Chapter 8: Public Transportation System

Introduction

The Bend area has experienced rapid population growth in the last decade, reaching approximately 90,000 residents, and that growth is expected to continue to approximately 140,000 residents by 2040. The area's rapid housing and employment development brings with it an increasing need for expanded public transportation services. The Bend Metropolitan Planning Organization (BMPO) and City have developed various public transportation plans that can be used to provide guidance on how to accommodate on-going growth within the area fixed route system.

Public transportation is an important element of multi-modal transportation planning and provides mobility options for the traveling public. Providing transportation options is important for all people and it is essential for those who are unable to drive motor vehicles. There are many segments of the population that are unable to drive or do not have a vehicle available. People may not be able to drive due to age or health. School age children, especially youths aged 10-17, seniors (aged 65 or above), and persons with disability may not be able to legally and safely operate motor vehicles. Other people may not own cars for financial reasons or individual preference. Many low-income households do not own private motor vehicles. Public transit allows this wide range of people the opportunity to travel for a variety of purposes.

Public transportation also provides a valuable alternative to travel by single-occupancy vehicle and potentially reduces motor vehicle demand on roadways. Public transportation can improve the efficiency of highways and arterial streets. It can reduce the need for costly capacity expansion projects, as fewer vehicles are required on the road to serve the same number of people. It can improve congestion by providing for people who would otherwise be putting additional vehicles on area roadways. Improvements to air quality can also be achieved by the net reduction of motor vehicle emissions. Public transportation can also play an important role in reducing congestion and parking requirements in high demand areas such as the downtown, opening up development opportunities for the community.

Planning Context

Three recent studies have identified issues and strategies toward improving transit services in Central Oregon:

- BMPO Public Transit Plan and Corridor Land Use Assessment (PTP)¹
- Central Oregon Regional Transit Master Plan (RTMP)²

¹ Public Transit Plan and Transit Corridor Land Use Assessment, Bend Metropolitan Planning Organization, March 2013

² Central Oregon Regional Transit Master Plan, Central Oregon Intergovernmental Council, June 2013

Central Oregon Strategic Transportation Options Plan (COTOP)³

The PTP serves as the Public Transit Plan for the Bend Metropolitan Planning Organization (BMPO) and will be adopted as a component of the BMPO Metropolitan Transportation Plan (MTP) Update. The PTP will also be adopted as a component of the City of Bend Transportation System Plan (TSP) and will be a companion to the City of Bend Comprehensive Plan, for land use planning actions and decisions.

The RTMP identifies where future transit services can support regional transportation and sustainability goals. The Plan provides a 20-year vision for the Central Oregon Intergovernmental Council (COIC), identifying needed improvements and funding strategies to effectively provide transit services for the region.

The COTOP was developed for the COIC to analyze transportation options for inter-city travel programs that include transit and carpool/vanpool services, bus and commuter rail. The Plan identifies cost-effective investments to support long-term inter-community travel demand in Central Oregon.

The following sections summarize the key policies, findings and identified improvement strategies from each of these three studies. The PTP is emphasized, as it is the Plan specifically applicable to the BMPO. The relevant elements of other regional studies are also identified.

Policies

The goals and objectives for the public transportation system were identified in the PTP. The goals and objectives were built upon the existing BMPO MTP strategies and Bend TSP objectives, policies, and actions. The four goals identified in the PTP are:

- Goal 1: Provide public transportation services for the transportation disadvantaged
- Goal 2: Reduce reliance on automobiles and develop public transportation facilities
- Goal 3: Increase mobility, accessibility, and visibility of transit throughout the urban area
- Goal 4: Provide infrastructure and land use planning to support transit

Objectives are defined to guide and support implementation of strategies that achieve progress towards the goals of the PTP.

- Objectives 1.A: Preserve and improve the existing Dial-A-Ride service.
- Objective 1.B: Equitably provide transit services throughout the city, including to areas with high concentrations of low-income households, households without a vehicle, seniors, and people with disabilities.

-

³ <u>Central Oregon Strategic Transportation Options Plan</u>, Central Oregon Intergovernmental Council, July 2013

