

# Chapter 7

## Freight Plan

### Overview

Freight mobility is critical to maintain Josephine County's economic competitiveness, and is dependent on a number of transportation modes, including truck, air, pipeline and rail. This chapter presents a review and assessment of needs, deficiencies, policies and improvement options affecting the freight transportation system within the rural portion of the County. Freight transportation modes discussed in this chapter include trucking and pipelines. The chapter also acknowledges the water transportation mode. Issues related to air freight are discussed in the general context of air transportation in Chapter 10. Freight rail is discussed in Chapter 12.

### Truck Freight

In the rural portion of Josephine County, freight mobility is largely dependent on the movement of goods by truck. Key transportation issues affecting freight mobility include:

- Adequacy of access to specific freight-dependent industrial, commercial, or resource-based destinations in the rural area;
- Adequacy of the state highway and county road system to accommodate through truck traffic between major destinations within Josephine County and through the county to other destinations in Oregon or California.

Roadway adequacy is measured both in terms of capacity to serve current and future truck-related demand (as measured by levels of congestion on key routes that are used by trucks), the safety of the roadway system (particularly for larger vehicles with more limited operating characteristics than automobiles), and the sufficiency of access to significant truck trip generators.

Included in this section is a discussion of the planning and policy context for developing and maintaining the truck freight system, an evaluation of needs and deficiencies, and a discussion of the recommended truck freight mobility action plan (including goals, objectives, policies and specific improvement projects).

### Consistency with Other Plans and Policies

Development of the truck freight portion of this TSP has been influenced by several state and local plans and policies including the *Oregon Highway Plan*, the *Josephine County Comprehensive Plan* and the *Grants Pass Urban Area Master Transportation Plan*. Key goals and policies in these plans that relate to and affect the development of the *Josephine County Rural TSP* are described below.

The *1999 Oregon Highway Plan (OHP)* recognizes the importance of good freight mobility to the State's economy and includes a policy to "maintain and improve the efficiency of freight movement on the state highway and access to intermodal connections. The State shall seek to balance the needs of long distance and rural communities." Through the Transportation Planning Rule and guidelines prepared by ODOT for preparation of local transportation system plans, local and regional governments are encouraged to improve planning coordination between public investments in highways and other investments (both public and private) in the freight movement infrastructure.

The OHP also designates certain roadways as part of the State Highway Freight System based on freight volume, connectivity and linkages to major intermodal facilities. Within Josephine County, Interstate 5 is the only designated State Freight Highway. The OHP also provides some guidance on the standard of performance necessary for freight movement on State highways. Mobility standards (using volume-to-capacity ratios) are designated based on a facility's location and the type of traffic using the roadway. Acceptable v/c ratios are higher for urbanized areas than for sparsely populated rural areas, meaning that relatively greater congestion is acceptable in urbanized areas than in rural areas. Acceptable v/c ratios for freight routes are slightly lower than for other highways, reflecting the desire to maintain freight mobility on key routes.

The *Josephine County Comprehensive Plan* (2000) contains goals and supporting policies intended to support the movement of freight within and through the County. Goal 4 focuses on developing facilities and services that are needed and affordable to County residents. A supporting policy encourages the development of a master plan (coordinated with City, State and Federal agencies) for bridges and roads in Josephine County that can be used for freight mobility purposes. The intent of Goal 5 is to “*diversify, expand and stabilize economic opportunities for the betterment of the County*”. A supporting policy directs the County and cities to jointly seek methods of assuring long-term capital improvement financing in order to extend services to designated commercial and industrial lands. Of critical importance to emerging employment centers will be the availability and adequacy of transportation services.

The *Grants Pass Urban Area Master Transportation Plan* includes several goals and policies specifically directed at enhancing freight movement within the urban portions of the county. While not specifically applicable to the rural portions of Josephine County, they do offer guidance for the development of policies for the *Rural TSP*. Goal 1 encourages the City of Grants Pass, Josephine County and ODOT to “*Provide a Comprehensive Transportation System*”. This goal is supported by objectives that encourage completion of the transportation system. Freight-related policies supporting this objective include identifying and designating regional truck routes. For the rural areas, these primary truck routes include such state highways as I-5, US 199, and OR 238. Goal 3 stresses the importance of protecting public investments in the transportation system. Supporting objectives applicable to freight movement include preserving future transportation corridors including potential by-pass routes near urban areas. Goal 4 is intended to “*Support Economic Development and Vitality*”. This goal is supported by a policy for providing for efficient goods movement.

## **Needs and Deficiencies**

Transportation distribution is an important economic activity in Southern Oregon including Josephine County, and good freight mobility is critical to maintaining the region's competitiveness. Particularly in the I-5 corridor, freight activity is showing a significant increase in comparison with a decade ago. The movement of goods and commodities into, out of, and through Josephine County is heavily dependent on the highway system where the demand for access and circulation by large vehicles is expected to be the highest. However, freight movement also occurs using rail, air, and pipeline modes. This section addresses freight movement on the road and highway system and in pipelines. Freight movement via rail and air transportation is addressed in the chapters pertaining to these modes.

The truck freight transportation system consists of streets and highways where the demand for access and circulation by large vehicles is expected to be the highest. The foundations of the freight movement system are the critical “backbone” highways and roads identified by the Federal Highway Administration as the National Highway System. National Highway System Routes are intended to include the most significant highways in the United States for the movement of people and freight. Within Josephine County, this system includes Interstate 5 and US 199. Most truck traffic in the region and the state moves on the National Highway System. In addition, the 1999 *Oregon Highway Plan* designated a State Highway Freight System based on freight volume, connectivity and linkages to major intermodal

facilities. Interstate 5 is the only highway in Josephine County that has been designated as a State Freight Highway.

ODOT's *I-5 State of the Interstate* (2000) report indicates that trucks comprise up to 20 percent of the daily traffic stream on I-5 between Grants Pass and Medford, which corresponds to as many as 6,000 trucks per day in the vicinity of Grants Pass.<sup>13</sup> Rural Josephine County presently has no designated truck routes, but I-5 and US 199 are primary routes for non-local freight traffic. I-5 is designated as a statewide freight system route in the *Oregon Transportation Plan* and is by far the most important freight link in the region. Not only does I-5 serve freight heading between the PML Forest Products inter-modal rail/truck reload facility in Grants Pass and the Medford area, but it also serves a significant number of trucks continuing both north and south to destinations elsewhere along the West Coast. Freight activity, particularly along the Interstate 5 and US 199 corridors, has shown a significant increase in the past decade.

Much of the freight activity in rural Josephine County is centered on the North Valley Industrial Park in the Grants Pass/Merlin area, a portion of which is included in federal Foreign Trade Zone (FTZ) 206 (this zone also includes the Rogue Valley International/Medford Airport). Foreign Trade Zones (FTZs) are secured areas that are legally defined as outside a nation's territory for the purposes of customs and excise activities. They allow companies doing business in a zone to reduce or eliminate the kinds of duties, taxes, and quotas that otherwise might apply, thereby potentially improving profitability. The FTZ designation is used as a business development or economic development tool. In the FTZ, goods may be stored, manufactured or assembled, mixed or manipulated, repaired or relabeled, processed or destroyed. Duties aren't due until the goods enter the US economy. The net effect can be drastic savings for a company importing or exporting any product or merchandise that might incur import taxes or duty. Other FTZ sites in unincorporated Josephine County are located at the Grants Pass Airport and the Illinois Valley Airport (Figure 3-5).<sup>14</sup>

Good freight mobility requires that the roadway system provide both an adequate level of service and good connectivity to intermodal facilities and inter-regional routes, such as Interstate 5 and US 199. Some guidance on the standard of performance necessary for freight movements is found in the 1999 *Oregon Highway Plan*. The *Highway Plan* sets mobility standards using volume-to-capacity ratios (v/c) rather than Level of Service standards, to identify the presence of congestion. If the v/c ratio for a highway segment exceeds the v/c ratio established in the OHP, then the highway segment does not meet ODOT's minimum operating conditions. Acceptable v/c ratios are higher for urbanized areas than for sparsely settled rural areas, which means that relatively greater congestion is acceptable in urbanized areas than in rural areas. Acceptable v/c ratios for freight routes are slightly lower than for other highways, reflecting the desire of maintaining freight mobility on key routes. The maximum acceptable v/c ratio for the rural Josephine County ranges from 0.70 for I-5 and US 199, to 0.75 for OR 238, OR 99, OR 46 and the Rogue River Loop Highway.

Pavement conditions and lack of restrictions on large vehicles along truck routes are also important for the efficient movement of freight. According to the *I-5 State of the Interstate* report, pavement conditions along I-5 generally fall in the very good category through Josephine County.

As freight activity increases in the County, it will be important to maintain and improve the road system to ensure adequate freight mobility. In addition to corridors with greater truck traffic, local roads providing access to activity centers must also be maintained and improved as needed. Access to aggregate resource areas will also need to be improved. Among others, primary aggregate resource areas like rock quarries are located on US 199 west of the Grants Pass UGB, on New Hope Road in Murphy

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<sup>13</sup> *I-5 State of the Interstate Report*, ODOT, 2000.

