

Chapter 8: Public Transportation System

Introduction

Public transportation is an important element of multi-modal transportation planning. It provides a valuable transportation alternative for high volume travel corridors. Public transportation can improve the efficiency of arterial streets because fewer vehicles are required on the road to serve the same number of trips. When faced with costly road improvement or construction difficulties, concerted trip reduction programs can add years of life to a roadway's capacity. 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.

Public transportation improves mobility for a wide range of the traveling public. School age children can use public transportation for trips to school, after-school activities, or recreational pursuits. Likewise, there are many other segments of the population that do not have a car (many for financial reasons), are unable to drive or would simply prefer to let someone else do the driving. Those with disabilities who cannot access fixed routes transit who need to make trips for shopping, medical or other trips have access to the paratransit system. Workers of all ages can get to their jobs without owning or relying on a car. Thus, public transportation is a valuable service that fills a much broader function than solely trip reduction. It provides mobility for those without cars as well as being an alternative to the automobile for many travel needs of the community.

Policies

The region has specific goals and policies outlined within the local transportation plans that are specifically related to TDM. The following goals and policies are applicable to the Bend Metropolitan planning area.

1. Work with ODOT, the city of Bend, Deschutes County, and transit service providers to study countywide rideshare facility needs, and investigate public transit possibilities including potential transit opportunities for a regional or commuter-based transit system.
2. Work with special service providers, ODOT, Deschutes County, and the city of Bend to secure additional funding as well as increase promotion of transit or transportation services that may be underutilized.
3. Work with special service providers, ODOT, Deschutes County, and the city of Bend to identify and monitor the needs of the transportation disadvantaged and attempt to fill those needs.
4. Work with the City of Bend to preserve and improve existing transit and paratransit services (efficiency, expanded ridership and routes, zone destination) and develop a strategic plan for its future expansion.
5. Work with the City of Bend, ODOT and other jurisdictions to evaluate funding alternatives and seek appropriate resources to expand the public transportation system.

6. Work with all central Oregon communities and the State to evaluate and develop inter-urban public transportation services.
7. To better accommodate a fixed-route transit system, work with the City of Bend to develop land use ordinances and other regulations that establish pedestrian and transit-friendly design along potential or existing transit routes.
8. Work with the City of Bend and other governmental agencies to develop a 20-year transit master plan. The plan should include but is not limited to routing maps, the type and location of required infrastructure, marketing/public education plan, development/ redevelopment requirements for transit, funding mechanisms, and implementing ordinances.
9. Participate in and support regional discussions and efforts to develop and improve regional public transportation services. The discussion could include development of a city- or region-wide transit district and evaluation and implementation of creative public/private sector funding techniques to accomplish this task.
10. Seek additional public transportation funding resources for public transportation.

Local Demand-Response Transportation

The region has a network of special transportation providers who serve the elderly and disabled populations. In most cases, the general public does not have access to these special transportation services. There are several providers of special transportation services in Deschutes County that provide transportation within the MPO area. These services range from public to private, both profit and non-profit. The following are the existing service providers in the County:

- City of Bend Dial-A-Ride
- Central Oregon Council On Aging (COCOA) Dial-A-Ride
- Opportunity Foundation of Central Oregon
- Residential Assistance Program (RAP)
- Disabled American Veterans
- Volunteer Services
- Central Oregon Resources for Independent Living
- Access Express

With limited funding options, no significant expansions in these demand responsive programs are planned.

Intercity Bus Services

The following intercity bus services are planned to continue as the primary (and only) public transit options in the area. The focus should be to maximize the efficiency of these services as land use changes occur. Without a local transit system to distribute trips, a commuter system linking the rural and urban areas is less likely to succeed.

- CAC Transportation
- Central Oregon Breeze

- Central Cascades Lines
- Greyhound
- Porter Stage Lines
- Valley Retriever

Transit System Studies

The feasibility of transit within the Bend urban area has been the subject of several studies over the past decade. In 1994, the City studied Bend's demographic, employment, travel and transportation system characteristics in relation to how they might support transit use. In 1996, the City hired a transit consultant to further evaluate how transit could be implemented in the community. This study augmented the previous analysis of transit feasibility by analyzing transit systems from similar sized cities, developing system evaluation criteria, conducting a public opinion survey on transit attitudes and financing methods, and evaluating capital needs and financing strategies.