- Objective 1.C: Provide transit service to all middle and high schools, as well as higher education facilities.
- Objective 2.A: Support and promote expansion of a reliable public transportation system that makes transit an attractive travel choice for Bend residents and visitors in order to reduce reliance on the automobile. Over time, the best transit service in Bend (highest frequency, most reliable, longest service span, etc.) should be provided in "primary transit corridors," as presented in the Public Transit Plan.
- Objective 2.B: Work with other governmental agencies to support implementation of a 20-year Public Transit Plan. Ordinances shall be adopted that implement the Public Transit Plan.
- Objective 3.A: Work with COIC, Central Oregon communities, and the State to maintain or improve connections between local Bend transit services and interurban public transportation services. Priority shall be given to high-ridership corridors and connections.
- Objective 3.B: Coordinate with the Central Oregon Intergovernmental Council (COIC), the State, and other jurisdictions to evaluate funding alternatives and seek appropriate resources to preserve and support future expansion of the public transportation system. Effort should be made to evaluate creative funding techniques that may include the combination of public and private transportation resources in coordination with other agencies and transportation providers.
- Objective 3.C: Continue to partner with local organizations, businesses and agencies to enhance the image of transit throughout the community.
- Objective 4.A: Implement land use ordinances and other regulations that establish pedestrian and transit-friendly design along potential or existing transit routes, to improve access to the fixed-route transit system.
- Objective 4.B: Encourage new development requiring transit service, such as schools, hospitals, clinics, high-density housing, etc., to locate along an existing transit route. Encourage the highest-intensity uses to locate along primary transit corridors, which would offer the highest level of transit service.
- Objective 4.C: Support implementation and/or improvement of secondary transit hubs including the Central Oregon Community College, the St. Charles Medical Center, and sites on the north and south reaches of Bend, including land acquisition and other infrastructure.
- Objective 4.D: Acquire properties (or secure joint use agreements) for Park-n-Ride lots at strategically located sites throughout the urban area. These locations may be co-located with secondary transit hubs or other major stops (see also Objective 4.C).

Existing Transit Services

The primary transit service provider for the Bend MPO is Cascades East Transit (CET). CET provides local (City) fixed-route service, regional (intercity) fixed-route service, and flexible demand-responsive service. The CET services are supplemented by other intercity transit providers. The following sections provide an overview of CET and other providers in the Bend MPO area.

Cascade East Transit

The CET local transit service includes seven routes within Bend. The routes are designed to radiate from Hawthorne Station, the main transit center in the Bend transit system, in a system design referred to as "hub-and-spoke". Hawthorne Station is located between 3rd Street and 4th Street on Hawthorne Avenue. The fixed route transit services are illustrated in Figure 1. Most of the routes provide drop-off and pick-up every 40 minutes on weekdays from between 6:20 a.m. and 6:15 p.m. and every 80 minutes from approximately 8:00 a.m. to 5:00 p.m. on Saturdays. Full price fare within Bend is currently \$1.50 for one-way travel, with day passes available for \$2.50.

CET also operates the Community Connector service which provides direct regional connections between Bend and La Pine and Redmond. From Redmond, additional connections are available to Prineville, Madras, Sisters, and the Redmond Airport. From Madras, connections to Metolius and Culver are also available. The fixed route intercity transit services are illustrated in Figure 2. Regional service routes generally operate on Weekdays during a.m. and p.m. peak commute hours. Seasonal service to Mt. Bachelor (winter) and the Ride the River route (summer) in Bend are also provided.

CET's demand-responsive service is Bend Dial-A-Ride, providing shared-ride service to people with disabilities and low-income seniors who do not live near fixed-route service. One-way fares are \$2.50, with half price discounts available to low-income riders.

Key service characteristics for CET are summarized in Table 1. Funding for the transit system comes primarily from federal assistance and local sources. The City of Bend provides approximately \$1 million annually from its general fund to meet local matching requirements for federal funding. Fare collection generally covers about 10 percent of operating expenses⁴.

-

⁴ National Transit Database, http://www.ntdprogram.gov/ntdprogram/pubs/profiles/2010/agency_profiles/0050.pdf

Table 1. Bend Area Transit Service Characteristics - 2010

Annual Passenger Trips	175,000
Average Weekday Trips (Unlinked)	1,400
Fare Revenues	\$250,000
Operating Expenditures	\$2,500,000
Capital Expenditures	\$450,000
Buses – Total (Fixed Route/Demand Response)	23 (10/13)

Source: 2010 National Transit Database

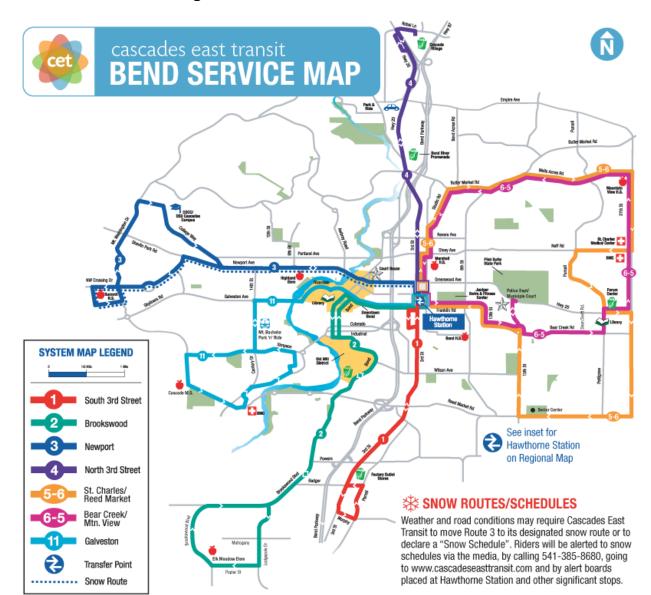
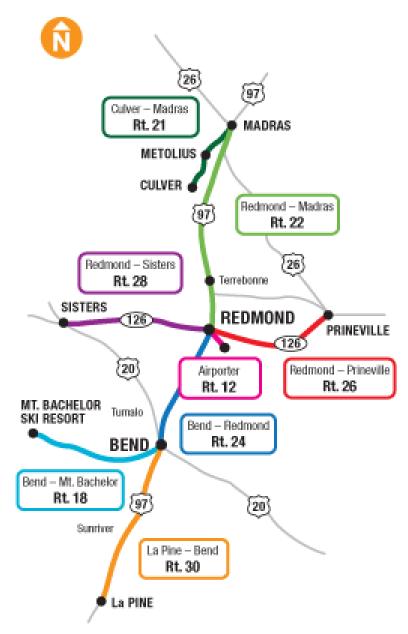


