

6

Air, Rail, and Pipeline Plan

This chapter describes air, rail, and pipeline transportation modes currently operating within Benton County, forecasts future needs for these transportation modes, lists current policy and necessary policy changes, and describes preferred alternatives for improving these modes (section 6.4).

6.1 Existing Conditions

6.1.1 Rail System

6.1.1.A Freight Rail System

Rail service within Benton County is provided by the Willamette & Pacific Railroad (WPRR), a class III short-line railroad formed in 1993 that operates on tracks leased from the Union Pacific (UP) Railroad that UP acquired from the Southern Pacific as a result of its merger. The WPRR operates 178.9 miles of track in Oregon, making it the fourth-longest railroad in the state.

Since 1994, the Genesee & Wyoming (parent company of WPRR) has leased additional track from both the Southern Pacific and the Burlington Northern Santa Fe (BNSF) (53 miles from each) and formed the Portland & Western Railroad (PNWR). This system serves the Tualatin Valley, connects with the WPRR line at Newberg which then continues to Portland, and runs down the I-5 corridor to Quinaby, north of Salem.

The significance of this acquisition to Benton County is that it allows the WPRR to single-line haul to Portland, where it can interchange with either the UP or the BNSF, and adds additional potential for intra-system shipping. A corollary to the latter advantage and a possible indirect benefit to the County is that the WPRR track covers a relatively large region, but with relatively few customers, while the PNWR is the reverse. This situation improves the overall operating balance, which should lead to an even more viable railroad with more development potential.

The stakeholder interviewed for this project considered rail service and facilities to be “good, but under-utilized,” and that “new WPRR management is wonderful, keeping lines well maintained.” This under-utilization is reflected by the amount of traffic the system handles, as follows:

- ◆ One train of about 40 cars a day, seven days a week round trip from Albany to Toledo.
- ◆ A Tuesday and Thursday and sometimes Saturday train, totaling 20+ cars a month, to Hull-Oakes Lumber Company in Dawson.
- ◆ A resident switching locomotive in Corvallis provides local service including a daily round trip to Wrens (the railroad’s spelling) and service south of Corvallis, which boosts the Corvallis-Monroe traffic to perhaps 30 cars a month.

- ◆ Traffic north of Corvallis amounts to two trains a day, 7 days a week, varying greatly in the number of cars, but averaging perhaps 50.

The apparent public appreciation of the WPRR is in contrast to the feelings in most localities about the UP, which is just the opposite. This attitude, in turn, is indicative of the shift in the railroad industry, the results of which will likely affect smaller localities. The Class I carriers are interested in high volumes, long hauls, and unit trains if possible. They are not interested in short haul, manifest type, local and/or switching service. This position is why the national railroads have been abandoning, leasing, and selling their branch lines. The short line carriers such as WPRR have moved to fill this void and have become feeder lines for the major railroads. Because the local railroads are vested in developing and maintaining a local customer base, the potential exists for service changes to one of lower cost, more flexibility and responsiveness, and better product care. This improved operating environment then can encourage existing businesses to convert to rail and new companies to locate in the region.

The combined WPRR and PNWR now serve more than 100 customers. This amount has almost doubled in one year due to the acquisition of the PNWR. Prior to the combination, just under 85 percent of the annual carloads were generated by four customers: Georgia-Pacific in Toledo, Hampton Lumber out of Willamina, Cascade Steel at McMinnville, and Smurfit Newsprint in Newberg. Now these four account for a little over 60 percent, but the increased traffic has occurred in the PNWR system, which does not affect Benton County. Of these, only Georgia-Pacific cars pass through the County and even they do not originate or terminate in Benton County.

The WPRR, in concert with the UP, currently offers Benton County single-line access to 13 states. This has dramatically changed the access picture since the merger of Union Pacific and Southern Pacific.

WPRR operates three lines in Benton County, on tracks leased from the Union Pacific (SP) Railroad (as shown in **Figure 6-1**).

The class of track determines the maximum speed allowed on the track. Regular classes range from 1 (low) to 5 (high). Excepted track is lower than Class 1, which may see train service under strict guidelines and with freight operating speeds limited to 10 mph.