<sup>14</sup> Rogue Valley International/Medford Airport web site, April 2003.

and along OR 238 south of Murphy. Improving the truck freight transportation network on a timely basis will ensure Josephine County’s competitive edge in the market.

## Strategies

A number of strategies were developed to provide the basis for a discussion of policies and priorities to be used in guiding the development of rural Josephine County’s freight transportation system in the coming decades. In part, these strategies were derived from existing policies and an assessment of existing deficiencies and current improvement programs.

As described in Chapter 5, five improvement “scenarios” were developed, each focusing on a different aspect of the transportation system that stakeholders identified as important for the TSP. These improvement scenarios provide the initial step in developing and evaluating alternatives for the TSP. For each scenario, individual improvements were identified, analyzed and ranked according to a set of qualitative and quantitative criteria developed by TSP stakeholders. Each of the scenarios has a different emphasis to reflect the policy and financial choices available to the County. Each of the scenarios also differs in the degree in which the County freight system would be improved. Table 7-1 lists projects from each scenario that improve freight mobility in Josephine County.

**Table 7-1  
Freight System Improvements Associated with Each Improvement Scenario**

Scenario	Freight System Improvement Projects
No Build	<ul style="list-style-type: none"> <li>• Grave Creek Bridge replacement on Interstate 5 (STIP)</li> <li>• Variable message sign on I-5 NB at Hugo and Glendale roads (STIP)</li> <li>• US 199 bridge replacement at East and West forks of the Illinois River (STIP)</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>• Monument Drive (Merlin Road to Timber Lane): Add left-turn lanes</li> <li>• Replace Jacks Creek Bridge on Jumpoff Joe Creek Road</li> <li>• Replace Jones Creek Bridge on Foothill Boulevard</li> <li>• Replace Sucker Creek Bridge on Holland Loop Road</li> <li>• Replace Coyote Creek Bridge on Bloom Road</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• OR 238 at Williams Highway: Add warning signs</li> <li>• US 199 at Willow Lane: Intersection improvements; potential signalization</li> <li>• US 199 at Ken Rose Lane: Add SB left-turn lane</li> <li>• US 199 at Waldo Road: Add SB left-turn lane</li> <li>• OR 238 at Jaynes Drive: Add NB and SB left-turn lanes</li> <li>• I-5 at Sexton Summit (MP 67.5 to 80.8): Install truck climbing lanes</li> <li>• OR 238 at New Hope Road: Improve truck turning radii</li> <li>• US 199 at Waters Creek Road: Flatten curve to improve sight distance; install warning signs</li> <li>• US 199 (MP 16-24 northbound and MP 7-14 southbound): Potential passing lanes</li> <li>• OR 238 at Applegate Road: Add left-turn lanes on OR 238</li> <li>• OR 238 (MP 16 to 17): Install northbound passing lane</li> <li>• US 199 at Rockdale Road: Safety improvements</li> <li>• OR 46 at Holland Loop Road (west): Safety improvements</li> </ul>
Mobility and Accessibility	<ul style="list-style-type: none"> <li>• I-5 NB on-/off-ramps at Merlin-Galice Road: Signal or roundabout</li> <li>• Monument Drive at Merlin-Galice Road: SB/WB turn lanes; restripe; signal modifications to provide NB/SB protected lefts</li> <li>• US 199 at Redwood Avenue: Side street left-turn lane</li> </ul>
Economic Development	<ul style="list-style-type: none"> <li>• I-5 NB on-/off-ramps at Merlin-Galice Road: Signal or roundabout</li> <li>• Monument Road at Merlin-Galice Road: SB/WB turn lanes; restripe; signal modifications to provide NB/SB protected lefts</li> <li>• OR 238 re-alignment at Water Gap Road</li> </ul>

Following development of these scenarios, which included all travel modes, evaluation criteria were applied for an initial ranking of projects. Stakeholders then reviewed the rankings and made some changes based on needs of specific user groups and/or specific areas of the County. Prioritized projects were then sorted into three tiered alternatives representing varying levels of financial commitment. The resulting three TSP tiered alternatives (Tier 1-No Build, Tier 2-Low Build and Tier 3-High Build) include a number of projects that would benefit freight movement in the County. The Tier 1 Alternative is identical to the No Build Scenario described above, while the Tier 3-High Build Alternative includes all improvements listed in Table 7-1. Projects benefiting freight movement that are included in the Tier 2 Alternative are shown in Table 7-2 along with the scenario in which they originated. The Tier 2 Alternative represents the County's Preferred Alternative for the TSP.

**Table 7-2  
Freight System Improvements Included in the Preferred Alternative (Tier 2)**

<b>Scenario</b>	<b>Freight System Improvement Projects</b>
No Build	<ul style="list-style-type: none"> <li>• Grave Creek Bridge replacement on Interstate 5 (STIP)</li> <li>• Variable message sign on I-5 NB at Hugo and Glendale Roads (STIP)</li> <li>• US 199 bridge replacement at East and West forks of the Illinois River (STIP)</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>• Monument Drive (Merlin Road to Timber Lane): Add left-turn lanes</li> <li>• Replace Jacks Creek Bridge on Jumpoff Joe Creek Road</li> <li>• Replace Jones Creek Bridge on Foothill Boulevard</li> <li>• Replace Sucker Creek Bridge on Holland Loop Road</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• OR 238 at Williams Highway: Add warning signs</li> <li>• US 199 at Willow Lane: Intersection improvements; potential signalization</li> <li>• US 199 at Ken Rose Lane: Add SB left-turn lane</li> <li>• US 199 at Waldo Road: Add SB left-turn lane</li> <li>• OR 238 at Jaynes Drive: Add NB and SB left-turn lanes</li> <li>• I-5 at Sexton Summit (MP 67.5 to 80.8): Install truck climbing lanes</li> <li>• OR 238 at New Hope Road: Improve truck turning radii</li> <li>• US 199 at Waters Creek Road: Flatten curve to improve sight distance; install warning signs</li> <li>• US 199 (MP 16-24 northbound and MP 7-14 southbound): Potential passing lanes</li> <li>• OR 238 at Applegate Road: Add left-turn lanes on OR 238</li> </ul>
Mobility and Accessibility	<ul style="list-style-type: none"> <li>• I-5 NB on-/off-ramps @ Merlin-Galice Road: Signal or roundabout</li> <li>• Monument Drive @ Merlin-Galice Road: SB/WB turn lanes; restripe; signal modifications to provide NB/SB protected lefts</li> </ul>
Economic Development	<ul style="list-style-type: none"> <li>• I-5 NB on-/off-ramps @ Merlin-Galice Road: Signal or roundabout</li> <li>• Monument Drive @ Merlin-Galice Road: SB/WB turn lanes; restripe; signal modifications to provide NB/SB protected lefts</li> </ul>

## Action Plan

### Draft Freight System Goals and Objectives

Early in the TSP development process, the County developed a number of draft TSP goals and policies for the future transportation system. Below is a goal and supporting policies pertinent to the improvement and management of the truck freight system.

#### **Goal 2: Provide for a transportation system that is accessible, efficient and practical.**

- *Objective 2 - Facilitate movement of goods into and out of the County.*
- *Objective 3 - Enhance freight mobility (by rail, truck and air) and intermodal transfer.*
- *Objective 4 - Address changing characteristics of trucking, aviation and rail industries.*

## **Policies and Recommendations**

**Policy 7-A:** Josephine County shall pursue a variety of funding options for improving freight mobility in rural areas, with particular emphasis on implementation of the high priority projects identified in the TSP.

- **Recommendation 7-A (1):** As funding becomes available for projects that enhance freight mobility, Josephine County shall assign the highest priority to projects on the Tier 2 (preferred alternative) list as described in Table 7-2.

**Policy 7-B:** Josephine County shall evaluate and develop improvement recommendations to address existing deficient bridges along freight routes within the rural portion of the County, secure necessary funding, and manage freight traffic during construction to minimize adverse impacts on both freight mobility and local multimodal traffic circulation.

**Policy 7-C:** Josephine County shall work cooperatively with freight providers and other jurisdictions to balance freight mobility with community livability including:

- Increase freight transport safety awareness
- Reduce the number and severity of commercial transport-related accidents
- Enforce regulations related to safe transport of hazardous materials
- Reduce through truck traffic on residential streets

## **Pipeline Transportation**

The only major pipeline transportation system in Josephine County is the major natural gas transmission line connecting at Grants Pass to a major natural gas transmission line operated by Northwest Pipeline Company that connects northward to Eugene and the Portland metropolitan area. Other pipelines in the County include transmission lines for electricity, cable television and telephone services, as well as water and sanitary sewer pipelines.

