td>15.2%</td>
<td>22.8%</td>
<td>17.4%</td>
<td>17.6%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>26.2%</td>
<td>14.9%</td>
<td>33.6%</td>
<td>18.3%</td>
<td>22.0%</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>31.4%</td>
<td>20.3%</td>
<td>32.0%</td>
<td>21.7%</td>
<td>19.9%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>25.2%</td>
<td>18.3%</td>
<td>29.9%</td>
<td>39.7%</td>
<td>20.4%</td>
<td>21.2%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau American Community Survey

3.a.v Disabled Residents within Study Area
Crook and Jefferson counties have significantly higher incidence of persons with disabilities, across all reported age groups, than the average for Oregon.

Section 3: Needs Assessment
Table 11. Number and Percent of Disabled Residents by County, by Age Group

<table>
<thead>
<tr>
<th>2014</th>
<th>Crook County</th>
<th>Deschutes County</th>
<th>Jefferson County</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Population 0 to 5 Years</td>
<td>39</td>
<td>4.3%</td>
<td>389</td>
<td>4.2%</td>
</tr>
<tr>
<td>Population 5 to 17 Years</td>
<td>272</td>
<td>8.3%</td>
<td>1,449</td>
<td>5.4%</td>
</tr>
<tr>
<td>Population 18 to 64 Years</td>
<td>2,299</td>
<td>19.4%</td>
<td>10,475</td>
<td>10.5%</td>
</tr>
<tr>
<td>Population 65 Years and Older</td>
<td>1,961</td>
<td>42.1%</td>
<td>8,684</td>
<td>32.4%</td>
</tr>
<tr>
<td>Total</td>
<td>4,571</td>
<td>20,997</td>
<td>3,642</td>
<td>548,143</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, 2014 American Community Survey

Table 12. Number and Percentage of Disabled Residents, Warm Springs Reservation and Off-reservation Trust Land, by Age Group

<table>
<thead>
<tr>
<th>2016</th>
<th>Estimate</th>
<th>With a disability</th>
<th>Percent with a disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total civilian non-</td>
<td>4,495</td>
<td>558</td>
<td>12.4%</td>
</tr>
<tr>
<td>institutionalized population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 5 years</td>
<td>333</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>5 to 17 years</td>
<td>1,178</td>
<td>28</td>
<td>2.4%</td>
</tr>
<tr>
<td>18 to 34 years</td>
<td>1,232</td>
<td>63</td>
<td>5.1%</td>
</tr>
<tr>
<td>35 to 64 years</td>
<td>1,402</td>
<td>309</td>
<td>22.0%</td>
</tr>
<tr>
<td>65 to 74 years</td>
<td>280</td>
<td>103</td>
<td>36.8%</td>
</tr>
<tr>
<td>75 years and over</td>
<td>70</td>
<td>55</td>
<td>78.6%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, American Community Survey 5-year Estimates (2012-2016)

3.a.vi Transit Propensity Index (TPI)

A useful tool for identifying priority locations of transit is the Transit Propensity Index (TPI). TPI maps use Census data to create a scale of “transit propensity” (degree to which households are likely to use or need transit) based on the combined densities of a) low-income households, b) zero car households, c) older adults (65 and older), and d) people with disabilities. Using this index, we can determine where in space are households are more likely to need transit. The TPI maps are quite useful at the regional scale and show the location of several “hot spots” for transit propensity in Central Oregon that include:

- Much of western Redmond, particularly central west and southwest Redmond,
- Central East Bend, Central Bend, and Southwest Bend,
- Northwest Madras, and
- Southwest Prineville

TPI maps’ “hot spots” are an especially useful tool in seeking opportunities to coordinate human services transportation. This is because these are the areas with higher density – and therefore more

Section 3: Needs Assessment
opportunities to chain trips – among individuals who are more likely to make use of those services. The limitations of the TPI include the fact that it only identifies the location of high transit propensity households, not desired destinations, and the fact that in rural areas Census blocks are very large, and so we don’t get a very high-resolution image of the need. Still, TPI maps are more geographically focused than the county and reservation-scale demographic tables in the previous section. This visual provides a useful analysis to understand likely opportunities to coordinate the transportation needs of human services organizations and their clients.
Figure 3. Central Oregon Transit Propensity Index Map – Regional Overview