Benton County is not a major rail traffic generator, with less than one-half million tons of freight originating or terminating in the County.

Westside Branch

This branch continues UP's Westside Branch south from Yamhill County through Monmouth and Corvallis to Monroe, for a total of 67 miles. The line intersects the Toledo Branch at Corvallis and the Bailey Branch at Alpine Junction, near Monroe. The line carries approximately one million gross tons of freight per year, primarily forest products and agricultural products such as grain and fertilizer. North of Corvallis, the track is Class 2 and 3; south of Corvallis it is excepted track.

Toledo Branch

This branch runs 75 miles between Albany and Toledo, through Corvallis. The line carries one to five million gross tons of forest products annually. The line is Class 3 northeast of Corvallis and Class 2 west of Corvallis. Cars over 85 feet long are prohibited west of Summit.

Bailey Branch

This line runs 6.9 miles west from Alpine Junction to Dawson. It carries less than one million gross tons of products each year, with wood products being the predominant commodity. The entire track on this branch is excepted track. Work required to upgrade the track to Class 1 condition includes replacing an average of 800 ties per mile, adding ballast, and surfacing the track. The total cost of the improvements is estimated to be \$330,000.

6.1.1.B Rail System Deficiencies

The Benton County portion of the rail system is limited to speeds of 25-40 mph (Class 2 and 3) north and east of Corvallis and to Toledo, and to 10 mph (Excepted) from Corvallis south to Monroe and Dawson. The Willamette & Pacific Railroad attributes most of the restriction to defective cross-ties. Field observations support the fact that trackage west, north, and east of Corvallis is in better condition than south and that there is a need for tie rehabilitation. Additional Federal Railroad Administration defects that were observed include poor drainage caused mostly by silting in the ballast section and most noticeable at crossings, vegetation in the gage and field sides of the rail, insufficient and fouled ballast, and high spikes and loose and/or missing tie plates. Given the above, the track geometry looked reasonably good, although no measurements were taken.

The viability of the railroad in Benton County is interdependent with the whole WPRR system. In this context, it is reported that the railroad is currently operating on excepted track from Whiteson (south of McMinnville) to Independence and from Newberg to Cook (south of Tigard). This condition renders the track “barely adequate from Corvallis to McMinnville.” In order to improve this situation, the WPRR is engaged in a 5-year, \$3.5 million upgrade program for the Westside corridor, including tie replacements and relay of 112# CWR (Continuous Welded Rail). Results are expected to be evident in the near future with a “faster, more reliable, safer line within 1-1/2 years.” Included in this program is a goal of improving the Corvallis-Monroe section to Class 2.

In terms of locomotive power (24 units) and cars, the physical plant is considered to be in good shape. Combining the operating characteristics of the WPRR and the PNWR helps to effectively use the resources.

Although Benton County is not a major rail freight generator, the freight that is transported by rail is freight that does not have to travel by truck over the County’s roads. Maintaining the availability of rail service helps reduce road maintenance costs and postpones the need for road improvements to accommodate additional truck traffic.

6.1.1.B. Passenger Rail System

There is no regularly scheduled passenger rail service in Benton County. Track conditions limit maximum passenger train speed to 30-60 mph north and east of Corvallis and do not allow passenger service south of Corvallis. The closest Amtrak station is located in Albany, which is served by Amtrak’s Coast Starlight, providing one run daily northbound to Portland and Seattle and southbound to Eugene, Sacramento, Oakland/San Francisco, and Los Angeles. Four additional trains (some are Thruway Busses) provide regular additional service between Eugene and Portland, connecting in Portland with service north to Seattle and Vancouver, BC. The Valley Retriever bus line provides twice daily service between the Albany Amtrak station and Newport via Corvallis and Philomath.

Amtrak officials classify the level of passenger demand experienced at the Albany station as moderate, depending on the time of year. There are no records kept for passenger requests for frequency or types of service not currently provided. Trains operating through the Albany generally not at capacity. There is no record of a patron being unable to board at the Albany station due to a fully booked train.