Because there is no significant pipeline transportation system within the rural portion of Josephine County, no project-specific recommendations for this area of transportation are provided for in the *Josephine County Rural TSP*. It is recommended that the County establish policy to promote accessibility to, protection of and siting of appropriate locations for regional pipeline systems within the County to address potential future pipeline locations.

## **Water Transportation**

There are no commercially-navigable waterways in Josephine County. Accordingly, no recommendations for this transportation system are provided for in the *Josephine County Rural TSP*.

# Chapter 8

## Public Transit Plan

### Overview

This Chapter presents a review of needs, deficiencies, policies and recommended actions affecting the provision of public transportation services in Josephine County. Included is a discussion of the local and state policy context for developing and enhancing this travel mode, an evaluation of the existing public transportation system, and identification of recommendations for the County. Josephine County, through Josephine County Transit (JCT), currently provides public transportation services in the county. Three alternatives, based on available funding, are offered for JCT and public transportation in the county.

Information contained in this chapter was obtained largely from: the existing conditions inventory; input from JCT and ODOT staff; and related local and state plans including the *Josephine County Comprehensive Plan*, the *City of Grants Pass Comprehensive Plan* and the *Oregon Public Transportation Plan*.

### Consistency with Other Plans and Policies

The public transit component of this TSP is intrinsically linked to the *Oregon Public Transportation Plan*, the Transportation Planning Rule (TPR), and Josephine County and City of Grants Pass Comprehensive Plans. Policies, goals and objectives in these plans and rules assure that the mobility needs of Josephine County citizens are properly planned for.

The *Oregon Public Transportation Plan* (OPTP) codifies goals, policies, strategies and service standards for public transportation systems throughout the state. Goal 1 of the OPTP defines the purpose of public transportation stating, “*The public transportation system should provide mobility alternatives to meet daily medical, employment, educational, business and leisure needs without dependence on single-occupant vehicle transportation. The system should enhance livability and economic opportunities for all Oregonians, and lessen the transportation system’s impact on the environment. The public transportation system should provide services and meet transportation needs in a coordinated, integrated and efficient manner.*” Goal 2 defines the components of such a system, accounting for the different needs of and resources available to urban, small city and rural systems. The OPTP contains minimum service standards that each system should achieve.

The TPR is part of the planning context of the OPTP and thus addresses requirements placed on local land use plans, ordinances and development codes in order to promote public transportation as a viable alternative. The TPR further mandates that all local transportation system plans contain a public transportation plan.

Goal 4 of the *Josephine County Comprehensive Plan* addresses the mobility needs for those with special needs stating “*The physically handicapped and transportation disadvantaged shall be considered in the design of transportation facilities and alternative transportation modes.*” Goal 8 of the plan identifies mass transportation as a means for controlling air pollution.

The *Grants Pass Urban Area Master Transportation Plan* includes several goals and policies specifically directed at enhancing public transit service within the urban portion of the county. While not specifically applicable to the rural portions of Josephine County, they do offer guidance for the development of policies for the *Rural TSP*. Goal 1 encourages the City of Grants Pass, Josephine County and ODOT to

take actions to “*Provide a Comprehensive Transportation System*”. This goal is supported by objectives that encourage completion of the transportation system and the provision of adequate mobility for all travelers. Policy 1.1.2 directs the affected agencies to “*Support the provision of public transit services for those people who cannot provide their own private transportation due to age ..., physical limitations, or economic circumstances*”. Policy 1.2.2 encourages these agencies to “*Maintain (a) minimum level of public transit services for those people who cannot or who choose not to travel by private vehicle*”. Goal 1 also includes objectives that address provision of a multimodal transportation system (encouraging reduced reliance on the single occupant automobile and improving connections between transportation modes), and ensuring accessibility to transportation for all travelers (with particular emphasis on transportation services for the disabled).

## Needs

Josephine County Transit (JCT) provides fully accessible weekday bus service to residents of Grants Pass and Cave Junction as well as intercity service between the two communities. JCT’s special transportation services (senior and disabled demand-responsive) are available to all communities south of the Merlin area. Table 8-1 summarizes the current JCT services, including operating costs and funding sources. JCT is heavily dependent on limited-duration grant funding and is continually seeking additional funding to sustain the current level of service.

JCT currently provides a relatively low level of lifeline public transportation service to non-urbanized areas of Josephine County. JCT’s public and senior/disabled services address state requirements (those defining the types of services needed for the area covered) for rural areas and communities between 2,500 and 25,000 population. However, the amount of service falls well short of the 1.7 hours of service per capita standard for communities over 2,500 as identified in the *Oregon Public Transportation Plan*<sup>15</sup> (current Grants Pass population is 23,900). As the population of Grants Pass grows past the 25,000 mark, JCT will face additional standards in the areas of ride-matching, demand management programs, peak commuter services and alternatives to single-occupancy automobile travel.

Sunny Wolf Community Response Team, the local non-profit organization supporting of the Sunny Valley, Wolf Creek, and Galice Enterprise Communities, operates a one-day-a-week shuttle into Grants Pass from the far northern part of the county. Residents in these communities have expressed the need for more service to Grants Pass.

JCT provides just over 14,000 hours of revenue service per year. Roughly half of these are dedicated to the Grants Pass fixed routes. The limited amount of service JCT is able to operate is reflected in trip booking policies that require passengers to call five days in advance for Dial-A-Ride reservations. This allows JCT to maximize its limited vehicle and staff resources while fulfilling reservation requests. There are currently very few trip denials, as most residents have altered their travel behavior to work with the reservation requirements. JCT also provides dispatch services for Options for Southern Oregon and HASL (Handicapped Accessible Service League), two local client-based transportation service providers, when the JCT dispatcher is on duty. The current budget/staff limitations prevent JCT from providing this service after 3:00 pm, requiring these agencies to provide dispatch functions in the late afternoon and evening.

JCT is facing a large shortfall in its existing operations budget, as two major sources of funding will not be available in the coming years. The City of Grants Pass is terminating its annual funding, an amount equal to \$50,000 a year for the last three years. The fixed-route system is also heavily dependent on \$196,000 it receives annually from a CMAQ grant that terminates in April 2005.

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<sup>15</sup> *Oregon Public Transportation Plan* (1997) Salem: Oregon Department of Transportation, V13-V18

**Table 8-1  
Current Josephine County Transit Services**

<b>Service</b>	<b>Service Area</b>	<b>Type of Service</b>	<b>Targeted Service Group</b>	<b>Annual Service Hours</b>	<b>Operating Cost</b>	<b>Funding</b>
Public Transit	City of Grants Pass	Fixed Route	General Public	8,580	\$355,200	\$196,000 CMAQ Grant (ends FY04/05) \$50,000 City of GP (ends FY02/03) \$48,400 FTA 5311 \$30,000 Fees \$30,000 Rogue Community College
<b>Dial-A-Ride</b>	Cities of Grants Pass and Cave Junction as well as Merlin, Murphy, Williams and Jerome Prairie (Central and Southern Josephine County)	Demand Responsive	Senior, Disabled	3,250	\$290,213	\$143,243 Special Transportation Funds (ODOT) \$60,000 Translink Fees \$18,000 Public Transit Ad Revenue \$10,000 Fees 55,600 Reserves
<b>Cave Junction</b>	Cities of Grants Pass and Cave Junction	Fixed Route	Senior, Disabled and General Public if space available	1,560		
<b>Senior Shuttle</b>	City of Grants Pass	Fixed Route	Senior, Disabled	1,250		

In addition, two of the special JCT services are currently funded out of a reserve carryover fund to cover an \$85,000 shortfall. These reserves are expected to run out in three to six months (from October of 2003). As a result, the Senior Shuttle in Grants Pass and the Route 50 service between Grants Pass and Cave Junction are facing imminent service reductions.

JCT transit stop and transfer facilities are minimal by the standards of any public transit system. JCT estimates that it will require \$150,000 to meet the County's most minimal needs for signage, benches, shelters and other transit facilities. JCT has recently purchased four new buses with special grant funding. Figure 8-2 presents the current JCT fleet, indicating those buses at or nearing the end of their useful lives.

**Table 8-2  
Current Josephine County Transit Fleet**

<b>Bus #</b>	<b>End of Useful Life</b>	<b>Seating Capacity</b>	<b>Wheel Chair Capacity</b>	<b>Use as of Nov 2003</b>
92663	1999	8	1	Cave Junction DAR
96602	2003	4	2	DAR
96603	2003	8	2	DAR
99601	2006	13	1	Public Transit
01664	2008	17	1	DAR
01667	2008	19/17	0/1	Cave Junction Fixed Route
01668	2008	19/17	0/1	Public Transit
02401	2006	5	0	DAR (Leased from Cty Motor Pool)
NEW 1	2010	19/17	0/1	Public Transit

**Table 8-2 Continued**  
**Current Josephine County Transit Fleet**

<b>Bus #</b>	<b>End of Useful Life</b>	<b>Seating Capacity</b>	<b>Wheel Chair Capacity</b>	<b>Use as of Nov 2003</b>
NEW 2	2010	19/17	0/1	Senior Bus
NEW 3	2010	10	2	DAR
NEW 4	2010	10	2	DAR

Travel to Medford is often cited as an unmet need. Greyhound currently operates four round trips between Grants Pass and Medford. The current schedule realistically provides for two daytime round trips from Grants Pass (leaving at 6:15 am and 12:01 pm, returning at 2:45 pm or 5:10 pm). The inflexibility in travel times, poor connections to rural transit services, and a \$8 one-way ticket price make this a poor option for Josephine County residents traveling to medical, work or other appointments in Jackson County. JCT receives a number of requests each week to provide regularly scheduled service to Medford.