 Transit Propensity Index by Census Block Group

- Highest in Region
- Higher than Region
- Region Median
- Lower than Region
- Lowest in Region

This index is based on the combined densities of:
- Low-income households
- Zero car households
- Older adults (65 or older)
- People with disabilities

Data Sources: American Community Survey 5 Year 2009-2014, Oregon Geospatial Data Library, US Census TIGER
Figure 4. Transit Propensity Index Maps – All Central Oregon Communities except Bend and Redmond
Figure 5. Transit Propensity Index Map - Redmond

Transit Propensity Index

- Highest in Region
- Lower than Region
- Lowest in Region

City Limits

This index is based on the combined densities of:
- Low-income households
- Zero Car Households
- Older adults (65 or older)
- People with disabilities

Data Sources: American Community Survey 5 Year 2009-2014, Oregon Geographic Data Library, US Census TIGER
Figure 6. Transit Propensity Index Map - Bend

Transit Propensity Index

- Highest in Region
- Low-income households
- Zero car households
- Older adults (65 or older)
- People with disabilities

This index is based on the combined densities of:

- Cascades East Transit Routes
- Bend Local Transit Routes
- City Limits

Data Sources: American Community Survey 5-Year 2009-2014, Oregon GeoSpatial Data Library, US Census TIGER
3.b Stakeholder-Identified Needs

3.b.i Central Oregon Transportation Coordination Pilot Findings

In 2015-16, the Association of Oregon Counties (AOC) teamed with the ODOT Rail and Public Transit Division to conduct three distinct public transportation-human service coordination projects around the state. The pilot projects were located in North Central Oregon (Hood River, Wasco and Sherman Counties), Central Oregon (Jefferson, Deschutes and Crook Counties), and the Central Willamette Valley (Linn, Benton, and Lincoln Counties).

The impetus for these projects grew out of the 2013 Transportation/Human Services Coordination Study. Among its recommendations was the conclusion that there is more opportunity at the local level than the state level for improving coordination, and that there are 35 programs administered by 13 separate state and federal agencies providing travel services to transportation disadvantaged populations. The pilot projects aimed to identify changes within the control of local communities and regional areas, address increasing demands, and enhance coordination between transportation and human service programs.

The key finding for the Central Oregon Pilot Project was the following:

- “Regional stakeholders agreed that there should be established a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.”

Regional stakeholders also prioritized the use of a small amount of pilot project funding to go towards the following activities (in priority order):

1. Expand study of rural system improvement needs by adding funds to current COIC contract that is addressing service to rural parts of the tri-county area.
2. Provide reimbursement for volunteer drivers, especially for veterans.
3. Develop incentives and expand marketing to promote transit use in the region.
   a. Expand current media buys by COIC promoting transit beyond print media to include video/TV.
4. Add a scheduling function to transit rider app.
5. More direct advertising and outreach.

2 The source for the information in this section is “Central Oregon Public Transportation - Human Services Coordination Study. March 1, 2016 Stakeholder Convening Briefing Paper”, 2016. Oregon Department of Transportation and Association of Oregon Counties.
While not crafted as needs statements, these outcomes implied the following set of needs relevant to the Coordination Plan process:

- There needs to be more ongoing communication and coordination between public transportation and health and human services stakeholder groups
- Rural parts of the region lack service.
- Volunteer driver and veterans’ ride programs lack sufficient funding for mileage reimbursements.
- Transit marketing and outreach is insufficient - not enough citizens know about the availability of public transportation and how to use it.
- Users need additional tools to schedule reservation rides (e.g. Dial-a-ride or medical ride brokerage).

The Coordination Plan Regional Steering Committee was composed of many of the same stakeholders as the Pilot project, and the Pilot project outcomes were fed directly into the front end of the Coordination Plan process.