6.1.2 Existing Air, Water, and Pipeline System

Introduction

Although air, water, and pipeline systems are not major elements of the transportation system in Benton County, these facilities serving Benton County are shown in

Figure 6-2.

6.1.2.A Air Freight/Passenger System

Within the County, Corvallis Municipal Airport is the only airport serving the general public. It is located approximately five miles south of the Corvallis central business district. Two full-service fixed-base operators provide commercial general aviation services. The Corvallis Municipal Airport Master Plan (1991) is the principal document detailing operations and future plans. Benton County supports the airport master plan. The plan states that the airport will continue to provide for private and corporate aircraft and will maintain facilities necessary for air carrier service. Commercial airline passengers from Benton County are currently served by Mahlon-Sweet Field in Eugene, Oregon and by Portland International Airport in Portland, Oregon.

The County has created an Airport Overlay Zone in the airport vicinity to protect the airport's viability by restricting or prohibiting uses that could interfere with aircraft operation or could be impacted by airport noise. Federal Express provides airfreight service from the Corvallis Municipal Airport.

The nearest regional airport with scheduled passenger service is Mahlon Sweet Field in Eugene, approximately 15 miles south of the southern County line. Portland International Airport, approximately 90 miles north of the north County line, provides national and international passengers service. Portland International Airport also provides complete airfreight service to regional, national, and international destinations. **Figure 6-2** shows the location of airport facilities.

The Corvallis Municipal Airport's main runway, 17-35, was recently lengthened by 850 feet, giving it a total length of 5,900 feet. This length serves on an unconstrained basis all aircraft expected to use the airport (typical critical aircraft are corporate jets such as the Gulfstream II and the Lear 35). Runway 17-35 is 150 feet wide. The airport's secondary runway, 9-27 has a useable length of 3,769 feet and is 150 feet wide. An instrument landing system is available on Runway 17. Other landing aids include medium-intensity runway lights (MIRLs) on both runways, a medium intensity approach lighting system with runway alignment indicator lights (MALSR) on Runway 17, visual approach slope indicators (VASIs) on Runways 17 and 35, a precision approach path indicator (PAPI) on Runway 27, and runway end identifier lights (REILs) on Runway 35. A VOR/DME air navigation facility is located at the airport. The airport also has a rotating beacon, lighted wind cones, a wind "T," and a segmented circle, which is a system of visual indicators that provide traffic pattern information at airports without operating control towers.

As of 1990, the airport had 46 paved tie-downs, 54 T-hanger spaces, and 13 other indoor aircraft storage spaces, according to the 1990-2010 Airport Master Plan. One full-service fixed-base operator was located at the airport and facilities were available for another (which has since been leased to a second FBO). A total of 77 aircraft were based at the airport in 1990 and a total of 47,500 operations (40 percent locally based and 60 percent itinerant) occurred at the airport.

The Corvallis Municipal Airport provides ample opportunity and capacity for both air passenger and freight service. The facilities are maintained sufficiently well to allow jet aircraft operations at a regional level.

Three private airports are located in Benton County, as shown in **Figure 6-2**. Good Samaritan Hospital currently has a helicopter and helipad, providing county-wide air ambulance service.

6.1.2.B Water & Pipeline Systems

6.1.2.B.1 Water

Although the Willamette River is considered a navigable waterway, no regular commercial use now exists or is anticipated. In earlier times steamboats carried goods to and from Corvallis and the (now defunct) town of Orleans across the river. The required bridge clearances on the Willamette are based on maintaining the usability of the river for transportation; however, the swing span of the Van Buren Avenue bridge has not been opened for many years. The viability of the Willamette as a commercial transportation link is relatively limited.

The Willamette River forms the eastern boundary of Benton County. Currently, this portion of the river is used primarily for recreation. The Army Corps of Engineers maintains this navigable waterway. No

commerce is presently conducted on the river, within Benton County. Bridge crossings of the river located in Corvallis and Albany are stationary and limit the height and width of river vessels. No specified depth limitations were identified by the Army Corps of Engineers for the section of river within Benton County. Industry sources consider the Willamette River to not be a viable mode of transportation, due to the lack of service and significantly slower speed at which freight could be moved.

