# **Transportation System Plan**





**Chapter 8** Freight Mobility, Air, Rail and Pipeline Plan



# 8 Freight Mobility, Air, Rail and Pipeline Plans

# Introduction

The safe and efficient movement of freight and goods is vital to the economy of McMinnville and the larger Yamhill County area. McMinnville is center to a major source of agricultural and timber commodities which are shipped by truck and in some cases rail. Cascade Steel ships both raw material and finished steel products by rail. Trucking also services other industrial uses within McMinnville's Industrial areas. The roadways that provide access to these facilities are vitally important to the successful movement of freight.

Historically, there has been a strong local perception that trucks should not route through downtown McMinnville. The goal has been to link Highway 99W and Highway 18 from the southwest, through the central city to its Industrial Park east of Lafayette Avenue. Downtown McMinnville streets were built in a compact grid street system, with small intersection corner radii. Longer and multi-unit trucks have a very difficult time negotiating the downtown grid, which can easily cause significant traffic back-ups.

McMinnville owns and operates the McMinnville Airport and has invested significantly in its long-range planning and facility development. The McMinnville Municipal Airport Layout Plan (Master Plan) was completed and adopted in 2004. The City is about to implement many of the Plan recommendations.

This chapter focuses on four key areas:

- Policies
- Truck Routes and Priority Projects
- Rail Service and Rail Crossings
- Air, Water and Pipeline Transport

# Policies

Additional policies are identified to help guide the freight mobility, air and rail plans, supplementing those policies already included in the McMinnville Comprehensive Plan and summarized in Chapter 2 of the TSP. General guiding policies include:

- **Truck routes** Identify and designate truck routes that tie intermodal facilities and industrial zones to the designated through routes.
- **Airport** Encourage safe aviation facilities that benefit local commerce.
- Airport area land use Do not permit land uses within airport noise corridors that are not noise compatible, and avoid the establishment of uses that are physical hazards to air traffic at the McMinnville Airport.
- **Railroad** Encourage railroad infrastructure to support current and future economic activities.
- **Railroad crossings** Encourage gate controls and sidewalk facilities at primary railroad crossings of streets.

# **Freight Mobility**

State Highways 18 and 99W serve as statewide and regional highway routes into and through McMinnville (see Chapter 2, Functional Classification).

#### Highway 99W

Highway 99W is not designated on the State's *Freight Route* system, but serves locally as McMinnville's major arterial and a local truck route.

#### Highway 18

Highway 18 is designated in the Oregon Highway Plan (OHP) on the National Highway System as a *Freight Route*. ODOT's criteria for designating freight routes includes freight volume, tonnage, connectivity, linkages to regional freight routes, percent of trucks on state highways and connectivity to other freight generating sites. Within urban areas like McMinnville, the policy and design objectives for freight routes are to function as expressways.

ODOT's and McMinnville's completion and adoption of the Highway 18 Corridor Plan is consistent with the OHP recommendation: eventual grade separation of Highway 18 to operate and function as an expressway. The Highway 18 freight route mobility standards and access management policies are noted in Chapter 2.

#### State and Local Truck Routes

**Exhibit 8-1** illustrates the recommended Truck Route map for McMinnville, including the following:

- State Highways 18 and 99W
- Three Mile Lane between Highway 18 and Johnson Street

• Johnson Street / Lafayette Avenue from Third Street to Highway 99W.



Trucks on Lafayette Avenue



#### **Truck Priority Projects**

As noted above, and in working with the Transportation Advisory Committee, the TSP effort identified new local truck routing along Three Mile Lane and Lafayette Avenue for improved truck access to one of McMinnville's industrial areas. This truck routing system will require advancement of Highway 18 interchange improvements, sooner than anticipated in the phasing plan from the Highway 18 Corridor Refinement Plan, and replacement of the Yamhill River Bridge. Each of these improvements are recommended in the Street System Plan (Chapter 4), and shown in Exhibit 8-2.