3.b.ii **Survey Findings**

As part of the Coordination Plan process, transportation and health and human services stakeholders were surveyed to identify the transportation needs and barriers to accessing key destinations on the part of the target populations (people with disabilities, seniors, and lower income individuals and households). The survey was conducted in May 2016, and was completed by 30 stakeholders serving on the Coordination Plan Regional Steering Committee as well as local stakeholders that were identified by RSC members.

The full survey text and findings are included in Appendix C. Following are the high-level findings from the survey:

- **Geographically**, the outlying areas of Crook, Deschutes, and Jefferson counties, and Warm Springs, have the least public transportation service and therefore the most barriers to access.
- **Temporally**, target populations have the hardest time accessing needed destinations on weekday evenings, followed by the weekends. Respondents also indicated that there is insufficient inter-community (Community Connector) service at all times.
- **The top barriers for using existing services** included service schedule/frequency limitations, concerns about accessibility/safety for people with disabilities, and “lack of information”.
- **The top cultural barriers** that need to be addressed included concerns with the ability of seniors and the disabled to access transit information (lack of familiarity with the system as well as difficulty accessing digital tools), cross-cultural and language barriers, and a general cultural disaffection for buses.
• When asked about **barriers relating to jurisdictional, turf, or funding silo issues**, respondents were unable to identify any key themes, although several noted that there should be better coordination, including potentially integration, across agencies and funding sources.

• The **#1 most-identified service improvement** identified by respondents was to expand fixed-route services to more locations and at more times, followed by reducing fares for target populations and developing more collaborative efforts focused on promoting the bus. Expansion of fixed route services had 2-3x more responses than any other answer.

• When asked **what stakeholder groups should be more engaged in finding solutions**, respondents indicated that social service and health stakeholders are most important, followed by advocacy organizations and business groups.

• Most respondents were unaware of any **inefficiencies in the current system that would benefit from coordination and reduction of duplication**. Some respondents called for a “one stop shop” of transportation service information, and others noted that there are likely opportunities to better coordinate among transportation, human services, and health agencies.

• In terms of **how to structure ongoing multi-party coordination efforts**, respondents favored the development of a regular meeting schedule, along with email/digital correspondence and outreach, as well as ad-hoc meetings or focus groups as needed. 45% of survey respondents indicated that they themselves would be willing to serve on an ongoing Coordination Plan Regional Steering Committee.

3.b.iii Final Regional Needs

A Regional Steering Committee (RSC) was developed to oversee the development of the Coordination Plan. The RSC included transportation, health, and human service stakeholder group representatives operating at a regional as well as local scale.

At their January 2017 meeting, the RSC reviewed all the information presented earlier in this chapter - demographic information and TPI maps, the Coordination Pilot findings, and the survey results. The RSC separated into three small groups and identified a list of needs and strategies (strategies will be discussed in the next chapter) and then came together to generate a final list of regional needs:

**Top 3 Needs:**

1. **Coordination and information sharing**: The region needs a means for ongoing information sharing and coordination of funding and services to maximize the use of resources and better meet the needs of target populations. This would primarily involve public transportation and health and human services providers. Related to this, another identified need is improvement in collection and dissemination of data regarding aggregate trip patterns among human service clients.

2. **Public awareness of transportation options**: Target populations need to be made more aware of the services provided by Cascades East Transit (CET), and how to access CET services. Further, Central Oregon residents that do not themselves rely on transit often do not understand the need for it.
3. **No dedicated public funding for transit.** There is no local, dedicated funding source for public transportation.

**Additional Needs:**

1. **Maintain the system.** Before contemplating new services, we need to make sure that the existing system is adequately funded and that buses and other infrastructure are well-maintained.