6.1.2.B.2 Pipeline

No significant through-transmission pipelines exist in Benton County. Transmission lines for electricity and telephone service exist within the County. Water pipelines convey water from the City of Corvallis' watershed on Mary's Peak into the City's water system. No long-distance oil or gas pipelines are located within the County. There are no known capacity constraints for any pipeline or transmission line service within Benton County.

6.2 Forecast of Future Conditions

6.2.1 Rail System

6.2.1.A Freight Rail

Historical trending, extrapolation, and econometric models were employed to prepare the future freight rail demand. The potential for rail growth in the Benton County area can be extrapolated from two sources: the Willamette & Pacific Railroad (WPRR) and ODOT. Since the WPRR took over from the Southern Pacific (since acquired by the Union Pacific) in the 2nd quarter of 1993, they have experienced an average growth in total carloads of about 5 percent per year. Since this growth has been partly attributable to reclaiming customers from trucks, they expect the trend to continue for the next three to five years, but probably not indefinitely.

The Oregon Rail Plan (ORP) cites rail traffic increase of 28 percent from 1986 to 1992. This growth translates to about 4 percent annually, a rate that is consistent with the WPRR experience due to the movement back to rail from trucks. The Oregon Transportation Plan projects freight rail growth to be 2.5 percent per year for the foreseeable future. Although the ORP fully describes the difficulties in predicting freight traffic (see the ORP for a more in-depth analysis), given the recent history of 4-5 percent growth and the national trends, a 2.5 percent sustained growth does not seem unreasonable.

In terms of overall economic growth, the Corvallis-Benton County Economic Development Partnership (EDP) states that the region has enjoyed a steady 1-1.5 percent annual increase, and that this trend is expected to continue. Given the railroad projections, this amount would seem to be a minimum for the range of probability. In terms of the railroad, the EDP is actively involved with prospective companies interested in the south Corvallis industrial area, several of whom desire rail access. The EDP sees this area of the County as more active economically and gradually filling in with businesses.

The WPRR/PNWR is actively pursuing more freight from existing customers as well as new types of business. Examples include servicing the expansion of Georgia-Pacific and the hauling chips to the plant that are now being transported by truck. The Governor's Transportation Initiative calls for removing chip trucks from U.S. 20. One means of accomplishing this is to develop a reload facility in Philomath and convert from truck to rail shipment at that point. There is also the possibility of an increase in production at the Georgia-Pacific small log mill in Philomath. Another potential includes a short haul market for aggregates and wood products.

Nationally, the merger of the Union Pacific and Southern Pacific has had a dramatic and, unfortunately, negative effect on rail activity. Congestion on primary lines has had the backlash effect of converting more commercial freight to trucks. This is seen as a short-term limitation, with strong possibilities to regain lost

freight volume and expand future volume. Because the WPRR connects with the UP system, it will then have direct connection to the UP routes, giving it single-line access to 24 states (instead of the 13 previously mentioned).

As part of the lease agreement with the UP, the WPRR must respect the original UP customers on the line and switch them to the UP line for destinations beyond the WPRR system. So, even though the WPRR can physically interchange with the Burlington Northern/Santa Fe at either Eugene or Portland, most of the Benton County traffic travels on the UP system. Historically, BNSF access to California ended at Bieber, CA. Recently, the UP entered into an agreement with the BNSF that extends BNSF trackage rights beyond Bieber into California; however, the BNSF has to use UP tracks from Eugene to Chemult if it does not want to route Willamette Valley traffic north through Portland to Wishram and then south through Bend.

The UP is committed to working with the State to achieve the competitiveness situation it desires and the BNSF will be included in the discussions.

The advantages of UP merging with SP to the WPRR and hence to Benton County and its shippers was well presented by ODOT, as the State's representative, in the following quoted comments:

“Establishing open interchange for customers located on Oregon short lines will provide clear public benefit. Open interchange will allow Oregon shippers to reduce use of reloads, and thereby reduce truck traffic on Oregon highways. The traffic that will return to Oregon's short lines, from mill to interchange point, will allow our very important short lines to (sic) their revenue base. We know first hand that Oregon short lines that have the ability to interchange with more than one Class I carrier have clear advantages over those who do not. They handle more carloads, and therefore, receive more revenue. The communities they serve would also benefit by being better positioned for retaining existing businesses and attracting new industry.”