**Recommended Truck Route Improvements** Exhibit 8-2

# amhill River Bridge Iti-modla safety, access lighway 18 Interchand or Full Access

#### **County Road Connectors**

Several county roads, like Westside Road, carry local truck traffic into and through the McMinnville area, mainly the hauling of timber and agricultural products. Truck traffic varies seasonally on these routes. The TSP does not recommend designating these routes as truck routes, as it encourages greater trucking on undersized city streets and through residential neighborhoods.

### Rail

Rail transportation is a key component in the movement of freight and goods. Rail lines safely and efficiently carry millions of tons of freight through McMinnville on an annual basis. Without rail access, more trucks would be needed to transport freight which would further increase congestion and cause increased wear to the existing roadway system.

**Exhibit 8-1** shows the existing rail route and at-grade crossings. The Portland and Western Railroad provides short-haul freight service in McMinnville. This line connects Portland with Albany where it meets the Burlington Northern-Sante Fe Railroad (BNSF). The railroad runs through the east side of McMinnville passing through a portion of the Linfield College campus, and continuing northward through the downtown, and extending northeasterly ultimately passing behind Cascade Steel Rolling Mills, a major rail shipper; a rail spur projects west into this site specifically to serve the steel mill. Freight business on this line is generally increasing and is an important component of McMinnville's economy.

The railroad presently carries two freight trains a day on a regular basis. The railroad also provides additional switching runs in high volume areas such as near the Cascade Steel Rolling Mills site. These switching runs are also near the City's one non-gated railroad crossing located at Riverside Drive, north of and adjacent to the steel mill. The industrial land-rail connection removes trucks from the local highway system; the railroad crossings impede east-west mobility.



#### **Railroad Crossings**

At grade railroad crossings in the City, as illustrated in **Exhibit 8-1**, are points of friction between rail traffic and vehicular, pedestrian, and bicycle traffic. Delays for vehicular traffic and trucks are increased when trains are crossing the roadway. Buses are required to stop and check for rail traffic at railroad crossings before proceeding even when no warnings are active causing delays for motorists behind them. At grade rail crossings can be hazardous for pedestrians and cyclists because of the uneven nature of the roadway.

There are fourteen at-grade railroad crossings within the McMinnville UGB. Many of the downtown and major street railroad crossings were reconstructed and modernized in 2002, at which time both the 4<sup>th</sup> Street and Washington Street crossings were closed. These improvements included rail bed structural improvements, and replacement or new advanced warning signs, signals and crossing arms. Some of the improvements included new sidewalks crossing the rail line on both sides of the street crossing, others did not or were isolated to only one side.

A review of the Federal Railroad Administration's<sup>1</sup> safety records revealed that there was one reported rail-related accident within the McMinnville UGB, located at the McDaniel Street crossing in 2006. The accident involved a motorist who drove around the crossing gate at about 10 mph and was struck by the train which was traveling at about 5 mph. This accident was the cause of the driver's failure to obey traffic law, and resulted in no injuries.

In Chapter4 (Street System Plan) there are two street projects that include new railroad crossings improvements, with new traffic control (signal arms) signs and sidewalk crossing improvements: Riverside Drive and Booth Bend Road. Chapter 4 also recommends a new sidewalk on north side of the 5<sup>th</sup> Street railroad crossing.

Recommended railroad crossing improvements are shown in **Exhibit 8-3**.



Signal, Crossing Arms and Sidewalks at 3<sup>rd</sup> Street Rail Crossing

Additional sidewalk improvements are recommended at the following railroad crossings:

- McDaniel Street
- 8<sup>th</sup> Street
- 5<sup>th</sup> Street

	Traffic Control				Sidewalks					
Crossing / Street	Cross-buck sign	Pavement Marking	Advanced Warning Signal	Crossing Arm	Both sides	One side	None	Plan Recommendation		
RIVERSIDE DR	x						x	See Chapter 4, Street Projects - new crossing roadbed and signal with arms, and new sidewalks		
ORCHARD AVE	x	x		х			х	New sidewalks, both sides		
_AFAYETTE AVE	x	х	х	х	x					
MCDANIEL LN	x	x		х		x		New sidewalks, one side		
NE 13TH ST	x	х	x	х	x					
NE 8TH ST	x	х		х		x		New sidewalks, one side		
NE 5TH ST	x	х		х		x		See Chapter 4 Street Projects - New sidewalks, one side		
NE 3RD ST	x	х	х	х	x					
NE 2ND ST	x	x		х	x					
NE 1ST ST	x	x		х	x					
WASHINGTON ST	x					x				
STOREY ST	x	x		х	x					
DAVIS ST	x	x		х	x					
BOOTH BEND RD	x	x		x			x	See Chapter 4, Street Projects - new crossing roadbed and signal with arms, and new sidewalks		

#### Exhibit 8-3 Recommended Railroad Crossing Improvements



Missing Sidewalk at 8th Street



Missing Sidewalk at 5th Street

# Air

The McMinnville Airport Layout Plan<sup>2</sup> (MALP), including its findings and recommendations, are included in the TSP by direct reference.

### Background

McMinnville Municipal Airport (MMV) is owned and operated by the City of McMinnville, Oregon. Approximately 710 acres in size, the airport has a triangular configuration, formed by two major runways and a connecting taxiway.

The FAA classifies the airport as a general aviation (GA) facility. A general aviation airport does not receive scheduled commercial passenger service but serves other commercial purposes such as charters. The McMinnville Airport receives private business and recreational trips. The airport is also an important pilot training facility for numerous airline and aircraft operators. Commercial passenger service is available via Portland International Airport approximately 75 minutes away.

McMinnville's airport is the only airport located in Yamhill County that is eligible for federal funding through the National Plan of Integrated Airport Systems (NPIAS), administered by the FAA. NPIAS airports are eligible for federal funding of improvements through FAA programs such as the current Airport Improvement Program (AIP). The FAA requires that all NPIAS airports periodically update their airport plans to maintain effective long-term planning.

MMV is included in Oregon's "Core System of Airports" as defined in the <u>Oregon Aviation Plan</u> (OAP).<sup>3 4</sup> Core system airports are defined as having "a significant role in the statewide aviation system." MMV is included in the "Business/High General Aviation (GA) Airport" category based on its current functional role. Business/High Activity airports typically accommodate corporate aviation activity, including business jets, in addition to a wide range of general aviation users.

The OAP-defined minimum facility standards for Business/High Activity GA airports include the provisions of all-weather capabilities,

instrumentation, a runway-taxiway system and services capable of accommodating a wide variety of aircraft activity. Business/High Activity GA airports are significant components in the statewide transportation system and generate both direct (employment, etc.) and indirect economic benefits for the local community or region through commercial-related aviation businesses and other nonaviation businesses that rely directly on general or business aviation.

#### **Plan Conclusions**

The major MALP study conclusions are noted here:

- MMV is included in the <u>National Plan of Integrated Airport</u> <u>System (NPIAS)</u>, making it eligible for federal funding through the Federal Aviation Administration (FAA).
- MMV is categorized as a "Business/High Activity General Aviation Airport" in the 2000 <u>Oregon Aviation Plan</u> and is included in Oregon's core system of airports, which denotes its significance in Oregon's aviation system.
- MMV is recognized as one of the northwest's premier glider training facilities, with currently more than twenty locally based sailplanes/gliders.
- MMV has two paved runways (4/22 and 17/35). Runway 4/22 is served by a full-length parallel taxiway. An access taxiway was recently removed and an infield taxiway is to be constructed in 2009.
- The 1989 Airport Layout Plan (ALP) indicated that the "existing" airport reference code (ARC) was B-II, which is consistent with multi-engine or small business jet aircraft. The ALP identified the "future" ARC as D-III, which includes transport category aircraft.
- The majority of McMinnville Municipal Airport is located entirely within the City of McMinnville's city limits and Urban Growth Boundary (UGB), in the General Industrial (M-2) Zone. The extreme northeast corner of airport property, in the vicinity of the intersection of Oregon State Highway 18 and Cruickshank Road, is outside the city limits and UGB and is subject to Yamhill County's zoning jurisdiction. The City's M-2 (General Industrial) Zone allows airports as an outright permitted use.