2. **Service gaps.** The RSC identified the following gaps of service:  
   a. **Insufficient evening and weekend public transportation service.** Specifically, most CET services do not operate past 7:30pm on weekday evenings, and the only weekend (non-recreation transit) service is certain fixed routes in Bend (Saturdays) and the Bend Dial-A-Ride (Saturdays and Sundays). Further, for some users (e.g. dialysis patients), service does not begin early enough in the day.
   b. **Lack of fixed-route service in local areas outside Bend.** CET’s only local fixed-route service is in Bend. Other communities need fixed-route in order to improve service availability and convenience.
   c. **Insufficient fixed-route service frequency.** Community connector shuttles and local fixed-route services in Bend do not come frequently enough.
   d. **Lack of veteran access to Portland** – the current Disabled American Veterans shuttle to the Portland VA hospital (and other services) does not have a wheelchair lift.
   e. **Too many transfers.** Too many trips require one or more transfers (e.g. at Hawthorne Station). There needs to be more direct, as well as express, transit routes.

3. **Insufficient accessibility for target populations.** Target populations have insufficient access to public transportation:
   a. **Housing costs and jobs/housing imbalance.** Lower income families are pushed out farther from higher-cost housing areas and therefore have more transportation needs, and higher costs to meet them. Further, major employment centers are often not located near housing that is affordable.
   b. **Lack of rural service.** There are significant numbers of target populations living in outlying areas with no public transportation service.
   c. **Disabled resident safety and assistance.** There is insufficient accessibility (e.g. ADA-compliant access to and from transit stops), assistance (e.g. travel training programs), and therefore reduced safety for persons with disabilities.
   d. **Cost.** CET fares are cost-prohibitive for low income individuals and veterans.
   e. **Cultural barriers.** There are cultural (e.g. primarily language) barriers to accessing transit for some racial and ethnic minority populations in Central Oregon.
   f. **Bike/pedestrian access.** There is insufficient bike/pedestrian access to and from transit stops in many parts of the region.

4. **Not enough “choice” riders.** The transit system is not used by enough “choice” riders to a) improve fare revenue, and b) demonstrate the value of public transportation to average voters.
3.c Origins and Destinations Mapping- Wikimapping Project
The Wikimapping interactive mapping platform (see http://wikimapping.com/ for more) was used to solicit information from regional human services agencies and transportation providers to help support development of the Coordination Plan. The purpose of the project was to identify common origin and destinations for seniors, persons with disabilities, and low-income households and understand transportation “flows” between these locations. Although the Transit Propensity Index (TPI) maps described in section 2.a.v provides a spatial proxy for the residential location of these needs in Central Oregon, this origin-destination surveying exercise enabled zeroing in on potential opportunities for coordination in human services organizations’ transportation needs.

3.c.i Wikimapping Participation Process
To identify origins and destinations with common need, COIC requested that representatives from the Regional Steering Committee, primarily including representatives from health and human services organizations, plot the transportation needs of their clients. This process particularly sought residential locations with clusters of focus populations including:

- Senior living facilities,
- Low income housing,
- Apartment complex (multi-family housing),
- Neighborhood with high concentrations of clients, and
- Homeless shelters

The destinations COIC sought from human services organizations in the Wikimapping process were areas where their clients have clustered travel needs, especially:

- Hospitals and doctors’ offices,
- Grocery stores, Senior centers or community centers,
- Schools,
- Entertainment,
- Public libraries,
- Places of worship,
- Social services, and
- Employment.

After plotting common client residential locations and destinations, participants in the survey were asked to identify the types and frequencies of trips their clients took. This included questions about the mode of transportation, types of clients, frequency of travel, and trip purposes. Participants were asked to complete this process for each of the common origin-destination pairs for their clients. By combining the information in the process described above, it was possible to better understand coordination opportunities between specific origin-destination pairs for clients of Central Oregon’s human services organizations.
Analysis and Data Cleaning Methodology

Wikimapping data gathered using the interactive map was downloaded in a spatial data format (shapefile), which includes the location and type of each Origin/Destination point and Route line. In addition, survey data that was entered by participants when they placed a point or line on the map includes additional information such as the name of each location, the category of client that goes there, and the frequency of client travel. This data was downloaded in tabular format (CSV).