Vanpool and ridematching needs are limited in the Grants Pass area. In the last year, the Rogue Valley Transportation District (RVTD) attempted to initiate a vanpool in Josephine County. The district was not able to engage a local business or organization to run a vanpool with a district-supplied vehicle. Even Rogue Community College, which has a substantial number of cross border commuters and maintains facilities in both counties, was unable to initiate a successful vanpool.

## Strategies

Currently, Josephine County has limited unmet needs with respect to the delivery of public transportation services in the county, but the long-term provision of these services is facing serious funding shortfalls. Three alternative strategies for public transportation were developed and evaluated that reflect three different service levels based on available funding. Table 8-3 highlights the amount of new funding and resulting service offerings for the three scenarios. Information on available funding sources is provided at the end of this section.

**Table 8-3**  
**Public Transit System Alternatives**

<b>System Alternative</b>	<b>Funding</b>	<b>Services</b>
Tier 1 (Fully Funded, No Build)	<ul style="list-style-type: none"> <li>• Retain:               <ul style="list-style-type: none"> <li>○ Special Transportation Funds (STF) - ODOT</li> <li>○ Translink fees</li> <li>○ RCC contract</li> <li>○ Rider fees</li> <li>○ Ad revenue</li> </ul> </li> <li>• Discontinue:               <ul style="list-style-type: none"> <li>○ CMAQ</li> <li>○ City of Grants Pass funding</li> <li>○ Funding from reserves</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Reduced frequency of service on Route 10 in Grants Pass from 30 minutes to hourly</li> <li>• Shortened service day on Route 10 in Grants Pass, terminating service before 5:00 pm</li> <li>• Elimination of:               <ul style="list-style-type: none"> <li>○ Senior Shuttle</li> <li>○ Cave Junction route</li> </ul> </li> </ul>

**Table 8-3 Continued  
Public Transit System Alternatives**

<b>System Alternative</b>	<b>Funding</b>	<b>Services</b>
Tier 2 (Unfunded, Low Build)	<p>Same as Tier 1 (No Build) with the Addition of:</p> <ul style="list-style-type: none"> <li>• \$250,000 to replace lost CMAQ and City of Grants Pass Funding. Options include: <ul style="list-style-type: none"> <li>○ Local tax base</li> <li>○ Increased Ad revenue</li> <li>○ FTA Section 5311</li> </ul> </li> <li>• Replace reserve funding with \$200,000 ODOT Region 3 Capital Grant</li> <li>• \$200,000 for fleet improvements in three years. Options include: <ul style="list-style-type: none"> <li>○ FTA Section 5309</li> <li>○ FTA Section 5310</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Retention of all current services and the possible addition of regular service to Sunny Wolf area in the north part of the county.</li> </ul>
Tier 3 (Unfunded, High Build)	<p>Same as Tier 2 (Low Build) with the Addition of:</p> <ul style="list-style-type: none"> <li>• \$50,000 annually for Intercity Service plus \$60,000 for additional bus. Options include: <ul style="list-style-type: none"> <li>○ FTA Section 5311(f)</li> <li>○ Fees</li> <li>○ FTA Section 5309</li> <li>○ FTA Section 5310</li> </ul> </li> <li>• \$200,000 in funding to replace limited duration ODOT Region 3 Capital Grant. Options include: <ul style="list-style-type: none"> <li>○ Fees</li> <li>○ 5310 if contracted services</li> <li>○ Increased tax base</li> </ul> </li> <li>• \$30,000 for additional Dial-A-Ride Staff Options include: <ul style="list-style-type: none"> <li>○ Contact fees</li> <li>○ STF discretionary funds</li> <li>○ Increased tax base</li> </ul> </li> <li>• \$150,000 for amenities capital improvements. Options include: <ul style="list-style-type: none"> <li>○ FTA Section 5309</li> <li>○ FTA Section 5310</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Retention of all current services</li> <li>• Plus: <ul style="list-style-type: none"> <li>○ Service to Sunny Wolf area</li> <li>○ Intercity service to Medford</li> <li>○ Increased coordination with local providers</li> </ul> </li> <li>• Deployment of signs, benches and shelters</li> </ul>

**The Tier 1 (No Build) Alternative** for public transportation represents the scenario where JCT does not adequately replace the operations funding it expects to lose in the coming years. This alternative results in the loss of public fixed-route services, as the agency must eliminate roughly \$250,000 from its operating budget. Currently, revenues generated by the fixed-route advertising program are currently used to subsidize the Dial-A-Ride system. JCT will have to increase advertising revenues and retain them to fund general public services, creating further budget pressures on the special transportation services.

The likely service cuts will entail a reduction in both level of service and the span of local transit service to the Grants Pass area. The current north-south route (Route 10) provides 30-minute service in Grants Pass. This will have to be reduced to hourly service under the No Build Alternative. In addition, the service day will have to be shortened. The 7:00 am start time will likely remain while the end of service will move from 5:00 pm to earlier in the day. This will provide the least negative impact for RCC students and staff.

The Senior Shuttle and Cave Junction route are currently funded out of reserves and face elimination in early 2004.

**The Tier 2 (Unfunded, Low Build) Alternative** seeks to replace lost revenues and maintain current services and/or slightly improve upon them. A county property tax levy and state/federal grants are feasible sources for the needed funding. JCT is also hoping to expand its advertising revenues to offset the pending lost revenues.

JCT already receives FTA Section 5311 funding based on existing formulas and will not likely receive substantial additional funds from this source. Josephine County has explored the potential for a public transportation tax levy. Property taxes could contribute the sustainable funding required to keep the fixed-route public service near today's levels. The *Transportation Feasibility Study* in 2000 indicated that a tax levy would probably pass, but not until the second or third effort. It is JCT's intent to go forward, placing a tax levy on the ballot in November 2004. To raise \$200,000, the levy would be about 15 cents per \$1,000 of assessed value in the City of Grants Pass or about 8 cents per \$1,000 over the service area if a new transportation district is created. A countywide tax would put pressure on the use of these funds throughout the county, not just in Grants Pass where the imminent shortfall would exist. A voter supported levy has been estimated to collect between and \$85,000 and \$100,000 – less than half of what is needed.

If Josephine County employers consider public transportation vital for making commute trips, a payroll tax is another option. To create a tax base equivalent to the \$250,000 loss in CMAG and City of Grants Pass funding, a payroll tax rate of roughly 0.03% would be required (0.05% if State In-Lieu taxes are not available to match). This rate is far less than permitted or collected by other districts/jurisdictions in Oregon.

JCT is also exploring a short-term capital grant with ODOT Region 3 for the special transportation system. These capital funds would allow for contracted services to the Sunny Wolf area and the backfilling of other JCT provided special transportation services (including the Senior Shuttle and the Cave Junction route), allowing JCT to re-allocate any non-dedicated funds back to the fixed-route system. The grant could potentially provide \$200,000 for these contracted services over the next two years.

The JCT fleet will require vehicle replacements in three years to maintain its current level of operation. Roughly \$200,000 will be required to upgrade the rolling stock in this timeframe. Two Federal grant programs can be explored in conjunction with the potential for ODOT Special Transportation Fund (STF) Grants for capital and operating funds. Federal Transit Administration (FTA) Section 5310 Discretionary Grants, which funds vehicles and other capital projects for programs that serve elderly and disabled people or the FTA Section 5309 capital program are potential sources for vehicle purchases.

**The Tier 3 (Unfunded, High Build) Alternative** seeks to expand service and address perceived shortcomings. Federal monies in the form of grants and/or Congressional set asides will likely be required to meet these needs.

Intercity Service to Medford is likely to cost around \$50,000 a year in operating costs (for three day-a-week, three roundtrips-per-day service) plus another \$60,000 for a dedicated vehicle.

FTA Section 5311(f) funds startup intercity services. These funds can be used for both capital and operating expenses and require local matching funds. The 5311(f) process can be competitive and are intended for startups, leaving the need for sustainable funding if the service is to remain in place. Fare revenue for this service should help offset some of the costs. Something between the \$1.00 basic JCT fare and the \$8.00 charged by Greyhound should contribute toward the operating needs. Contracts with RCC and/or RVTD for any commuters coming to Grants Pass from Jackson County could also fund part of the operation.