Figure 1. CET Local Fixed-Route Service

Source: Cascade East Transit, http://www.cascadeseasttransit.com/routes-schedules/where-are-you-going.html

Figure 2. CET Regional (Intercity) Fixed-Route Service





 $Source: Cascade \ East \ Transit, \ \underline{http://www.cascadeseasttransit.com/routes-schedules/city-service.html}$

Other Intercity Bus Services

The following bus services provide intercity travel options in the Bend MPO area:

- Central Oregon Breeze, operated by CAC transportation, provides daily bus service between Central Oregon and the Portland area. Central Oregon stops include the Sugarloaf Mountain Hotel in Bend, Redmond Airport and Madras. Portland Area stops include Union Station, Portland International Airport (PDX), and the Cleveland MAX stop in Gresham.
- Amtrak provides daily shuttle bus service called High Desert Point (between Chemult and Redmond), Eastern Point (between Ontario and Bend) and Eugene to Bend (between Eugene and Bend). These bus services provide connections to Amtrak's national passenger rail network.
- Valley Retriever provides shuttle service between Bend and Newport, Corvallis, Albany, and Salem.
- Redmond Airport Shuttle offers charter van and mini-van shuttle service between Central Oregon and Portland, Salem, Eugene, and Corvallis.
- The People Mover provides shuttle bus services three days per week between Prairie City (Grant County) and Bend.
- Greyhound provides intercity bus service connecting to a nationwide network of routes.

Travel Demand Management Programs

Transportation Demand Management (TDM) or transportation options (TO) are general terms for strategies that reduce reliance on single-occupancy motor vehicle trips. Commute Options for Central Oregon is the region's primary TDM program. Commute Options is a non-profit agency that serves as an advocacy group that supports a variety of TDM strategies and programs. It facilitates vanpools, carpools, park and ride lot development, bike corrals, pedestrian facilities and marketing for transit. It also administers the Drive Less Connect and commute options partner and rewards programs and delivers the educational components of the Safe Routes to Schools program.

- Drive Less Connect is an online rideshare and TDM tracking program in Oregon, Idaho, and Washington. It provides a tool to aid in organizing carpools and identifying other bike riders. It provides estimated cost savings that result for traveling by a mode other than single-occupancy motor vehicles.
- Commute Options Partners is a program that organizes employers to participate in TDM activities. Transportation Coordinators are designated at the member business or organization to facilitate employee participation in Drive Less Connect.
- Commute Options Reward Program offers reward to employees of organization that are registered in the Commute Options Partners program.

Identified Needs

Needs for CET transit service were identified in the PTP and the RTMP, while intercity transit service was addressed in the COTOP. The needs identified for each are summarized below.

CET Transit Service

The RTMP highlights general needs for supplying transit services in the region:

- Maintain regional transit service (provided by CET) to take advantage of the benefits of an integrated, coordinated, and unified transit system.
- Identify a reliable, sustainable funding source for CET services
- Focus on service improvements to attract "choice" riders that have other transportation options.
- Support higher density land use development to create activity centers that support transit services.
- Improve and maintain primary transit facilities and access for bikes and pedestrians.
- Maintain or improve the condition of the vehicle fleet and other equipment and capital investments.
- Improve awareness of the CET transit services

Major needs for CET transit services were identified and prioritized as part of the PTP. The highest priority needs related to expanding the service frequency and operating hours of existing services. The lowest priority needs were expanding the service coverage area and providing faster or more direct service. The prioritized needs for CET services are summarized in Table 2.

Table 2. Prioritized Transit Needs

Expressed Major Service Needs	Overall Priority
Early Evening Service Hours (6:00 – 8:00 p.m.)	High
Increase Saturday Frequency	High
Provide Sunday Service	High
Increase Weekday Frequency	High
Later Evening Service Hours (8:00 – 10:00 p.m.)	Medium
Expand Saturday Hours	Medium
Early Morning Service Hours (Start at 5:00 a.m.)	Medium
Provide Faster, More Direct Service	Low-Medium
Expand Service Coverage	Low-Medium

Source: Bend MPO Public Transit Plan, Figure 5-1

Specific issues highlighted include difficulty with on-time performance on Route 5 (Wells Acres) leading to late arrivals and overcrowding, limited service hours on Route 11 (Galveston), and the general difficulty of travel planning with 40-minute headways on most routes. The desire to expanding service coverage within Bend and improving

regional connections were also identified. Additional details of the existing conditions needs assessment and key findings are available in Chapter 5 of the PTP.