The results of the Wikimapping process are displayed in Figures 8-10 below. This information will be used as part of CET’s upcoming Regional Transit Master Plan rewrite process, and will help planners identify new or adjusted route alignments and timings.
Figure 8. Regional Wikimapping Results
Figure 9. Wikimapping Results - Bend

Deschutes River Woods to Bend Education & Employment

Deschutes River Woods

Redmond to Bend COCC

Madras to Health Services in Bend

Data Sources: Wikimapping Survey 2016-2017, Oregon Geospatial Data Library, U.S. Census TIGER.
Figure 10. Wikimapping Results - Redmond
4. Prioritized Coordination Strategies

The Regional Steering Committee created a list of Priority Strategies at their January 2017 meeting. During subsequent local stakeholder meetings convened in Crook, Deschutes, and Jefferson Counties and the Confederated Tribes of Warm Springs, stakeholder groups prioritized these as well as additional, local transportation strategies. The entire list was then reviewed at a final December 2017 Regional Steering Committee meeting (RSC members refined regional priority strategies but did not make any changes to local strategies).

The process for prioritizing strategies at the meetings in Crook, Deschutes, and Jefferson Counties, as well as regionally, allowed each attendee to vote for their top three strategies. Each vote received one point, and the points were added together to apply a score to each strategy.

During the prioritization process at the Confederated Tribes of Warm Springs Local Meeting, attendees preferred instead to use a consensus-based approach. They chose to discuss each strategy that came up in the meeting, collectively agreeing which strategies were tier one (of higher importance) or tier two (of lower importance).

A table with regional as well as local strategies and associated scores from each group is included at the end of this section.

4.a Regional Priority Strategies

The following “Regional Priority Strategies” were developed by the Regional Steering Committee, composed of health and human services and transportation stakeholders that administer services at the regional scale, as well as STF Coordinators and other key leaders that operate at the local scale.

4.a.i Highest Priority Strategies:

The Regional Steering Committee identified the following high priority strategies, listed in priority order:

#1: Improve affordability of transit services to low-income individuals and veterans. Provide subsidized fares for low income clients and veterans needing access to health and human services.

#2: Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.

- Develop a quarterly coordinating meeting for public transportation and health and human services organizations.
- Explore development of a regionally-based Special Transportation Fund (STF) Committee, or joint tri-county and Warm Springs STF Committee meeting to collect data on needs and services; and advise COIC directly on the allocation of resources to meet needs. As part of the exploration, consider integrating this committee with the required new local advisory committees required to access Statewide Transportation Improvement Fund (STIF) resources.
• Create common datasets for transportation planning across the region and across transportation, health, and human services organizations.
• Incorporate transportation network companies (TNCs) into the transit system and explore offering vouchers for TNCs to provide access to fixed-routes.

#3: Expand public transportation services to late in the evening and on weekends. Work with human and health services stakeholders to identify priorities for expansion of services to later in the evenings and when/where to provide weekend services.

#4: Education and Outreach. Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.

#5: Create a Dedicated Local Public Fund for Transit. Identify priority geographies/communities and develop a local public tax base to provide additional services.

4.a.ii Additional Strategies
The following strategies were also endorsed by the Regional Steering Committee, listed in priority order:

Medium Priority:

6. Improve accessibility, assistance, and safety for disabled residents. This includes travel training programs as well as infrastructure improvements to enhance access (e.g. ADA access) to and from transit stops.
7. Provide a clearinghouse for transportation information, including transportation provider routes, services, eligibility, and contact information. Include all services, not just CET.
8. Support, maintain, and strengthen the existing transportation network, including both local service and community connector shuttles – leverage local public transportation investments to secure state and federal resources.
9. Expand intercommunity transit service. Expand the frequency of Community Connector Shuttle service and expand operating hours. Additionally, create more commuter-oriented inter-community service.
10. Link rural populations to transit services by:
    • Expanding service areas;
    • Offering vouchers for TNCs, as identified in priority #2 above;
    • Providing more Park & Ride lots;
    • Or other solutions.
11. Address cultural and language barriers to riding the bus. Work with ESL populations to create better information (e.g. brochures, website, etc.) and outreach (direct engagement with communities) to improve transit access and utilization by these communities.
12. Provide local fixed route services in communities outside Bend.
**Lower Priority**

The following strategies were discussed by the group but received very few votes. They are not listed in priority order:

- Increase frequency of service in fixed route areas.
- Better market group bus programs for employees
- Make winter transportation more livable.