6.2.1.B Future Passenger Rail

Rising traffic levels in the U.S. 20 (Philomath/Corvallis/Albany) and Highway 99W corridors have raised public interest in commuter trains. In addition to commuter traffic, the Benton County system could also feed destination trips. The Amtrak Coast Starlight runs daily on the UP main line through Albany, so the trackage and connection points are already in place. The only problem is that the UP lease precludes the WPRR from using their trackage for passenger traffic. Amtrak has made a request to the UP to let them run several special trains a year from Albany to OSU for popular athletic events, so the commuter idea is already being tried.

As can be seen by the Amtrak model, the only requirements to operate passenger trains on freight rail lines are permission from the railroad and a source of funds. With at most a couple of trains per day, the WPRR has no objection (if the UP will agree) to supporting passenger traffic. The corridors under consideration run largely through open farmland and there are no obvious physical impediments to instituting commuter trains.

To estimate potential commuter rail ridership, the following scenario was developed: A commuter rail line would run along the WPRR tracks between the Albany Amtrak station and Philomath, with stops at North Albany, Hewlett-Packard, downtown Corvallis, and the Oregon State University campus. Four round-trips would be operated daily. Potential ridership was estimated by assuming the following: average vehicle occupancy during peak hours is 1.14 persons, 50 percent of the ADT in the corridor consists of commute trips, and 3 percent of commuters in the corridor would use the train if four round trips were provided. Under these assumptions, daily ridership would be 485 persons and annual ridership (6 days a week, 51 weeks a year) would be 148,400.

6.2.1.C Rail Deficiencies

Existing rail facilities have considerable capacity for growth in both freight and passenger traffic. However, freight speeds are severely limited by track conditions south of Corvallis. Therefore, the constraint is not in capacity but in the ability to provide rail service as a viable option to motor freight or vehicular travel.

As stated earlier, the rail system is underutilized. A system that sees one train a day, each way, can accommodate a considerable increase in traffic without major capital investment. In the case of the WPRR, the primary reaction to increased business would be to accelerate the track rehabilitation and improvement program that is already under way. With a significant increase in car loadings, more cars and locomotive power would also be required. As with the track structure, these acquisitions would follow the cash flow generated by the increased revenues.

With an increase in the number of trains, running at higher speeds, an additional need would be more sidings to accommodate trains passing in opposite directions. The location and size of these passing sidings would depend on the traffic patterns/train schedules that develop in response to the market. Because much of the WPRR system lies in open country, siting these installations should not prove to be a significant physical or economic problem.

From the public point of view, increased rail activity means that there will be more use of existing railroad crossings and a call for additional crossings to serve new industrial spurs. Public planners will need to recognize these needs in preparing zoning plans and other restrictions.

The fundamental challenge facing the use of freight rail for passenger traffic is that of speed. As stated in the Oregon Rail Plan (ORP), and as very evident in the WPRR system, rail trackage has largely lost its higher speed capability as railroads concentrated on the reduced level of track maintenance needed to serve their freight customers.

ODOT's program for upgrading the Oregon high speed rail corridor provides a good outline of the kinds of improvements that typically need to be made to achieve a viable passenger line:

- ◆ Upgrading track and signals
- ◆ Changing access to train stations
- ◆ Providing supplemental feeder bus service
- ◆ Upgrading safety devices at grade crossings
- ◆ Adding new alignment and construction to provide track geometry that will accommodate higher train speeds
- ◆ Enhancing grade separations

Determining how much of these types of improvements would be needed in Benton County to establish a viable commuter/passenger system is beyond the scope of this TSP. As a minimum, it appears that track structure would need to be upgraded to at least 40 mph capacity and that the numerous grade crossings be reviewed and upgraded. Because commute distances are relatively short, slower train speeds may be acceptable, which helps mitigate crossing problems.