#### **Plan Recommendations**

The City of McMinnville has or is in the process of implementing many of the MALP recommendations. The Plans major recommendations are summaized here:

- Regular scheduling of pavement maintenance.
- Revised design standards for Runway 4/22 based on FAA airport reference code (ARC) B-II Runway 17/35.
- Expansion of the outer section of the terminal apron to provide additional parking for aircraft
- Expansion/replacement of airport terminal building
- Closure of Taxiway D (completed)
- Reconstruction of runway 17/35 (completed)
- Acquisition of approximately 12 acres within the future runway (35) protection zone (RPZ) to meet FAA RPZ clearance and control guidelines.
- Lighting Runway 17/35 to increase day/night operational capabilities and safety.
- Reconfiguration of glider staging area located along the east side of Runway 17/35 to eliminate conflicts with several FAA-defined clearances
- Hangar reconfiguration, location and expansion
- New internal airport access road to serve future aviation and related development in the eastern and infield areas of the airport.
- Ensure that the City of McMinnville, Yamhill County, and the City of Dayton revise or amend their land use airport overlay zoning to reflect updated boundaries of the FAR Part 77 airspace surfaces that fully comply with Oregon state law (ORS Ch. 836.600-630). The ordinance language and mapping developed and maintained by the individual land use jurisdictions should be consistent to ensure overall compatibility.
- The City of McMinnville should require that applicants for all leases or development proposals involving construction of structures on the airport demonstrate compatibility with the airport's protected airspace surfaces. The applicant should be

required to provide all documentation necessary for the sponsor to obtain "no objection" finding by FAA resulting from the review of <u>FAA Form 7460-1 – Notice of Proposed Construction or</u> <u>Alteration</u>, prior to approval of ground leases. Any proposal that receives an objection by FAA should not be approved without first addressing FAA concerns.

- Local (City or County) planning and building officials should require that applicants for all proposed development within the boundaries of the airport overlay zone (as defined by the updated Airport Airspace Plan) demonstrate a finding of "no objection" by FAA resulting from review of proposed development (FAA Form 7460-1) prior to approval.
- Recommendation that any proposed changes in land use or zoning within the boundaries of the airport overlay zone be coordinated with the Oregon Department of Aviation (ODA) to ensure consistency with Oregon airport land use guidelines.

The physical relationship that exists between MMV, the adjacent Evergreen International complex, and the Evergreen Air Museum/Captain Michael King Smith Education Institute creates an extremely valuable asset that should be preserved and enhanced whenever possible for the continued benefit of the entire community. The unique combination of public and private aviation-related investment has resulted in substantial job creation, increased tourism, and significant overall contribution to the local economy.

## Water

Within McMinnville there are no navigable waterways. The South and North Yamhill Rivers form portions of the McMinnville UGB and city limit line. Neither of these rivers however are used for shipping, as they are used only recreational purposes. No new policy or action plans are included or recommended in McMinnville's TSP regarding water transport.

# **Pipeline**

A 6-inch natural gas pipeline runs through McMinnville. The pipeline is owned and operated by Northwest Natural Gas Company. The gas line currently runs under capacity. There are no foreseeable needs or plans to either expand or relocate this line within the next 20 years (as reported by NW Natural Gas). The natural gas line is also shown in **Exhibit 8-1**.

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<sup>&</sup>lt;sup>1</sup> Federal Railroad Administration, website data records – 1995-2009. http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/ <sup>2</sup> McMinnville Airport Layout Plan, City of McMinnville, prepared by Century West, 2004.

<sup>&</sup>lt;sup>3</sup> Oregon Aviation Plan (Dye Management/Century West), © Oregon Department of Transportation 2000.