

APPENDIX C
EXISTING TRANSPORTATION
FACILITIES

Appendix C - Existing Transportation Facilities

1. Highway and Arterial System

Introduction & Purpose

The regional highway and arterial system consists of federal highways, state highways, county roads, and city streets. RTPPO's are responsible for designating the regional system as part of the Regional Transportation Plan. The criteria for establishing the regional system is set forth in RCW 47.80.30. A facility should have one or more of the following characteristics:

- Crosses member county lines.
- Is or will be used by a significant number of people who live or work outside the county in which the facility, service, or project is located.
- Significant impacts are expected to be felt in more than one county.
- Potentially adverse impacts of the facility, service, program, or project can be better avoided or mitigated through adherence to regional policies.
- Transportation needs addressed by a project have been identified by the regional transportation planning process and the remedy is deemed to have regional significance.
- Provides for system continuity.

The following sections provide a description of the Highway and Arterial System components and highlight issues and deficiencies identified.

System Description

The Highway and Arterial System consists of different components serving different transportation users and needs. The following highlights the relevant functional classification systems, historical traffic growth and associated congestion, as well as safety issues.

Functional Classification

Functional classification is the process by which public streets and highways are grouped into classes according to the character of service they are intended to provide.

Generally, highways fall into one of four broad categories-- principal arterials, minor arterials, collector roads, and local roads.

- Arterials provide longer through travel between major trip generators (larger cities, recreational areas, etc.)
- Collector roads collect traffic from the local roads and also connect smaller cities and towns with each other and to the arterials.
- Local roads provide access to private property or low volume public facilities.

Table 1 shows the federal functional classification for the rural and urban areas. Urban area boundaries are fixed primarily to establish eligibility for project funding and are not to be confused with planning area boundaries that are defined for the comprehensive planning process. Urban area boundaries are established by WSDOT in cooperation with Metropolitan Planning Organizations using a set of criteria. All boundaries are approved by Federal Highways Administration (FHWA).

Table 1. Federal Functional Classification (FCC) System

Rural Area	Urban Area
Interstate	Interstate
Principal Arterial or Minor Arterial	Principal Arterial
Major Collector	Minor Arterial
Minor Collector	Collector
Local Access	Local Access

In addition to federal functional classification, the roadway system has the following federal and state classifications:

National Highway System (NHS) – The federal National Highway System designation includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS includes the following subsystems of roadways:

- Interstate - The Eisenhower Interstate System of highways.
- Other Principal Arterials - These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.
- Strategic Highway Network (STRAHNET) - This is a network of highways which are important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.
- Major Strategic Highway Network Connectors - These are highways which provide access between major military installations and highways which are part of the Strategic Highway Network.
- Intermodal Connectors - These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System.

Highways of Statewide Significance (HSS) – Washington State has designated Highways of Statewide Significance per RCW 47.06.140. These facilities include interstate highways and other principal arterials that are needed to connect major communities in the state. The designation helps assist with the allocation and direction of funding.

Non-HSS Routes – State designation includes state highways that are not classified as HSS. These are also known as State Highways of Regional Significance

National Scenic Byways – Federal designation of byways based on scenic, cultural, historic, natural, recreational, and archaeological qualities. Includes the following classes:

- All American Roads (SR 410 Enumclaw to Naches)
- National Scenic Byway (SR 97 from Kittitas County to Klickitat County)

Local Roadways -

- Approximately 70% of the classified roadways in Yakima County are Major and Minor Collectors.
- Major and Minor Collectors are located in the more rural areas of the County and span longer distances to provide critical connections between the outlying rural communities and the urban centers, including the interstate system.

Existing Traffic Volumes and Congestion

Traffic volumes throughout the Yakima Valley region vary by facility. Table 2 shows existing and historical traffic volumes for state facilities within the region.

Table 2. State Route Annual Average Growth Rates

Route	SRMP ²	Annual Average Daily Traffic		Compound Annual Growth Rate
		2005	2014	
I-82	34.02	43,000	48,000	1.2%
US-12	200.55	24,000	29,000	2.1%
SR-22	0.86	7,800	7,900	0.1%
US-97	61.62	6,300	8,000	2.7%
SR-24	8.68	2,600	2,900	1.2%

1. Source: 2014 WSDOT Annual Traffic Report

2. State Route Mile Post

- State routes within Yakima County have experienced modest growth during the last 10 years.
- I-82 and US-12 carry a majority of the daily traffic in the region with over 77,000 vehicles a day between them.
- US-97 is experiencing the significant growth with approximately 3% growth per year. This is a shift from the US-12 approach to I-82 which has been at 3% in the past M/RTP. The other routes are growing more modestly at less than 1.5% per year.
- Currently few roadway capacity deficiencies exist within Yakima County. Over 99% of arterial roadways have a v/c of less than 0.70 (70% of capacity).
- The MPO/RTPO model set shows some approaches to the I-82 are experiencing some congestion. The east approach to the SR-24/I-82 junction is nearing a volume-to-capacity (v/c) ratio of 1.0 or 100% of capacity. More detailed analyses have been performed on the I-82 corridor through the development of the Interchange Justification Report for I-82 at Yakima Avenue. That report is being reviewed by FHWA and FTA for approval as staff are writing this M/RTP.