### 4.b County and Tribal Prioritized Strategies

After the Regional Steering Committee developed and confirmed their priority strategies, COIC convened local stakeholder meetings for each of the Coordination Plan jurisdictions – Crook County, Deschutes County, Jefferson County, and the Confederated Tribes of Warm Springs. The stakeholder meetings included members of each jurisdiction’s Special Transportation Fund Committee, as well as additional community members representing health and human services and transportation organizations (see the Attributions section on page iii for some of the attendees) At each meeting, the stakeholders reviewed the regional priority strategies and then developed additional priority strategies focused on local needs, as desired. Finally, the participants prioritized the entire list of strategies – the regional strategies as well as their own local strategies.

#### 4.b.i Crook County Priority Strategies

Following are listings of strategies identified at the January 19, 2017 Crook County meeting, and further refined at the May 17, 2018 STF Committee meeting.

**Crook County High Priority Strategies**

The following are in rank order:

1. Expand service frequency and hours between Prineville and Bend to meet commuter needs
2. Expand service to later in the evening and weekends on the community connector service as well as local service.
3. Improve affordability of transit services to low-income individuals and veterans. Provide subsidized fares for low income clients and veterans needing access to health and human services.
4. Support, maintain, and strengthen the existing transportation network, including both local service and community connector shuttles – leverage local public transportation investments to secure state and federal resources.

**Crook County Medium Priority Strategies**

The following are all considered medium priority strategies for Crook County, and are not listed in any priority order (they are all weighted equally):
• Create a dedicated funding source for public transportation.
• Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.
  o In addition to the coordination ideas expressed in the (same) regional priority strategy, work to coordinate facility siting and development, through the land use planning system, with transit service provision to ensure that target populations may access facilities on CET.
• Education and Outreach. Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.
• Gather more data on trips flows for human service and health care organization clients to plan public transit services.
• Expand transit to rural areas of Crook County.
• Convert Prineville to fixed route or deviated fixed route.

Additional Strategies
Following are additional strategies that received votes in the Crook County meeting. They are not listed in rank order:

• Create more commuter-oriented inter-community service (across the system).
• Travel training – provide travel training classes to individuals who use paratransit service to convert to fixed-route service.
• Better market group bus pass promotion for employees.
• Make winter transportation more livable (e.g. shelters, better access to stops, etc.).

4.b.ii Deschutes County Priority Strategies
Following are listings of high and medium priority strategies identified at the February 28, 2017 Deschutes County meeting.

Deschutes County High Priority Strategies
The following are in rank order:

1. Create a dedicated funding source for public transportation.
2. Support, maintain, and strengthen the existing transportation network, including both local service and community connector shuttles – leverage local public transportation investments to secure state and federal resources (Note: participants indicated that the “strengthen” part of this strategy was largely focused on providing fixed-route service in Redmond).
3. Expand service to later in the evening and weekends.
4. Education and Outreach. Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.
5. Provide fixed route services outside Bend, starting with Redmond.

**Deschutes County Medium Priority Strategies**
The following are all considered medium priority strategies for Deschutes County, and are weighted equally:

- Create express bus routes.
- Improve Bend DAR system (i.e. caregiver, child riding with parent).
- Improve affordability of transit services to low-income individuals and veterans (e.g. subsidized fares and veterans ride programs)
- Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.
- Develop electronic fare card system.

**Additional Strategies**
Following are additional strategies that received votes in the Deschutes County meeting. They are not listed in rank order:

- Make winter transportation more livable.
- Consider density and/or mixed housing stock (e.g. transit oriented development - TOD).
- Travel training – provide travel training classes to individuals who use paratransit service to convert to fixed-route service.
- Create voucher system for ride-sharing programs.

**4.b.iii Jefferson County Priority Strategies**
Following are listings of high and medium priority strategies identified at the February 2, 2017 Jefferson County meeting.