As an alternative, a JCT-managed vanpool may meet the needs for community and/or commute trips to Medford on a slightly reduce scale, and therefore, at a lower cost. Based on the primary trip purposes (i.e. senior/disabled medical vs. worker commutes) various funding mechanisms may come into play, including those through RVTD for van programs.

JCT could also add one full time equivalent staff person (FTE) for the dial-a-ride system in order to provide service later in the day (e.g., after 3 p.m.) and to add capacity during peak times, allowing for more flexibility when taking reservations. Late afternoon service would also allow JCT to provide additional dispatch services for Options for Southern Oregon and HASL, increasing the coordination between county providers. The additional resource would require another \$50,000 per year.

The aforementioned ODOT and FTA discretionary grants can fund capital improvements that address JCT's distinct need for signage, shelters and benches. JCT has solicited Congressional earmarked funding for its capital needs. The transit agency should continue to explore this funding mechanism in addition to any grants that have capital components.

## **Action Plan**

### **Draft Public Transit Goals and Objectives**

Draft goals and objectives have been prepared to guide the development and evaluation of improvement strategies for all transportation modes in rural Josephine County. Draft goals and objectives for public transit are as follows (numbers reflect the numbering of the complete list of goals and objectives):

#### **Goal 2: Provide for a transportation system that is accessible, efficient and practical.**

- *Objective 1 - Increase mobility and access options for Josephine County citizens.*

#### **Goal 3: Provide sufficient capacity within the transportation system to accommodate future demand.**

- *Objective 1 - Satisfy Transportation Planning Rule requirements for system capacity and for encouraging the use of alternative modes of transportation.*
- *Objective 3 - Encourage alternative modes of transportation by providing for a choice in modes.*

#### **Goal 5: Provide system connections as needed to improve efficiency and access and to improve circulation.**

- *Objective 1 - Accommodate projected growth with improvements to the roadway network and increased options for choosing a mode of transportation.*
- *Objective 2 - Achieve greater mobility between communities, activities and land uses.*
- *Objective 3 - Achieve improved connectivity between modes of transportation.*

#### **Goal 7: Ensure an effective strategy for intergovernmental coordination in transportation planning.**

- *Objective 2 - Provide compatible design standards for all modes of transportation.*

**Goal 9: Consider funding issues in planning a future transportation system.**

- *Objective 1 - Identify a range of methods for funding recommended actions and improvements.*
- *Objective 2 - Ensure cost-effective investment in transportation. Improvements should be fiscally responsible, economically efficient and realistic.*
- *Objective 3 - Extend usable life of existing facilities*
- *Objective 4 - Ensure the plan provides for the maintenance of existing and planned improvements.*
- *Objective 5 - Achieve a balance between public and private sector interests when considering potential new funding sources for transportation improvements.*

**Goal 10: Plan for a transportation system that is environmentally responsible.**

- *Objective 1 - Provide for choice with regard to the use of alternative modes of transportation.*

**Policies and Recommendations**

Policies and specific recommendations were developed to support the goals and objectives for improving public transit service in the rural portions of Josephine County. The policies and recommendations are intended to provide a more-detailed guide to meeting the County’s short- and long-term transportation needs for this travel mode.

**Policy 8-A:** Josephine County shall establish a sustainable funding source for the operation of public transportation in the county.

- **Recommendation 8-A (1):** Develop tax base dedicated to public transportation, sufficient to maintain existing services when combined with fees and non-discretionary federal and state grants (Tier 2 Alternative).

**Policy 8-B:** Josephine Country shall work to improve intercity connections between Josephine County communities and the Medford urban area.

- **Recommendation 8-B (1):** Investigate opportunities for the planning and funding of new intercity services.
- **Recommendation 8-B (2):** Investigate opportunities for better schedule coordination with private transit service providers.

**Policy 8-C:** Josephine Country shall maintain and enhance the capital facilities and equipment required by JCT.

- **Recommendation 8-C (1):** Review bus stop amenity needs and seek discretionary grant funding where required.
- **Recommendation 8-C (2):** Develop a capital equipment replacement plan and seek discretionary grant funding where required.

**Policy 8-D:** Josephine Country shall provide mobility options for those citizens who cannot, or choose not to, use private transportation due to age limitations, physical disabilities, economic circumstances, lack of access to private transportation, and/or transportation preferences.

- **Recommendation 8-D (1):** Maintain existing services to those citizens with special mobility needs.
- **Recommendation 8-D (2):** Further explore coordination opportunities with private and non-profit providers in order to expand services where needed in the county.

**Public Transit Plan Funding Options**

This section identifies potential federal, state and local funding sources. Unless noted, JCT is eligible for each of these revenue sources.

## **Federal Sources**

### **Federal Transit Administration (FTA) Section 5309-Capital Program**

Section 5309 provides funding directly to the transit provider to finance capital improvements such as vehicle acquisition, capital equipment and facility construction. This program will fund up to 80 percent of the costs of capital acquisition. These funds are discretionary and awarded competitively. Congress apportions Section 5309 funds and potential recipients are designated through a political process. After a potential recipient has been designated, it then must submit an application.

### **FTA Section 5310 Discretionary Grants**

This program funds vehicles and other capital projects for programs that serve elderly and disabled people. Funding is available to private not-for-profit agencies, or public agencies that support specialized transportation services to senior citizens and persons with disabilities in addition to rural or small city transportation services that benefit the general public. Grant funds are available through the discretionary grant program managed by ODOT. This program has 50 percent match requirements for operating projects and a 10.27 percent requirement for capital or planning projects.

### **FTA Section 5311-Nonurbanized Area Formula Program**

Section 5311 is a federally-sponsored program for general public transit services (public and/or private non-profit) in small urban and rural areas. These funds are earmarked for communities that have populations of less than 50,000 people. This program supports capital and operating as well as planning needs. These funds require local matches (80/20 for capital and administration, 50/50 for operating). The ODOT Public Transit Division distributes these funds.

### **FTA Section 5311(f) Intercity Program**

Part of 5311 funds are allocated to intercity services. Intercity transit services connect communities to rail, bus and air hubs. The program places an emphasis on connecting communities of 2,500 or more with the next larger market economy (e.g., Medford) and connecting travel modes. These funds can be used for both capital and operating expenses. Local revenues must match these funds. Match requirements are the same as those for 5311 funds.

### **Department of Labor/FTA Welfare-To-Work Programs**

The Department of Labor provides grants to communities to provide transitional assistance to move welfare recipients into unsubsidized employment. One of the areas applicants are encouraged to consider is the development of responsive transportation systems to move people to work or to career training. The ODOT Public Transit Division provides technical assistance to help local agencies pursue Job Access and Reverse Commute (JARC) program funding. This is an FTA-administered program for small cities and rural areas, encouraging access to employment. These programs fund capital as well as operating projects and require a 50/50 match.

## **State Sources**

### **Special Transportation Funds (STF)**

STF is generated by a tax on cigarettes, and is available to public and social service transit providers to fund transportation for seniors and persons with disabilities. Funds may be used for capital or operating purpose. ODOT distributes these funds to counties. Seventy-five percent of funds are distributed as formula grants (entitlements) based on population; the other 25 percent is distributed along with federal Elderly and Disabled Capital Program funds and Federal Highway Administration (FHWA) Surface Transportation Program (STP) funds as discretionary grants based on need and merit.

## **Local Sources**

### **Local Option Levy**

A jurisdiction or transportation district could place a local option levy before the voters for the purposes of funding transit. A levy could be placed on properties in either Josephine County, City of Grants Pass

or in a newly formed district covering the core JCT service area. Property values are estimated at \$4 billion in the County, \$1.3 billion in Grants Pass and \$1.9 billion in the service area.

### Payroll Tax

ORS 267.530 allows a transportation district to impose an excise tax on every employer equal to not more than six tenths of 1% (0.006) of the gross payroll. It is likely that municipalities have the same taxing authority. No vote of the electorate is needed to pass a payroll tax; the governing board of the jurisdiction may pass it. Transit services that use a payroll tax include Wilsonville SMART and Lane Transit District in Eugene.

In 2002, total payroll in Josephine County was approximately \$553,000,000. Of that, \$15,000,000 was payroll for state employees. Payroll taxes cannot be assessed on state employees. However, state In-Lieu taxes could match any payroll tax income for an amount up to just under \$90,000 (an amount equivalent to 0.6% of state payroll total in the county).

## **Intercity Bus Service**

### **Needs**

Intercity bus service between Josephine County and other destinations in Oregon and elsewhere in the United States is provided by Greyhound Bus Lines. As described in Chapter 3, existing Greyhound service is provided each weekday along the I-5 corridor between Portland and Sacramento. As of the winter of 2003, Greyhound made four daily stops in Grants Pass in both northbound and southbound directions. Greyhound terminals are located on Agness Avenue and at the Grants Pass Airport near Merlin. No significant improvements are proposed for expansion of the existing privately-operated intercity bus service or facilities.