Collision Data

The Washington State Department of Transportation uses two major programs to identify and prioritize potentially unsafe locations. These are the High Accident Location (HAL) and the High Accident Corridor (HAC) programs. Historically, the following locations have been identified:

High Accident Locations (HAL) – These are spot locations less than a mile long which have experienced a higher than average rate of severe accidents during previous years.

- US-12
- SR-24
- US-97
- SR-241 (4 locations)

High Accident Corridors (HAC) – These are sections of state highway one or more miles long, which have a higher than average number of severe accidents over a continuous period of time.

- US-12

- SR-22
- SR-24
- I-82 (3 sections)
- US-97 (3 sections)
- SR-22
- SR-241 (2 sections)
- SR-410

SR-241 has multiple HAL and HAC locations. This state facility is low volume 2-lane rural highway through that carries significant percentage (15% to 20%) heavy vehicles. Improvements such as additional truck climbing lanes or passing lanes should be considered.

The SR-97/SR-22 junction has 3 HAC sections within a short proximity. This area has higher traffic volumes and a high percentage of heavy vehicles (over 40% on SR-97 south of SR-22). This area should be reviewed for safety improvements.

Summary

- Historical growth has been modest on most arterial roadways within Yakima County. Currently few roadway capacity issues exist. However, poor intersection operations may inhibit mobility within specific corridors.
- Safety issues with auto and truck traffic on urban and rural roadways should be evaluated. Improvements such as truck climbing lanes and pull outs may improve safety in certain locations.

2. Non-motorized Transportation System

Introduction & Purpose

Almost every trip begins or ends with a non-motorized transportation component. Non-motorized transportation consists primarily of pedestrian and bicycle travel. A non-motorized transportation component may consist of a sidewalk connects a parking lot to an office building, or a bike path from a transit stop to a downtown commercial district.

Non-Motorized transportation facilities serves recreation and other travel needs in the region. Non-motorized transportation systems provide alternatives to motorized travel and access to public transit for users who may not have access to a motorized vehicle of their own. In short, the livability of a community can be greatly enhanced or degraded by the existence or lack of an adequate and comprehensive non-motorized transportation system.

System Description

Bicycle Facilities

Bicycle facilities are classified according to WSDOT design standards. The following standards apply to facilities in Yakima County.

- Bike Lane – Bike lanes delineate the rights of way assigned to bicyclists and motorists through lane striping and signage.
- Shared Roadway – Highways and streets without bikeway designations, striping, and signage but where the roadway widths and shoulders are sufficient to allow for safe and efficient movement for cyclists and motorists.
- Signed Shared Roadway – Highways and streets with bikeway designations and signage but no striping.
- Shared Use Path – Bike and pedestrian paths.
- WSDOT has designated two bicycle routes in Yakima Valley (US 12 and US 97)
 - On US 12, there is a one half mile segment north of SR 410 Junction that is below standard.
 - On US 97, there is one and one-half mile segment between Mile Post 44.58 and Mile Post 46 that is below standard.
- The bicycle routes compliment the Yakima Transit bus routes. All Yakima Transit buses are equipped to handle bicycles.

Pedestrian Facilities

- The Yakima Greenway Path, shadows the Yakima River from the southern end of the City of Yakima, not far from Union Gap, almost to the City of Yakima. Access across the Yakima River on the north end of the trail provides convenient access to the Greenway for residents of Selah. Parking lots at various points along the trail accommodate visitors who travel to the trail by motor vehicle. The final piece of unfunded section to connect the two communities was awarded funding in the recent 16-year Washington State Transportation bill in the *Connecting Washington* program.

Summary

- A comprehensive physical inventory of non-motorized facilities has not been completed or is not readily available. This would provide a basis for identifying missing facilities and/or connections between regional attractions. More of the inventory is being tackled as the Cities and the County are updating their Comprehensive Plans this year and next.

This update of the M/RTP precedes their efforts.

- City and County non-motorized facility classifications are not coordinated at a regional level. Facilities are classified differently in the urban and rural areas. Without a coordinated and consistent regional classification system, it is difficult to identify deficiencies and prioritize needed improvements.
- The status of compliance with Americans with Disabilities Act (ADA) regulations is needed. A detailed inventory of sidewalks, ramps, etc. is underway in Yakima County as a response to an ADA complaint investigation and subsequent remedy.
- CTR work sites are served by a well-developed network of bicycle facilities. With the exception of five of the worksites (Yakima Valley Farmers Clinic, Department of Ecology, City of Moxee, Alexandria Moulding and Yakima Valley Hospital), the sites directly connect to a bicycle network route. (Yakima Hospital is located four blocks away from a signed bike path).
- The majority of CTR work sites are not connected to pedestrian routes. However, because there was no sidewalk inventory to analyze, it is unclear on whether the CTR work sites have sidewalks.