In 1997, based on this comprehensive evaluation of transit feasibility, the City Council declared that transit was feasible at build-out for the city of Bend. In 2000, an additional study evaluated possible expansions and improvements to the existing Dial-a-Ride system. The report recommended that the City pursue this strategy as an initial method of providing public transportation for the general public. This strategy was not pursued.

In 2006, a review of service plan proposals for new fixed-route service was completed. This work focused on an evaluation of fixed-route design options that would meet City budget constraints, optimize resources and meet the demand for paratransit and demand response service. This plan was acted upon with a start-up 7-route system implemented in September 2006.

Public Transportation Facility Design

Transit Centers

Transit centers are locations where several transit vehicles converge for the purpose of passenger transfer. This creates a very efficient, convenient and safe method of exchanging people between transit vehicles. This can also provide a location and opportunity where several intercity and intracity transportation services can meet to exchange passengers. It is desirable to coordinate public transportation operations such that all vehicles meet at a transit center at close to the same scheduled time. This allows passengers to make easy transfers without a long wait.

The existing transit center on NE Hawthorne Avenue, between 3rd and 4th streets, is currently the *interim* transit center location. Further evaluation of the effectiveness of this site should be conducted to determine whether it will meet longer-term Transit Center needs. A transit center located in the downtown can also provide a convenient connection to the many governmental, banking and shopping activities that are located in this focused business district as well as provide a good location for a central point of operation.

In designing a transit center, the location of the facility should provide for orderly circulation and accessibility of all types of transit vehicles, while minimizing the conflict with other traffic flow. The center should be located to minimize the number of pedestrian and vehicle conflicts, and be easy to access by walking or bicycling. Bicycle parking facilities should be designed and located for safe and convenient use, and provided in adequate supply to meet demand. More study will be required to determine the best long-term candidate location(s) and spatial requirements of facilities necessary to serve this important transportation system function.

Major Transit Stops

Major transit stops are locations along the transit system that are important to the functioning of the system and provide a high level, volume or frequency of transit service. Additional transit related amenities and pedestrian facilities should be provided to accommodate the differing types of demand. Adjoining developments should be encouraged to provide transit-friendly design elements that facilitate bus movements and convenient pedestrian access to the major transit stop.

As the system grows, an assessment of major transit stops should be conducted. Consideration should also be given to planning for a functional regional inter-modal facility where an efficient connection between local and regional trip activity can occur. Major transit stops should be defined as the system matures and other destinations with high transit ridership potential are identified.

Transit Friendly Design

Transit friendly design is an important element in the encouragement of transit trips. Access to transit stops must feel safe and be convenient. The construction of sidewalks and accessways helps to assure that the walking link of the transit trip is a safe and pleasant experience. The Bend Urban Area TSP was recently amended to ensure development of walking and bicycling corridors on approximately a one-quarter mile transportation system grid.

As routes are planned and local transit stops are located throughout the system, pullout lanes should be considered for bus stops to permit buses to pull-out of the traffic flow on heavier traveled arterial streets with travel speeds under 45 mph. Constructing suitable and convenient bike parking and providing buses equipped with bike racks will also encourage longer distance inter-modal trips to connect with transit. Providing benches, shelters and lighting at bus stops can also increase the comfort of transit users.

Land Use Organization

Land use organization that situates high-density residential, mixed-use, entertainment and employment concentrations along transit routes is an important strategy that supports transit use. Additionally, site design elements such as building layout that sites structures in close proximity to the street and provides convenient pedestrian corridors, will also help to promote transit trip activity. Bend's General Plan typically 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 future transit service.

The city of Bend also adopted a new Development Code in 2006 that incorporated the transit friendly site design objectives of the State Transportation Planning Rule (OAR 660-012).