### **Action Plan**

Goals and objectives for intercity bus service are typically the same as those previously presented and discussed for general public transit service. Policies and recommendations that are specific to the provision of intercity bus service in Josephine County are described below.

### **Policies and Recommendations**

To support the continued availability of intercity bus service to/from the Grants Pass area, the County should consider the following actions:

**Policy 8-E:** Josephine County shall coordinate with private transportation service providers to ensure that there is continued availability of transit, taxi and/or shuttle services to connect with all intercity passenger facilities.

**Policy 8-F:** Josephine County shall encourage the continued operations and future expansion of intercity bus service to and from the Grants Pass area.

- **Recommendation 8-F (1):** Explore coordination opportunities with RVTD for inter-county services.

# Chapter 9

## Transportation System Management/Transportation Demand Management Plan

### Overview

Transportation System Management (TSM) and Transportation Demand Management (TDM) are terms used to describe a broad array of strategies, programs and technologies used to more effectively manage existing transportation resources and to potentially postpone or eliminate the need for major capacity-enhancing investments. The range of TSM and TDM strategies that may be applicable in rural Josephine County are presented and discussed in this chapter.

TSM strategies focus on measures that improve the efficiency of the existing transportation system. Such strategies include traffic signalization, removal of existing unwarranted traffic signals, signal synchronization to improve traffic progression, intersection channelization improvements, one-way streets, parking restrictions, turn prohibitions, and other similar actions. With only one traffic signal in rural Josephine County, Intelligent Transportation Systems (ITS) technologies such as traffic cameras and variable message signs, particularly on state highways offer the greatest potential as TSM strategies for inclusion in the TSP.

TDM strategies and programs are aimed at reducing travel by single-occupant vehicle during peak travel periods, thus reducing the need for additional roadway capacity. TDM strategies include transit passes or other measures to increase transit use, carpools, vanpools, flexible work hours and/or a compressed workweek, telecommuting, videoconferencing, and other similar activities.

### Consistency with Other Plans and Policies

The TSM/TDM component of this TSP is primarily linked to the *Oregon Highway Plan*, Oregon's Transportation Planning Rule (TPR), the *Comprehensive Plan* for Josephine County, and the *Grants Pass Urban Area Master Transportation Plan*. The goals, objectives and policies within these plans and regulations are aimed at ensuring that TSM and TDM strategies are addressed as part of a comprehensive, multi-modal transportation system plan.

The 1999 *Oregon Highway Plan* defines policies and strategies for investing in Oregon's highway system over the next 20 years. It refines and amplifies the goals and policies of the 1992 *Oregon Transportation Plan*, and is part of Oregon's *Statewide Transportation Plan*. The *Oregon Highway Plan* recognizes the need for efficient and effective management of the street and highway system. The Plan places particular emphasis on safer traffic operations and greater system reliability through such actions as Intelligent Transportation Systems (ITS) strategies (including variable message signs to warn of congestion or hazards), slow vehicle turnouts, traffic signals and signs. The *Highway Plan* also recognizes the importance of developing and implementing a variety of travel demand management strategies that reduce reliance on single-occupant vehicles during peak travel times.

The TSM and TDM policies in the *Highway Plan* having the greatest relevance to the Josephine County TSP include:

- Establishing cooperative partnerships with local agencies to enhance overall operations and management of the transportation system.

- Working with local agencies to identify and implement off-(state highway)system improvements where these improvements would be a cost-effective way of improving the operation of the state highway system.
- Considering a broad range of ITS strategies to improve system efficiency and safety in a cost-effective manner. Particularly relevant for rural Josephine County would be such activities as: driver information, emergency or hazard notification, and traffic control.
- Supporting efficient use of the state transportation system through investment in TDM strategies.
- Seeking cost-effective expansion of the highway system’s passenger capacity through development and use of park-and-ride facilities.

The Transportation Planning Rule requires that transportation system plans address all modes of transportation, including an evaluation of various TSM and TDM strategies to enhance the efficiency and safety of transportation system operations.

The *Josephine County Comprehensive Plan* contains goals and policies intended to support TSM and TDM strategies. Goal 4 focuses on developing facilities and services that are needed and affordable to County residents. A supporting policy states that “*the physically handicapped and transportation disadvantaged shall be considered in the design of transportation facilities and alternative transportation modes*”. The purpose of Goal 8 is to control pollution. A supporting policy of Goal 8 directs the Board of County Commissioners explore mass transit as an alternative means of transportation, and to also continue management programs that reduce road-associated dust and other forms of air contamination.

The *Grants Pass Urban Area Master Transportation Plan* includes several goals and policies specifically directed at TSM and TDM strategies. While not specifically applicable to the rural portions of Josephine County, they do offer guidance for the development of policies for the *Rural TSP*. Goal 3 pertains to “*Protecting Public Investments in Public Transportation*”. The supporting objective, “*Manage the Transportation System Effectively*” (including the supporting policies), directly relates to TSM and TDM measures. Policy 3.1.1 encourages the use of TSM techniques to preserve and enhance the capacity of transportation facilities in the urban area. Techniques include right-turn channelization, signal-timing coordination and on-street parking management. Policy 3.1.2 encourages the use of TDM techniques to reduce the total demand for travel. In addition, TDM measures are intended to change the timing and location of travel demand, and the chosen mode of travel (from single-occupant vehicles to other modes).

## Transportation System Management

Transportation System Management (or TSM) improvements include actions designed to maximize efficient use of the existing transportation system. TSM strategies include actions such as traffic signalization, signal synchronization to improve traffic progression (particularly along major arterial streets), signal retiming, channelization improvements, one-way streets, parking prohibitions, turn prohibitions, use of Intelligent Transportation Systems (ITS), and other actions.

### Existing TSM Activities

TSM activities currently underway in rural Josephine County include:

- Traffic Signalization - there is currently only one signalized intersection in the rural portion of Josephine County (outside of the Grants Pass and Cave Junction urban areas). This signal is located at the intersection of Merlin-Galice Road with Monument Drive in the Merlin/North Valley area.
- Traffic Channelization – traffic lane channelization enhances the safety and capacity of the existing rural highway system by providing turn lanes and/or acceleration or deceleration lanes

where necessary and appropriate. An example of lane channelization includes the northbound right turn lane on OR 238 at Jaynes Drive that permits the deceleration of right-turning vehicles transitioning from the state highway to the county road.

- Intelligent Transportation System Assets - the development and implementation of Intelligent Transportation Systems (ITS) is a strategic approach to better managing the demands on our street and highway system and, thus, maximizing the value of transportation capital investment. According to the *Oregon ITS Strategic Plan: 1997-2017*, ITS “involves the application of advanced technology to solve transportation problems, to provide services to travelers, and to assist transportation system operators in implementing the most effective traffic management strategies to meet actual highway conditions”. Also known as Intelligent Vehicle Highway Systems (IVHS), ITS can help to address existing and projected future transportation system needs by:
  - “Allowing for better management of transportation supply and demand” (by allowing transportation managers to respond immediately to operational needs).
  - “Promoting the use of alternative modes and connectivity across the different modes”.
  - “Increasing travel efficiency and mobility without increasing the physical size of the transportation facility” (in other words, getting more use out of each dollar invested in the highway and transit system).
  - “Enabling travelers to choose (their) travel time, mode and route efficiently based on real-time roadway and transit status information.”
  - “Reducing the cost of operating and maintaining transportation facilities and services (through the use of newer technology with better reliability)”.
  - “Providing increased safety and security to travelers” (through the reduction in time to respond and clear incidents).

In rural areas, ITS generally focuses on traveler safety and security, emergency services, operations and maintenance systems both for fleet vehicles and roadways, tourism and traveler information, public transportation, and commercial vehicles.

Josephine County does not currently have TSM or ITS applications in use on the rural roadway system under the County’s jurisdiction. However, ODOT operates two types of ITS devices on I-5 and US 199 in the County: highway cameras, and road and weather information systems (RWIS). RWIS technologies are used in areas subject to extreme climate changes to report temperature, wind, precipitation and pavement conditions. ITS applications on I-5 include a highway camera and RWIS at Sexton Mountain Pass north of Merlin. On US 199, ITS features include a variable message sign located in Grants Pass near the UGB, and a highway camera and RWIS installations at Hayes Hill and O’Brien.

## Needs and Strategies

TSM and ITS techniques can serve the need for driver information and education concerning issues such as travel options, weather conditions, and safe speeds in light of potential hazards like wildlife and physical roadway conditions.

Josephine County should continue to coordinate with ODOT and advocate for appropriate use of TSM and ITS on the State highways and major County roads. Areas where TSM and ITS applications may be appropriate include:

- Installation of traffic signals on the rural road system as warranted. The potential need for signalization has been discussed in Chapter 6 and includes the intersections of:

- I-5 northbound ramps at Merlin-Galice Road (Exit 61)
- US 199 at Willow Lane
- Public safety through coordinated response to incidents.
- Travel information such as road closures, weather, roadway events and construction delays. Information could be provided through coordinated efforts with other agencies on the internet.
- Transit information provided through the internet or other media, targeted at residents who are mobility impaired and dependent on rural transit for mobility.
- On-going traffic monitoring to provide the data necessary for effective management of the existing transportation system.