Intercity Transit

The COTOP analyzed intercity transportation in Central Oregon, focusing on the corridors that connect Bend, Redmond, Sisters, Prineville, Madras, La Pine, and Culver/Metolius. The COTOP analyzed a variety of strategies to provide intercity travel options including commuter rail, vehicle-mile-traveled (VMT) pricing, transit enhancements and vanpool enhancements. The costs and benefits were evaluated for providing these alternative strategies on each of the key corridors that connect these communities.

The overall conclusion of the COTOP is that, although transit investments are difficult to justify on the basis of reducing capacity constraints on intercity corridors, providing lower cost mobility options has significant user and societal benefits.

Key findings of the study are summarized below:

- There is relatively little congestion through 2030 on the highway corridors that provide the majority of intercity connections in Central Oregon.
- Shifting intercommunity trips has relatively little impact on congestion on the intercity highway corridors, as the majority of trips have origins and/or destinations outside of the Central Oregon communities analyzed.
- Reducing VMT is the most significant benefit of providing improved intercity transit services, as a result of shifting demand away from single-occupancy vehicle travel on longer-distance trips.
- Transit investments on the Redmond-Bend corridor are the most costeffective due to demand between the communities. A market assessment found the Redmond-Bend corridor to have the highest potential for transit investments in the region. Bend-Sisters and Bend-La Pine were considered to have moderate market potential, based on the criteria of the report
- Transit investments are not warranted between some of the smaller communities, based on low demand for travel between them, even through 2030.
- Community Connector fares are not competitive on shorter-distance intercity trips such as those between Culver and Metolius (when compared to driving).
- Although it would produce benefits where implemented, a number of significant challenges exist for Commuter Rail service. These challenges include high capital and operating costs, freight-owned right-of-way, limited coverage with the region (i.e., the US 97 corridor), and poor alignment with supportive land uses on the proposed alignment.
- Pricing strategies (e.g., VMT-based driving fee) could be effective as a complement to intercity transit investments. However, high quality alternatives must be in place to result in significant vehicle trip reductions.
- Local transit services and connections are critical for intercommunity transit effectiveness. The quality of local transit service, how accessible the transit stops are for people who walk and bike, and the degree to which land use strategies

- support transit and may significantly affect ridership potential of intercity transit services.
- Intercity vanpool and transit investments have the ability to impact local traffic operations within communities, particularly at so-called "first intersections" near the end points of intercity transit services.

Land Use Organization

Developing supportive land uses is an important strategy for effective transit systems. Land uses that include high-density residential, mixed-use, entertainment and employment concentrations support transit route ridership. Bend's Comprehensive Plan designates the types of land uses; high-density, mixed-use and commercial activities, along the arterial and collector street system that is likely to have transit service.

Site design elements such as building layouts that site structures in close proximity to the street and provides convenient pedestrian access also promote transit trip activity. The City of Bend Development Code incorporates the transit friendly site design objectives of the State Transportation Planning Rule (OAR 660-012).

The Complete Transit System is identified in the PTP as a unifying concept for complementary transit service quality and land use elements. The concept describes land use policies functioning together with non-service elements such as pedestrian and bicycle access and transit facilities. Coordinated development of these elements provides the foundation for improving transit service in Bend.

Planned Improvements

The PTP identifies a robust plan for the CET transit system including short-term, midterm, and long-term improvements. Improvements are identified for service quality and non-service elements such as facilities, amenities, access, and marketing.

Service Quality

Short-term improvements are focused on addressing the most pressing operational issues without increasing operating costs. Mid-term and long-term improvements are built around developing primary transit corridors and restructuring the transit system into a more flexible and scalable model that will support continued growth. The cost of the initial restructuring in the mid-term is financially constrained, based on evaluation of peer systems. The long-term concept is not financially constrained, but maintains required funding levels within the range of peer systems.

The following summarizes the timeline and key developments for PTP's proposed service concepts:

- Short-term (Years 1 to 3): Address the most pressing operational issues; including enabling Route 5 (Wells Acres) to run within a 40-minute schedule all day by restructuring it to interline with Route 6 (Bear Creek).
- Near Mid-Term (Year 4): Routing modifications for Route 3 (Newport to COCC) and Route 11 (Galveston), with additional service on Route 11 to support the

- planned OSU facility on SW Century Drive. Also, one additional evening run should be provided on all routes, extending service until nearly 7:00 p.m. on weekdays. Stop infrastructure would be required for the proposed route redesigns.
- Mid-Term (Years 5 to 10): An initial implementation of the restructured system, providing more frequent service (every 30 minutes) for several routes on primary transit corridors. Other routes with less demand would run hourly. Users could make transfers more easily and the system would be more flexible and scalable over time. Several routes would be modified and a new route (Greenwood to Forum Shopping Center and St. Charles Medical Center) would be added. Transit service hours would be expanded to early evenings on weekdays (until 8 p.m.) Two additional vehicles would be required along with stop infrastructure related to route redesign.
- Long-Term (up to 20 years). A set of flexible service options can be implemented in phases, linked to available funding and criteria for service expansion. The concepts include expanding service hours on weekdays and Saturdays, implementing Sunday services, and expanding service in NE and SE Bend, if warranted by development characteristics in those areas. Significant operating and capital improvement funds would be needed for the proposed increases in frequency and additional routes.