Park and Ride Lots

Park and ride lots, when strategically located, can support both public transportation and rideshare activities. If park and ride lots are located on the edge of the city, they can conveniently serve both directions of travel into and out of the urban area. Park and ride lots also provide a meeting place for car pools and a location for motorists to access a public transportation system. Park and ride lots can either be publicly constructed facilities, or more commonly, a partnership between public and private property interests, typically requiring a cooperative use agreement with the landowner. Shopping centers, churches, or the like, commonly have large parking lots that are underutilized during the day, making park and ride activity complementary with the business demands of the property owner. Van or shuttle systems can also incorporate park and ride lots into a parking management plan by shuttling employees to the work place. This can help to minimize localized parking demand or impacts generated by employee traffic.

There are currently two existing designated Park and Ride lots in the MPO study area. Seven other lots are located throughout the central Oregon region. Work continues to identify, locate and secure other candidate park and ride lots through out the Bend area. The highest priority areas are at the north and south entries to the City along or near Highways 97 and 20.

Transit Trunk Routes and Transitways

Trunk routes are transit routes that normally maintain a higher level of transit service. Greater service levels are achieved by providing more frequent headways (times between buses) either by designating overlapping bus routes down the same street or by running a greater number of, or larger buses along the trunk route. In larger cities, trunk routes also deliver riders from outlying areas to activity centers where riders may need to transfer to a feeder bus that continues on to the core area. Trunk routes are also typically characterized by having multiple routes intersecting the main stop locations. Trunk routes typically provide transit service for specific high ridership demand hours of the day/days of the week. As trunk route stops or stations typically have more ridership activity, they often have greater waiting capacity (i.e., larger shelters) and other rider amenities (i.e., pay phones, drinking fountains, route information/maps, ticketing equipment, scheduling monitors, etc.).

Transitways are very specialized trunk routes that provide very high levels of transit service. Transit is normally given a very high priority along transitways to enhance transit service levels. This is often accomplished by making improvements for transit travel that will optimize travel speeds and/or reduce travel delay/times. Examples of typical transitway features are; exclusive transit travel lanes or shared use of High Occupancy Vehicle (HOV) lanes with other multi-passenger vehicle traffic (commonly

found in large metropolitan areas in conjunction with freeway systems), bus rapid transit systems (typically buses running along “bus only” lanes that are often located within separate right-of-ways, traffic signal/queue-bus bypass lanes and/or other transit preferential treatments.

The Bend urban area, for the most part, is not geographically large enough or experiencing the type of traffic delays or congestion points that will likely warrant the designation and/or improvement of transit trunk or transitway routes within the planning period. Should conditions warrant this form of transit operation, the most likely candidate corridors for consideration of this type of express transit service would possibly be the main east-west route between C.O.C.C. and St. Charles M.C. and a north-south route in the center of the community utilizing 3rd Street.

Coordinated Human Services Public Transportation Plan

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

Deschutes County is developing the coordinated plan with completion expected in late summer 2007. The draft plan sets forth a set of principles, goals and action items to begin to address the fundamental public transportation challenges facing the region. The draft plan is the product of a year of planning, research and deliberations involving a diverse group of stakeholders.

The success of the plan depends on a partnership of all transportation stakeholders in Deschutes County and Central Oregon. Developing and sustaining a coordinated system of transportation services is limited by available resources. The framers of the draft plan recognize that every public and private partner has a role to play in responding to the transportation challenges and pressing needs for transportation services in the county and region.

Transit System Implementation

The city of Bend is currently providing an active pilot fixed-route transit system along seven routes through-out the City and a companion paratransit, Dial-a-Ride (DAR) service. Federal law requires the paratransit service provide coverage within a 3/4 mile of any fixed-route. The City has chosen to continue to serve the entirety of the City with DAR service in order to better accommodate the needs of its low income senior citizens and the disabled population.

Long-range financial forecasts show that little, if any, expansion of the pilot system will be feasible without new funding. The financial forecasts are detailed in Chapter 19.

Expansions to this public transportation system will be considered by the City based on an evaluation of the pilot transit project and subject to the availability of funding necessary to support transit service. Expansions to the transit system could include expanded service hours, new routes in Bend, new routes connecting Bend to other central Oregon communities, and capital improvements (e.g. transit stops, park-and-ride facilities). A preliminary cost assessment to provide these additional services is included in Appendix G.

An alternative to a City funded public transportation system would be the successful formation of a local or regional transit district.

Further study to evaluate future transit system options will be needed in the future.