## Transportation Demand Management

Transportation Demand Management or TDM involves using a variety of strategies to reduce travel by single-occupant vehicle during peak travel periods, to reduce the need for additional roadway capacity. TDM strategies include the use of transit, carpooling, vanpooling, working flexible hours and/or a compressed workweek, and working from home through the use of communications technology. Most TDM strategies rely on voluntary participation and often incentives are provided to make the use of these strategies more attractive. TDM measures can also include land use actions such as higher density or mixed-use development and growth management (Smart Growth) strategies.

### Existing TDM Activities

Presently Josephine County does not have a TDM program for the rural area of the County. In Jackson County, RVTD currently promotes a full range of several TDM strategies, some of which may be applicable to Josephine County. Potential TDM strategies that could be expanded by RVTD in Josephine County including, but may not be limited to: education programs, carpools, vanpools, telework, and other strategies.

### Needs and Strategies

Table 9-1 lists TDM strategies that could be considered for implementation within rural Josephine County.

**Table 9-1**  
**Examples of Transportation Demand Management Strategies**

<b>Strategy</b>	<b>Description</b>
Alternative Work Hours	Flex time and alternative work weeks (such as 4 10-hour days)
Bicycle Improvements	Improved bicycle planning, education and facilities
Guaranteed Ride Home	Provide a limited number of free rides home for transit and rideshare commuters
Intermodal Bicycle Services	Provision of bike lockers at transit stops; bike racks on transit vehicles
Park and Ride	Provision of commuter parking at urban-fringe transit stops
Preferential Parking	Preferential parking for rideshare vehicles
Rideshare Programs	Rideshare promotions and ride-matching
Security	Address security concerns of rideshare, transit, cycle, and pedestrian commuters
Telecommuting	Working at home to avoid commute trips
Transit Improvements	Improve public transit service
Vanpool Programs	Promotion/organization of vanpools

The County typically has a support role for TDM strategies, which is acknowledged in the following strategies:

- Coordinate with Rogue Valley Community College, major employers in the Merlin area, and business organizations such as the Grants Pass Chamber of Commerce to encourage TDM strategies including flex time/alternative work weeks, ridesharing and telecommuting.
- Coordinate with ODOT and the City of Grants Pass to pursue opportunities for installing one or more park-and-ride lots at the edge of the Grants Pass UGB.

## **TSM/TDM Action Plan**

### **Draft TSM/TDM Goals and Objectives**

Draft goals and objectives to address the need for Transportation System Management (TSM) and Transportation Demand Management (TDM) actions have been developed for the *Josephine County Rural TSP*. These goals and objectives are as follows (numbers reflect the numbering of the complete list of goals and objectives).

#### **Goal 1: Improve safety for all transportation modes.**

- *Objective 1 - Ensure the transportation system is planned to maximize safety.*

#### **Goal 2: Provide for a transportation system that is accessible, efficient and practical.**

- *Objective 1 - Increase mobility and access options for Josephine County citizens.*

#### **Goal 3: Provide sufficient capacity within the transportation system to accommodate future demand.**

- *Objective 1 - Satisfy Transportation Planning Rule requirements for system capacity and for encouraging the use of alternative modes of transportation.*
- *Objective 2 – Maximize transportation system capacity through the use of facility improvement, Transportation Demand Management actions, Transportation System Management actions, appropriate IVHS and other appropriate tools and techniques.*
- *Objective 3 - Encourage alternative modes of transportation by providing for a choice in modes.*

### **TSM/TDM Policies and Recommendations**

Policies and recommended actions were identified as a means to support TSP goals and objectives for each transportation mode, including TSM and TDM. The policies and recommendations listed below are intended to provide direction to the County for on-going TSM and TDM activities and improvements.

**Policy 9-A:** Josephine County will pursue and encourage implementation of Transportation Demand Management (TDM) and Transportation System Management (TSM) activities whenever possible as an alternative to building new transportation facilities.

- **Recommendation 9-A (1):** Josephine County should promote the use of alternative commute options to reduce motor vehicle travel generated by employment sites and schools by participating in activities to raise awareness about the use of TDM strategies.
- **Recommendation 9-A (2):** Josephine County should seek support from RVTD resources as available.
- **Recommendation 9-A (3):** Josephine County should work cooperatively with ODOT to identify and implement appropriate TSM strategies on the rural road and highway system including ITS strategies.

# Chapter 10

## Air Transportation Plan

### Overview

This chapter includes a review and assessment of needs, deficiencies, policies and improvement options affecting the air transportation system within Josephine County. Included is a discussion of the local and regional planning and policy context for developing and maintaining this travel mode, an evaluation of needs and deficiencies in the existing system, and a discussion of various improvement recommendations for enhancing and expanding this system.

Information contained in this memo was obtained largely from the 1992 *Grants Pass Airport Master Plan*, the 1992 *Illinois Valley Airport Master Plan*, and the 2001 *Illinois Valley Airport, Airport Layout Plan Update Report*. These three plans document existing and future demand for airport services, evaluate the condition of airport facilities, and identify the need for improvements. Of particular importance to the TSP are any landside access issues to these airports (including access from the airport property to the state and county roadway system). Also important are issues related to the preservation of compatible land uses in the vicinity of these airports to ensure that their long-term operational feasibility is not compromised by encroaching incompatible development.

### Consistency with Other Plans and Policies

The air transportation component of this TSP is primarily linked to the *Oregon Aviation Plan*, Oregon's Transportation Planning Rule (TPR), the *Comprehensive Plan* for Josephine County, and the *Grants Pass Urban Area Master Transportation Plan*. The goals, objectives and policies within these plans and regulations are aimed at ensuring that air transportation is addressed as part of a comprehensive, multi-modal transportation system plan.

The 2000 *Oregon Aviation Plan* defines policies and strategies for investing in Oregon's public-use aviation system over the next 20 years. It refines and amplifies the goals and policies of the 1992 *Oregon Transportation Plan*, and is part of Oregon's *Statewide Transportation Plan*. The *Oregon Aviation Plan* recognizes the key role that public-use airports play in ensuring economic growth and livability throughout the state, and the importance of air transportation in connecting Oregon's rural populations with services and businesses in larger cities, the nation, and beyond. The policies within this plan having the greatest relevance to the *Josephine County Rural TSP* include:

- Preserving Oregon's system of airports and current service levels.
- Protecting airports from incompatible land uses.
- Supporting airport access for emergency and medical response.
- Supporting economic development by providing access to markets.
- Integrating airport systems with surface modes of transportation, and allowing for a choice of modes for moving people and goods.

The Transportation Planning Rule requires that transportation system plans address all modes of transportation, including air transportation.

The *Josephine County Comprehensive Plan* (2000) contains goals and supporting policies related to air transportation. Goal 4 focuses on developing facilities and services that are needed and affordable to County residents. A supporting policy pertaining to air transportation states that "*the County shall*

*continue to maintain and improve the appropriate airport facilities within Josephine County. Zoning standards shall be established to prevent the development of incompatible uses or hazardous structures within the flight approach zones. Any development and expansion will be in accordance with applicable airport master plans". Goal 5 is intended to "diversify, expand and stabilize economic opportunities for the betterment of the County". This goal is supported by a policy stating that County-owned land in the vicinity of the Grants Pass (Merlin area) Airport will be developed for industrial use.*

The *Grants Pass Urban Area Master Transportation Plan* includes goals and policies related to air transportation. While not specifically applicable to the rural portions of Josephine County, they do offer guidance for the development of policies for the *Rural TSP*. Goal 1 encourages the City of Grants Pass, Josephine County and ODOT to "Provide a Comprehensive Transportation System". This goal is supported by the objective of providing a multi-modal transportation system. Policy 1.5.1 relates somewhat to air transportation, as it calls for the provision of transportation choices for the movement of both people and goods.

The Rogue Valley International/Medford Airport (located at the northern end of the Medford urban area), is also important to the movement of people and goods by air in Josephine County. Along with the more distant airports in Coos Bay/North Bend and Klamath Falls, this facility is one of the few locations offering regularly scheduled airline service in southern Oregon. Of particular importance to the residents of Josephine County is the policy direction for operation and improvement to air carrier service in southern Oregon established by the 2002 *Regional Transportation Plan (RTP)* prepared by the Rogue Valley Council of Governments. The RTP recommends local governments to "...take actions to promote air transportation in the region and its connections with the other areas in the state, nation, and abroad. This includes ensuring that good ground transportation is available for passengers and freight, and that the Airport Master Plan is periodically updated as necessary." (Policy 13-1).