The service characteristics over time are summarized in Table 3.

Table 3. Recommended Service Characteristics

Time Frame	Short-term	Near Mid-Term	Mid-Term	Long Term
	Years 1-3	Year 4	5-10 Years	up to 20 Years
Weekday	6:15 AM –	6:15 AM –	6:00 AM –	5:00 AM –
Service Hours	6:15 PM	7:00 PM (one	8:00 PM	10:00 PM
	Route 11 runs	additional trip)		60 minute
	only 6 hours	Route 11 runs		service after
	per day	all day		8:00 PM
Weekday	40 minutes	40 minutes	30 or 60	15, 30 or 60
Headways		60 min. on	minutes	minutes
		Route 11		(variable by
				route and time
				of day)
Saturday	7:00/8:00 AM –	No Change	8:00 AM –	7:00 AM –
Service Hours	4:00/ 5:00 PM	Saturday	5:00 PM	7:00 PM
	No Route 11	Service on		
	service	Route 11		
Saturday	80 minutes	No Change	60 minutes 1	30-60 minutes
Headways				

Sunday Service Hours	None	None	None	8:00 AM – 5:00 PM
Sunday Headways	N/A	N/A	N/A	60 minutes
# of Routes	7	7	8	9
# of Peak Buses	7	7	9	20
Estimated Capital Cost	\$12,000	\$68,000	\$656,000	\$2,766,000

Source: Bend MPO Public Transit Plan, Figures 7-13 and 9-3

Service design guidelines and performance standards are also suggested in the PTP, to aid in the effective management and timely implementation of improvements to the transit system. The system-level performance standards are related to efficiency, service quality and reliability. The route-specific performance standards include passenger per revenue hour, passengers per revenue mile, on-time performance, and passenger loading measures. The PTP recommends more periodic reporting on boardings and adding system and route-level measures to the Monthly CET Management Report. Additional details of the recommended service improvements and performance standards are available in Chapter 8 of the PTP and the associated cost estimates are identified in Chapter 9.

Non-Service Elements

Enhanced transit services are supported by non-service elements that better meet the needs of the public. The PTP describes a set of recommendations to non-service elements of the transportation system:

- Stop Amenities: may include route/time information, seating, shelters and trash receptacles.
- Major Transit Stops: are high demand transit stops where enhanced stop amenities such as real-time bus arrival information and bicycle parking should be provided. The major transit stops may function as secondary transit hubs where convenient transfers occur. Recommended major transit stops are identified in the east (at St. Charles Medical Center) and west (COCC). Other major transit stops may be supported in the north (Cascade Village), and south (location TBD) as development occurs.
- Park & Ride Connections: are parking facilities with convenient connections to transit. There are several locations proposed, primarily to serve longer-distance trips within the BMPO.
- Pedestrian & Bicycle Access Improvements: create safe, comfortable, direct pedestrian and bicycle facilities that connect to transit stops. Sidewalks should be well-lit and barrier-free. Intersections should have curb ramps for people with mobility impairments. Crossing opportunities should be nearby and comfortable for all users. Low-stress and high visibility bicycle facilities can significantly extend the range of transit users. Specific locations where these improvements should be considered include Greenwood Avenue, 3rd Street and Hawthorne Station.

- Transportation Demand Management: is a general term for strategies that reduce reliance on single-occupancy motor vehicle trips. Some of these strategies, such as subsidized transit passes, Guaranteed Ride Home programs, ride sharing and vanpool options can provide complementary options to increase the use of transit.
- Transportation Management Associations: are member-based organizations that support transit operations through a variety of community outreach efforts that make it easier for people to use transit. Examples include providing information on transit programs and services, coordinating with employers or large organizations, and facilitating ridesharing. Many of these functions are currently performed by CET and Commute Options.
- Branding: recommendations include fully transitioning from remnants of the defunct Bend Area Transit to the CET brand, to raise awareness of the services that are currently available.
- Printed Marketing: includes brochures, maps, and fliers. The recommended enhancements to existing materials including more Dial-A-Ride information, color-coded routes, and consistent naming conventions and descriptions.
- Electronic Marketing: includes online information at www.cascadeseasttransit.com. Possible improvements include links to other regional transportation providers and more information regarding planning and travel training. Establishing a social media presence via companies such as Facebook and Twitter may also be pursued to enhance awareness and online accessibility.

Additional details of the recommended non-service element enhancements are available in Chapter 8 of the PTP.