An order of magnitude rough estimate of the cost of these kinds of improvements within the County can be obtained using the ODOT estimate for the high-speed rail corridor. From border to border, (approximately 300 miles), the entire ODOT program is projected at \$450 million. This amount translates to \$1.5 million per mile. If improvement corridors from both Albany and Philomath to Corvallis are assumed, a combined distance of approximately 17 miles, the total cost might be on the order of \$25 million. Granted, the ODOT figures are for train speeds up to 125 mph, but there are sections of less density and economies of scale, and the physical plant is already in better condition, being the SP main line. Even at half this cost, the adaptation would not be inexpensive.

As a final note, it should be observed that there is an inherent conflict between industrial development and the increased use of rail and highways and urban development. A plan for the resolution of this conflict is in part the purpose of the TSP; however, this subject is well covered in the ORP and will not be repeated here.

As the high speed rail corridor between Vancouver B.C. and Eugene evolves over the next few decades, capacity will need to be increased on the single track UP line between Portland and Eugene as freight and

passenger train density grows. The most likely solution to address this anticipated growth is to add a second main track between Portland and Eugene, or to double-track the route.

Another option is to double-track the UP line between Eugene and Junction City and build approximately 10 miles of new single-track line paralleling Highway 99W from Junction City to Monroe. At Monroe, the line would connect with the existing railroad between Monroe and Corvallis, which would be upgraded. It is always more cost effective to upgrade an existing line than to build a new railroad.

From Corvallis to the north, there are two options. One is to upgrade the line between Corvallis and Albany for fast passenger operation. The second, and perhaps best long term option, is to upgrade the rail line paralleling Highway 99W to Portland for passenger operation.

The first option would avoid the expense of building a second main track along the UP mainline between Albany and Junction City, including a new bridge across the Willamette River at Harrisburg to carry the second track. Some strategic sidings would have to be constructed between Corvallis and Junction City to accommodate the meeting of opposing passenger trains. Because passenger trains are short, however, these sidings would not need to be long. The majority of freight traffic would remain on the UP mainline.

This plan solves the problem of how to link Corvallis, the most populous area in the mid-Willamette Valley, to the high-speed rail system without sacrificing Albany or Junction City. The Albany, Corvallis, Eugene route is more circuitous than the existing UP line via Halsey but the slightly longer transit times may be justified by making the service available to a greater population. If there was a demand for time-sensitive and limited stop express trains between Eugene and Portland they could be routed via the shorter route.

The second option to extend passenger train capability north from Corvallis to Portland is via Independence, McMinnville and Newberg. If done soon, this option could negate the need to construct a second main track on the UP line between Portland and Albany, and at the same time offer rail passenger service to some of the fastest growing sections of the greater Portland metro area. The line from McMinnville to Portland is already being considered for potential commuter train operation. The bottleneck on this route is the railroad's crossing of Rex Hill, northeast of Newberg, where grades and curves restrict train speed significantly. While tunneling under Rex Hill might be a solution, others have suggested reconstruction of 18 miles of abandoned line between St. Joseph (northeast of McMinnville) and Gaston via Yamhill and Carlton, recreating a former Southern Pacific branch that connected McMinnville with Hillsboro. Not only does this route offer minimum grade and curvature problems, it would link into the high-speed network of the fast growing communities of Forest Grove, Cornelius, and Hillsboro, with a connection to TriMet's Westside light rail system at the end point. The right of way for the 18 miles of missing track still exists as a corridor and belongs to the UP.

There is an opportunity through judicious planning to create a dual route rail system that would serve most of the major population centers in the Willamette Valley. The concept is surprisingly similar to the solution embraced by last century's highway builders when confronted with how to route Highway 99. They solved the dilemma of which communities to serve by splitting the road into 99E and 99W segments between Junction City and Portland, thus providing U.S. highway access to the majority of the population residing in the valley.