## **Needs**

Within Josephine County there are two general aviation public airports, the Grants Pass Airport located just north of Grants Pass near the outskirts of Merlin, and the Illinois Valley Airport located approximately four miles south of Cave Junction. A discussion of the existing facilities and usage patterns at these airports, as well as future projected use and improvement needs are briefly discussed in this section.

### **Grants Pass Airport**

The first Grants Pass Airport was built in 1928 just north of the city. The current airport near Merlin (approximately five miles northwest of Grants Pass) was completed in 1959, and is dedicated to general aviation use. Various improvements, including additional land acquisition for airport expansion, have been made to this airport over the past 45 years. The airport currently has 400 acres with a 4,000-foot runway, 46 hangars owned by the county, 70 private hangars, 75 outdoor tie-downs, and several commercial businesses on-site. Aviation fuel is also available on-site. Access to this airport is via Merlin-Galice Road and Carton Way. No existing or future high accident or congestion problems have been identified in the immediate airport area that exceed the County's threshold for improvement.

It should be noted that the Grants Pass Airport is currently located within the federal Foreign Trade Zone (FTZ) 206 (along with the Rogue Valley International/Medford Airport and substantial surrounding property). As noted in the discussion of freight movement, FTZs are secured areas that allow companies doing business within them to reduce or eliminate a number of federal duties, taxes, and quotas that otherwise might otherwise apply, thereby potentially improving profitability. The FTZ designation is used as a business development or economic development tool. In the Merlin area, much of the freight-related activity that could benefit from the FTZ is currently centered on the North Valley Industrial Park.

Potential future industrial development at the airport, on the Rendata property or in other locations, could also benefit from the FTZ designation.

The 1992 *Grants Pass Airport Master Plan* reports that the airport will continue to serve mainly general aviation traffic. Annual aircraft operations are projected to increase by 50 percent from 1992 to 2010, but would not exceed the capacity of the existing runway and taxi system. The *Master Plan* recommends expanding the runway length by 1,200 feet to increase the range of business aircraft it can accommodate. It also recommends various other airport infrastructure improvements including additional hangars and tie-downs, and improved navigational aids. Additionally, the *Master Plan* recommends various roadway and other infrastructure improvements to support development at the North Valley Industrial Park, such as the extension of Flaming Road to Paradise Ranch.

## **Illinois Valley Airport**

The Illinois Valley Airport was established in 1943 as a U.S. Forest Service smoke jumper base. The airport was deactivated by the Forest Service in 1981 and deeded to Josephine County in 1988. The airport is located four miles south of Cave Junction immediately adjacent to US 199. The airport currently serves a variety of general aviation users, with occasional government use. The airport has 175 acres with a 5,200-foot runway, VFR (visual flight rules) navigational aids, 20 rental hangars, recreational camping facilities, an on-site restaurant, and some industrial park development. Direct access to this airport is available from US 199. Secondary access is available via Airport Road. Approximately 400 feet of the existing runway has a displaced threshold due to the proximity of Airport Road.

The 2001 Airport Layout Plan includes several recommendations to accommodate anticipated growth in aircraft activity at this airport. These recommendations include returning the runway to a full 5,200 feet of useable length with the realignment of Airport Drive, development of new facilities on the airport site including taxiways, hangars, aircraft aprons, navigational aids, lighting, and fuel storage. The purchase of approximately 70 acres on the west side of the runway was recommended to expand industrial development potential, particularly in relation to the Foreign Trade Zone located on the northwest corner of the airport property. Some industrial park development has recently been completed which can accommodate between 15 and 20 businesses.

With a full service, air carrier airport offering scheduled passenger service located nearby in Medford, the Grants Pass Airport and Illinois Valley Airport appear to meet existing needs for general aviation services within rural Josephine County.

## **Land Use Issues**

In addition to the airport improvement needs identified and discussed above, consideration needs to be given to the impacts that the Grants Pass and Illinois Valley Airports can have on land uses in their vicinity. These impacts include not only potential safety issues related to both aircraft operations and risks to surrounding land uses, but also potentially to neighborhood quality of life issues related to airport noise. The economic and transportation needs associated with airport use and development must be balanced against these potential land use issues.

To address airport area land use issues, the Oregon Administrative Rules (Section 660-013-Airport Planning) requires local agencies with planning authority for one or more airports or for areas within safety or compatibility zones around airports to adopt comprehensive plan and land use regulations for airports consistent with the requirements to that division and ORS 836.600 through 836.630. These plans and regulations are intended to encourage the long-term viability and compatibility of airports with their surrounding communities.

To meet the requirements of the OAR, local governments are required to:

- Adopt an Airport Safety Overlay Zone to prohibit structure, trees and other objects of natural growth from penetrating airport imaginary surfaces (e.g., in particular, height limitations in areas used by aircraft to approach or depart from the airport's runways);
- Adopt airport compatibility requirements to prohibit new residential development and public assembly within the Runway Protection Zone; to limit establishment of specified uses within a noise impact boundary; to prohibit siting of new industrial uses and the expansion of existing industrial uses that could cause emissions of smoke, dust or steam that would obscure visibility within airport approach corridors; to limit outdoor lighting that would project directly onto an existing runway or taxiway or into existing airport approach corridors; to coordinate siting of transmission facilities with ODOT Aeronautics Division; and to regulate water impounds and the establishment of new landfills near airports (that might attract birds).

## Action Plan

### Draft Air Transportation Goals and Objectives

Draft goals and objectives to address the needs of air transportation have been developed for the rural Josephine County TSP. These goals and objectives are as follows (numbers reflect the numbering of the complete list of goals and objectives).

#### **Goal 1: Improve safety for all transportation modes.**

- *Objective 1 - Ensure the transportation system is planned to maximize safety.*

#### **Goal 2: Provide for a transportation system that is accessible, efficient and practical.**

- *Objective 1 - Increase mobility and access options for Josephine County citizens.*
- *Objective 2 - Facilitate movement of goods into and out of the County.*
- *Objective 3 - Enhance freight mobility (by rail, truck and air) and intermodal transfer.*
- *Objective 4 - Address changing characteristics of trucking, aviation and rail industries.*

#### **Goal 3: Provide sufficient capacity within the transportation system to accommodate future demand.**

- *Objective 1 - Satisfy Transportation Planning Rule requirements for system capacity and for encouraging the use of alternative modes of transportation.*
- *Objective 3 - Encourage alternative modes of transportation by providing for a choice in modes.*

#### **Goal 5: Provide system connections as needed to improve efficiency and access and to improve circulation.**

- *Objective 3 - Achieve improved connectivity between modes of transportation.*

#### **Goal 6: Consider and implement land use and transportation plans/solutions simultaneously in all planning activities.**

- *Objective 1 - Provide for the consideration of the interrelationships and connections between transportation and land use in future planning.*
- *Objective 2 - Ensure that transportation improvements meet the needs of rural land uses, consistent with the Transportation Planning Rule.*

## Policies and Recommendations

Policies and recommended actions were identified as a means to support TSP goals and objectives for each transportation mode, including aviation. The policies and recommendations listed below are

intended to provide direction to the County for the on-going management and improvement of the air transportation system, with particular emphasis on the Grants Pass and Illinois Valley Airports.

**Policy 10-A:** Future updates to the plans for the Grants Pass and Illinois Valley airports and the transportation system plans for Josephine County, Cave Junction and Grants Pass should be coordinated to:

- Improve opportunities and efficiencies for emergency and medical response;
- Maximize economic development opportunities by improving access between industry and commerce to markets both within and outside the region; and
- Provide for appropriate connections between modes of transportation to facilitate choice and efficiencies for the movement of people and goods.

**Policy 10-B:** Josephine County should coordinate implementation of recommended roadway system improvements in the vicinity of the Grants Pass and Illinois Valley Airports with the access and infrastructure needs of these facilities.

- **Recommendation 10-B (1):** Development plans and secure funding to implement the following roadway improvements:
  - Adding left turn lanes and bicycle lanes on Monument Drive.
  - Widening the Merlin-Galice Road/Monument Drive intersection to provide additional turn lanes and protected left turns.
  - Improving the I-5 northbound/Merlin-Galice Road intersection area to accommodate anticipated traffic growth.

**Policy 10-C:** Josephine County will protect the function and operations of airports from incompatible land uses.

- **Recommendation 10-C (1):** To address land use compatibility issues in the vicinity of the Grants Pass and Illinois Valley Airports, the current comprehensive plan and code should be evaluated to ensure the following:
  - That the types and levels of public facilities and services needed to support development located at or planned for the airports are provided;
  - That there is adequate mapping of the airport areas as required by OAR 660-013;
  - Develop and consider any ordinances necessary to carry out the requirements of OAR 660-013 consistent with applicable statewide planning requirements. This might include revisions to the County's existing Airport Overlay Zone (Josephine County RLDC, Article 69.4) if this is determined to be inadequate to meet the requirements of OAR 660-013 for the safety provisions of an Airport Overlay Zone;
- **Recommendation 10-C (2):** Consider land use plans in the vicinity of the airport to minimize potential safety and noise related impacts associated with the airports.