Implementation Actions

Implementation Actions were identified to phase in the recommendations of the PTP. Each action is associated with one of the four goals of the PTP. The PTP identifies a detailed phasing timeframe for each action; near short-term (first year), short-term (1-3 years), mid-term (4-10 years) and long-term (ongoing/monitor). For the RTP, the implementation actions are divided into short-term (0-5 years) and long-term (5 years or more) timeframes. The implementation actions are listed in Table 4 (modified from Figure 9-7 of the PTP).

Specific implementation actions for intercity transit service were recommended in the COTOP. These recommendations are summarized below:

- Transit and vanpool investments should be considered as part of any potential capacity-increasing projects on the Bend-Redmond corridor, as improving transit options on the corridor has the potential to significantly reduce motor vehicle demand.
- Strategic investments in marketing and incentives to expand intercity vanpool services should be considered, as they appear to be underutilized in the region.

- The interaction between Community Connector and local CET services should be considered in future transit system investments.
- CET should consider moving service on the Sisters-Redmond corridor to Sisters-Bend, where there is more travel demand potential. (Also recommended in the RTMP)
- Investment should be increased in the Drive Less Connect Program to expand outreach for intercity travelers.
- Due to high costs relative to benefits, investments in commuter rail should not be met unless unexpected developments occur.
- Consider agency support of VMT-based pricing as an alternative to the gas tax, to make intercity travel more cost-effective compared to motor vehicle travel.

Table 4. PTP Implementation Actions

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Long- Term
1.1	Ensure that local funding for Bend Dial-A-Ride service is maintained beyond the City of Bend's current funding commitment (through September 2015).	BMPO ¹ , CET ¹ , City of Bend ¹	✓	✓
	Goal 1: Develop public transportation services for the transportation disadvantaged			
1.2	Acquire low-floor buses as part of new/replacement vehicle purchases and prioritize on routes with high levels of wheelchair boardings and/or ridership.	CET ¹	✓	✓
1.3	Assess balance between fixed-route and Dial-A-Ride services on a periodic basis, based on available financial resources and as fixed-route service is enhanced in the future. This could include evaluation of the costs and cost-effectiveness of providing Dial-A-Ride service that exceeds ADA requirements in terms of: (1) geographic coverage beyond the required ¾ distance from fixed-route service (currently anywhere within city limits); (2) service at days and times when fixed-route service does not operate (e.g., on Sundays); (3) eligibility for low-income seniors.	CET ¹ , City of Bend ²	✓	~
	Goal 2: Reduce reliance on automobiles and develop public transportation facilities			
	Funding			
2.1	Identify a source(s) for local matching funds (as needed) to secure additional transit funding under MAP-21. This could include assessment of City of Bend's willingness to increase its funding commitment	CET ¹ , BMPO ² , City of Bend ²	✓	
2.2	Ensure that local funding for fixed-route transit is maintained beyond the City of Bend's funding commitment (through September 2015). Develop local funding sources sufficient to support the mid-term service improvements recommended in the PTP.	BMPO ¹ , CET ¹ , City of Bend ¹	✓	✓
2.3	Renegotiate terms of the bulk ticket discount program with COCC, with the aim of developing a group pass program. Demand for the existing program has exceeded the levels for which it was designed/intended.	CET ¹ , COCC ²	✓	

Table 4. PTP Implementation Actions (Continued)

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Long- Term
	Facilities & Infrastructure			
2.4	Adopt bus stop amenity design standards, e.g., based on PTP Figure 8-4. This should include standards for new bus shelters that enhance transit visibility and meet passenger needs for weather protection. This could also be addressed in the community-oriented design process described in item 2.4 (below). Pursue opportunities to integrate advertising or sponsorships as part of the funding package for shelters or other stop enhancements.	CET ¹ , City of Bend ² , BMPO ²	✓	
2.5	Develop specifications for new/replacement vehicles that modernize the fleet in order to be more appealing and attractive to a broad range of users and align vehicle capacity to passenger demand/needs on each route. This could include transit signal priority, real-time passenger information, and other ITS capabilities, e.g., automated passenger counters (APCs). In the mid-term time frame (or beyond) this could include a community-oriented process to design vehicles (and other system elements) to community specifications (e.g., similar to Boulder, where such a process was embraced in development of the Hop, Skip, Jump, etc., local transit services; see PTP for details).	CET ¹		✓
2.6	Develop a program of transit-supportive capital improvements. This program should be coordinated with the City's Capital Improvement Plan (CIP), to identify and prioritize transit-supportive capital improvements around major transit nodes, primary transit corridors, and planned routes including: Bus stops at major intersections (both sides of the street) and amenities at the most highly used stops (using stop amenity thresholds in Figure 8-1 as a guideline).	City of Bend ¹ , CET ¹ , BMPO ² , ODOT ²	✓	Review/ update every 2 years
	Bicycle/pedestrian improvements (e.g., street crossings serving stops and activity centers along arterial transit streets such as 3 rd Street and Greenwood Ave.) Transit signal priority to allow buses to better maintain schedule on congested corridors.			years
2.7	Develop a sidewalk repair and infill program , with a specific emphasis on access to transit facilities.	City of Bend ¹ , BMPO ² , CET ²	✓	✓