**Jefferson County High Priority Strategies**
The following are in rank order:

1. Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.
2. Create a dedicated funding source for public transportation.
3. Education and Outreach. Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.
4. Support, maintain, and strengthen the existing transportation network, including both local service and community connector shuttles – leverage local public transportation investments to secure state and federal resources.
Jefferson County Medium Priority Strategies
The following are all considered medium priority strategies for Jefferson County, and are weighted equally:

- Gather more data on trips flows for human service and health care organization clients to plan public transit services.
- Expand service to later in the evening and weekends.
- Make winter transportation more livable.

Additional Strategies
Following are additional strategies that received votes in the Jefferson County meeting. They are not listed in rank order:

- Travel training – provide travel training classes to individuals who use paratransit service to convert to fixed-route service.
- Better market group bus pass promotion for employees
- Create express bus routes

4.b.iv Confederated Tribes of Warm Springs Priority Strategies
At their February 28 and September 21, 2017 meetings, the CTWS attendees decided to identify “Tier 1” (high priority) and “Tier 2” (medium priority) strategies, and decided to NOT rank the strategies within each Tier.

CTWS Tier 1 Strategies
- Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.
- Education and Outreach. Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.
- Provide transit to/from underserved areas like Simnasho
- Develop a public transit route to Government Camp to increase employment and recreation opportunities.
- Ensure that the CTWS senior center has viable buses and service

CTWS Tier 2 Strategies
- Create a dedicated funding source for public transportation.
- Expand service to later in the evening and weekends.
- Support, maintain, and strengthen the existing transportation network, including both local service and community connector shuttles – leverage local public transportation investments to secure state and federal resources.
- Create more commuter-oriented inter-community service.
• Gather more data on trips flows for human service and health care organization clients to plan public transit services.
• Travel training – provide travel training classes to individuals who use paratransit service to convert to fixed-route service.
• Better market group bus pass promotion for employees.
• Make winter transportation more livable.
4.b.v Regional and Local Priority Strategy Matrix

The table below summarizes all of the high priority strategies – including regional and local priority strategies – and demonstrates where different local areas are aligned with each other and with the regional strategies. For more information on medium or lower-priority strategies, see the narrative above.

Table 13. Regional and Local High Priority Strategies (Highest Priority strategies in blue highlight.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Regional</th>
<th>Crook</th>
<th>Deschutes</th>
<th>Jefferson</th>
<th>CTWS</th>
<th>Votes by geography</th>
</tr>
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<tbody>
<tr>
<td><strong>HIGH-PRIORITY STRATEGIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a dedicated funding source for public transportation</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
<td>Tier 2</td>
</tr>
<tr>
<td>Education and Outreach. Develop a comprehensive marketing and awareness campaign. Provide more information to riders, the public, communities, and elected officials and leaders about the benefits of public transit and existing transit services.</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td></td>
<td>Tier 1</td>
</tr>
<tr>
<td>Ongoing coordination – establish a structure for ongoing dialogue on coordination needs and opportunities among public transportation providers and the human and health services communities.</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td>Tier 1</td>
</tr>
<tr>
<td>Support, maintain, and strengthen the existing transportation network, including both local service and community connector shuttles – leverage local public transportation investments to secure state and federal resources.</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
<td>Tier 2</td>
</tr>
<tr>
<td>Expand service to later in the evening and weekends</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td></td>
<td>Tier 2</td>
</tr>
<tr>
<td>Improve affordability of transit services to low-income individuals and veterans (e.g. subsidized fares and veterans ride programs)</td>
<td>High</td>
<td>n/a</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expand service frequency and hours from Prineville to Bend to meet commuter needs</td>
<td>n/a</td>
<td>High</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Provide fixed route services outside Bend</td>
<td>Medium</td>
<td>n/a</td>
<td>High</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Provide transit to/from underserved areas like Simnasho</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Tier 1</td>
</tr>
<tr>
<td>Develop a public transit route to Government Camp to increase employment opportunities</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Tier 1</td>
</tr>
<tr>
<td>Ensure that the CTWS senior center has viable buses and service</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>Tier 1</td>
</tr>
</tbody>
</table>
List of Appendices

A. Planning Precedent

B. Transportation Infrastructure and Fleet

C. Stakeholder Survey