6.2.2 Air System

The Corvallis Airport Master Plan, 1990-2010, prepared by W&H Pacific, Inc., provides forecasts of airport usage through the year 2010. The number of aircraft based at Corvallis Municipal Airport is forecast to increase at an average rate of 1.8 percent per year, from 77 aircraft in 1990 to 110 aircraft in 2010. General aviation operations are forecast to increase from 46,900 annually to 81,400 during the same time period, while military operations are forecast to decrease from 600 annually to 400 annually. In 1990, 88 percent of the aircraft registered to Benton County residents were based in Benton County. Only four aircraft registered to Benton County residents were based in Linn County and only five aircraft registered to Linn County residents were based in Benton County. The Runway 17-35 extension is expected to "serve

all airplanes expected to use this facility on an unconstrained basis.” The Master Plan identified the need for 34 new hangar spaces and 29 new paved automobile parking spaces by the year 2010. Without additional construction, there will be insufficient hangar and paved parking lot space to accommodate demand by the year 2010. Benton County residents will remain dependent on airports in Eugene and Portland for most air travel.

Infrastructure improvements recently completed at the Portland International Airport are projected to serve travel demands for this region well beyond the 20-year future. The regional airport in Eugene has not identified any passenger air service constraints within the next 20 years.

No public transit service is available to the Eugene or Portland airports. However, private shuttle service is available that adequately addresses those who are transportation disadvantaged.

6.2.3 Water and Pipeline Systems

Existing facilities within urban areas have sufficient capacity to accommodate growth through the year 2015.

6.3 Air, Rail, and Pipeline Transportation Policies

6.3.1 Existing Policy

Existing policies will be modified when the new policy recommendations are approved.

6.3.1.A Benton County Comprehensive Plan

Section E, Transportation:

4. Existing and potential transportation facilities and corridors as identified in the Comprehensive Plan or its amendments shall be protected.
5. Benton County shall provide for alternative transportation modes by:
 - b. considering the development of pipelines as a viable form for transportation of certain goods;
 - e. encouraging development of airway, railway, and waterway transportation resources to effectively supplement conventional transportation alternatives by: adopting the Corvallis Airport Master Plan, locating residential development away from flight patterns, and pursuing passenger use of existing railways.

6.3.1.B Benton County Development Code

Chapter 86, Airport Overlay, meets the Transportation Planning Rule requirements for the protection of airport facilities.

6.3.2 New Policy Recommendations

The efforts of reviewing related documents and identifying policy issues with staff, agencies, and the public has resulted in the identification of policies and codes that are recommended for modification. Summarized below are the recommendations.

The viability of the railroad in Benton County is interdependent with the whole WPRR system. If rail service were terminated, truck traffic could increase throughout the County, depending on the reason service was terminated (obviously, closure of a mill would cease all freight movement from that location, whether by rail or by truck). This truck traffic would use the road corridors that already carry the most traffic and experience the greatest congestion. Therefore, it is in the County's interest to encourage continued rail freight service, whether or not the County ever develops as a more significant freight generator. Passenger rail service from Corvallis east to Albany or north to McMinnville and Portland is not economically viable at this point; however, the County should encourage more frequent and convenient public transit connections to existing passenger rail service, particularly when high speed rail service begins operating in the Willamette Valley.

Proposed New Policies

In order to promote the viability of rail transportation, and to facilitate its operation, Benton County should:

- ◆ Minimize rail crossings of the automobile roadway system
- ◆ Maintain safe operations at rail crossings for all modes
- ◆ Minimize delays to rail operations due to conflicts with the automobile roadway system
- ◆ Discourage residential development near rail lines
- ◆ Actively plan for and promote the idea of commuter rail service between Albany and Philomath at the earliest possible time

6.4 Preferred Alternatives

Corvallis Airport improvements are planned and included in the City of Corvallis TSP. These include installing access gates; acquiring land for enlarged runway protection zones, and construction of two helicopter pads. The cost of these improvements is \$204,000.

Additional improvements called for in the Corvallis Airport Master Plan include completing the fencing of the airport, constructing additional automobile parking, and construction of additional T-hangar spaces. The local share of these projects is approximately \$165,000; the federal share is approximately \$97,000. The improvement plan also provides for four corporate hangers to be built by users.