Table 4. PTP Implementation Actions (Continued)

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Long- Term
2.8	Evaluate pedestrian safety and transit operational improvements for the on-street bus transfer facility at Hawthorne Station. This could include consideration of: (1) converting Hawthorne Avenue to exclusive transit and pedestrian use between 3 rd and 4 th Avenue, e.g., east of the Safeway driveway; (2) providing a mid-block crossing for use by passengers (e.g., raised pavement surface, pedestrian-activated lighting, etc.). A "neck-down" could be included in the design of the mid-block crossing, assuming it does not impact bus movements; (3) on-street parking on 4 th Avenue between Hawthorne and Greenwood, given current and future transit operations.	City of Bend ¹ , CET ² , , BMPO ²	√	*
2.9	Evaluate locations and opportunities for major transit stops in north and south Bend, at existing or future stop locations. These locations may serve as secondary transit hubs, facilitating connections between local or regional routes (based on future service enhancements identified in this plan or the RTMP), as well as ride sharing. See Figure 8-1 and Figure 8-2 for locations and potential stop features.	CET ¹ , City of Bend ² , BMPO ²	✓	<
2.10	Develop bike parking facilities, preferably covered, at secondary hub locations and other outlying stop locations. Recommended locations are identified in Figure 8-2.	CET ¹ , BMPO ² , City of Bend ² , ODOT ² , Commute Options ²	✓	*
2.11	Evaluate feasibility of a bicycle-sharing program . Implement as feasible (based on an appropriate service model, partnerships, etc.). Bicycle sharing can serve "last-mile" connections to destinations beyond walking distance of transit stops and relieve capacity limitations for transporting bicycles in racks on buses.	BMPO ¹ , City of Bend ² , Commute Options ²		✓
2.12	Implement speed & reliability improvements on 3 rd Street . Such investments could include signal timing, transit signal priority, and evaluating stop placement to minimize delay to buses. Bus routes on 3 rd should be able to complete a round trip within the scheduled time (currently 40 minutes; in the mid-term time frame, 30 minutes for south 3 rd Street [Route 1] and 60 minutes for north 3 rd Street [Route 4]).	City of Bend ^{1,} ODOT ¹ , BMPO ² , CET ²		✓

Table 4. PTP Implementation Actions (Continued)

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Long- Term
	Service or Service-Related			
2.13	Implement short-term service improvements to Routes 4, 5, and 6. Conduct additional outreach to Route 5 and 6 passengers who will be affected by the changes. Create a temporary stop for outbound Route 6/inbound Route 5 on eastbound Greenwood at Purcell. Add this stop and existing temporary stops on 5 th Street to the program for developing permanent stops.	CET ¹	✓	
2.14	Implement near mid-term service and infrastructure improvements on Routes 3 and 11, timed with and contingent on a new OSU facility on SW Colorado with a projected enrollment of 5,000 students within the next several years. Pursue partnerships with OSU (and/or others) to fund the increase in operating costs for all-day Route 11 service as well as additional early-evening service.	OSU ^{1,} COCC ¹ , CET ² , City of Bend ²		✓
2.15	Secure funding for and implement pedestrian access corridors from Bear Creek Road to Greenwood Avenue to support implementation of Route 7. This should include required traffic signals and/or protected pedestrian crossings (e.g., rapid flashing beacon) to connect access corridors to future stop locations. A map of existing/planned accessways is provided in Appendix B, Figure B-16.	City of Bend ¹ , ODOT ² , CET ²		~
2.16	Review priorities for eliminating at-grade railroad crossings including consideration of when transit service on a corridor may be feasible/likely and whether the potential for delay at railroad crossings could preclude future transit service. For example, Cooley Road in northeast Bend and Reed Market Road in southeast Bend; the COACT Report on Central Oregon Rail Planning (2009) prioritized both the Cooley and Reed Market Road crossings as "High."	City of Bend ¹ , CET ² , BMPO ²	✓	

Table 4. PTP Implementation Actions (Continued)

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Long- Term
	Goal 3: Increase mobility, accessibility, and visibility of transit throughout the urban area			
	Regional Service Enhancements			
3.1	Utilize the Bend-La Pine Community Connector (Route 30) to provide a stop in Deschutes River Woods. Identify potential locations (e.g., Riverwoods Baptist Church initially and/or Riverwoods Country Store in longer-term) amenable to a stop location, assess feasibility, and negotiate a joint-use agreement. Secure funding for any infrastructure improvements needed at the Riverwoods Country Store (e.g., pave rear portion of parking lot) if this location is pursued in the longer-term. Note: Service to Riverwoods Baptist Church started on 11/26/2012.	CET ¹ , BMPO ²	✓	✓
3.2	Evaluate a Bend-Redmond Community Connector (Route 24) stop in the north part of Bend. An initial location could be the ODOT Park & Ride near the DMV office on 3 rd Street. In the longerterm, the stop could be co-located with a future major transit hub / secondary hub location in north Bend (see 2.9).	CET ¹ , BMPO ²	✓	√
3.3	Evaluate a Bend-La Pine Community Connector (Route 30) stop in the south part of Bend. An initial location could be the existing Route 1 stops near Walmart. In the longer-term, the stop could be co-located with a future major transit hub / secondary hub location in south Bend (see 2.9).	CET ¹ , BMPO ²	✓	✓
3.4	Promote vanpools to dispersed employment sites. Identify opportunities for promoting vanpools to employment sites not currently served by the fixed-route system or located outside of Bend city limits (e.g., Bend Municipal Airport). Assess demand for such vanpools to serve regional demand in coordination with Community Connector routes as well as local demand.	Commute Options ¹ , CET ² , BMPO ²	✓	
3.5	Develop a region-wide volunteer driver program to fill a need for transportation connections not served by transit, i.e., outside service area or service days/times.	Commute Options ¹ , CET ²	√	
	Marketing and Branding			
3.6	Market regular interlining of routes to passengers as a convenience feature. Initially, this item refers to marketing existing route interlining practices (e.g., route 1-3, 2-4, 5-6).	CET ¹	√	√

Table 4. PTP Implementation Actions (Continued)

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Mid- Term
3.7	Build upon the "open" transit data published in Google Transit. Make trip planning capabilities available on the CET, City of Bend, and Commute Options websites. Provide real-time transit arrival information including on mobile devices (when available). Market enhancements to online trip planning and real-time information to current and potential riders.	CET ¹ , City of Bend ² , BMPO ² , Commute Options ²	✓	✓
3.6	Develop capabilities for targeted communication with customers including on their mobile devices (via text messages, e-mail, social media, etc.), such as to provide updates on delays or snow routes.	CET ¹	✓	
3.7	Develop a plan to complete the transition from BAT to CET in all system branding, including vehicles and stops.	CET ¹ , City of Bend ²	✓	
3.8	Conduct a comprehensive assessment of CET's marketing and branding and develop action plan. This could include an assessment and update of the Rider Guide, website, social media, bus stop materials, etc.	CET ¹ , BMPO ²	√	
3.9	Review / update marketing materials on a regular basis. This could include recommended improvements outlined in the Marketing and Branding section of Chapter 8, such as enhancements of the Rider Guide and increased development of social media (assuming staff is able to monitor and keep sites up-to-date). In addition, consider marketing regular interlining of routes to passengers as a convenience feature.	CET ¹ , Commute Options ¹		Every 2 years
3.10	Develop marketing materials for service between Bend and Redmond Airport. Coordinate service with major flight departure/arrival times to the extent possible and place marketing materials at strategic locations.	CET ¹	√	Annually
	Performance Standards			
3.11	 Evaluate use of automatic passenger counters (APCs) to enhance data collection capabilities. Based on outcome of evaluation, include APC technology in new vehicle acquisitions. 	CET ¹	✓	✓
3.12	Develop strategies to reduce the high rate of cancellations (potentially related to the large number of subscription trips).	CET ¹	✓	

Table 4. PTP Implementation Actions (Continued)

Action #	Recommended Actions	Lead Implementer(s)	Short- Term	Long- Term
	Goal 4: Provide infrastructure and land use planning to support transit			
4.1	Adopt a Primary Transit Corridors policy. This policy should identify corridors with the highest potential ridership (see Primary Transit Corridors map, Figure 7-4) where the City, BMPO, and CET will prioritize the highest level of transit service over time and where major transit-supportive land uses are encouraged to locate. This policy should be reviewed periodically to ensure the primary transit corridors reflect current and planned land use intensity.	City of Bend ¹ , BMPO ² , CET ²	✓	Every 5 years
4.2	Develop a transit overlay zoning ordinance and adopt it around primary transit corridors and/or major transit nodes (e.g., Hawthorne Station). The Future Opportunities memo provides a more in-depth discussion of elements that could be addressed in such an ordinance and other opportunities to incorporate transit-supportive elements into the existing City code.	City of Bend ¹ , BMPO ²	✓	
4.3	Require review of transit service needs as part of the development review process. Develop a protocol for integrating assessment of transit requirements (including involvement of CET staff, and funding contribution for staff time) into early review of development/land use proposals, particularly those with potentially significant impact on transit ridership and/or where the proposed use is located away from transit.	City of Bend ¹ , BMPO ² , CET ²	✓	
4.4	Coordinate public facility master plans (e.g., sewer, water, etc.) with priorities/opportunities for intensifying land use along primary transit corridors. In particular, consider prioritizing facility upgrades that would relieve capacity constraints and enable development.	City of Bend ¹ , BMPO ² , CET ²	✓	
4.5	Evaluate a mechanism to formalize developer contributions to funding for transit infrastructure.	City of Bend ¹ , BMPO ²	✓	