3. Transit System

Introduction & Purpose

The purpose of this section is to provide a description of the current public transportation services within Yakima County and provide a preliminary analysis of the existing system accomplishments and any unmet customer needs. The public transportation system is an important component of the integrated transportation system as it relates to Commute Trip Reduction

System Description

Several different transportation providers provide public transportation services within Yakima County. Services to enhance transit and transportation demand management programs have been developed to better serve the local community needs and reduce overall traffic volumes. These services are divided into several different components including:

- Fixed route transit,
- Rural mobility routes,
- Paratransit, and
- Total Demand Management (TDM) and Commute Trip Reduction (CTR).

Population Characteristics of Yakima County

Yakima County has substantial population segment that is likely to have unmet transportation needs. This population may consist of persons with disabilities, older adults, youth, and individuals with limited incomes. The percentage of individuals falling into one or more of these categories is as follows:

- 22 percent have a disability (5 years of age or older)
- 12.8 percent are 65 years of age or older
- 29.8 percent are under 18 years of age
- 20 percent of individuals have income that falls below poverty level¹

As the County grows, these percentages indicate that transportation needs will grow with them. The elderly population in particular will grow faster than the general population as baby boomers age and because Yakima has become a more popular destination for retirees. An increased elderly population in particular, will place additional demands on the need for transportation to nursing homes, assisted living facilities, and health care facilities.

Yakima Transit

Yakima Transit is closing in on its 108th year of operation and has provided many different types of service throughout its existence in the Yakima valley, such as busses, trolleys, and streetcars.

- Since 1907, there have been many changes to the system and also a tremendous increase in ridership.
- In 2014, transit ridership is exceeding one million passengers annually on its fixed route service.

¹ U.S. 2010 Census

- Yakima Transit operates nine fixed routes, of which all operate on Saturdays and 6 routes operate on Sundays.
- Yakima Transit contracts with Access Paratransit and People for People to provide Dial-A-Ride service for persons with disabilities.
- Transit service is operated within the city limits of Yakima with the exception of commuter service to Ellensburg, Selah, and Union Gap.

Hours of operations for Yakima Transit are as follows:

Monday - Friday, 6:00 am – 7:00 pm

Saturday - 8:45 am - 6:00 pm

Sundays - 8:00am – 4:00pm

Holiday Service Schedule (as announced)

Looking at the system as a whole, Yakima Transit ridership has ranged from 1.4 million in 2011 to 1.1 million in 2014.

Residential Areas Needing Service

Based on the TRB's Transit Cooperative Research Program (TCRP) Report 100: Transit Capacity and Quality of Service Manual, 2nd Edition, fixed-route bus service becomes viable with densities of seven persons per acre or better. As shown in the *PopDen_final* map at the end of this appendix, the only significant concentrations of high density residential housing of seven persons per acre or better are located within the City of Yakima. In addition, there are small concentrations of higher density residential areas in Selah, Union Gap, Wapato, Toppenish, Grandview, Zillah, and Sunnyside. This information is intended to be clarified if YVCOG can obtain funding for it's as yet unfunded Regional Transit Study as described in the State Fiscal Year Unified Planning Work Program (SFY 2017 UPWP).

Virtually all of the areas with higher density residential concentrations within Yakima are currently served by Yakima Transit. The People for People Connector between Prosser and downtown Yakima serves the concentrations in Wapato, Toppenish, and Sunnyside. The one area that is unserved currently is Union Gap. Union Gap has the residential densities that are supportive of fixed route transit.

The growing areas to the west of Yakima have transportation needs, yet the densities are insufficient to support fixed-route transit service. West Yakima areas would be best served by expanded demand response or dial-a-ride service.

Traffic Bottlenecks Creating a Transit Need

Existing and projected traffic levels of service show that the majority of the Yakima Transit service area will not experience significant traffic congestion. There are some large exceptions to this, however. The I-82 corridor is being used for both regional and local trips within the Yakima urbanized area, and therefore is subject to congestion at the interchanges. In addition, Selah, Union Gap, and Moxee are connected to Yakima proper via a very limited street network, and therefore are subject to bottleneck traffic. Transit is necessary to provide an alternative to automobile traffic in the SR 823 corridor in Selah and on the North 1st Street corridor in Yakima/Union Gap. Transit can play a role in reducing congestion on SR 24 between Moxee and Yakima as well.

Transit Needs Based on Market Changes

On a nationwide basis, a shift in primary employment type has been taking place. The Yakima urbanized area is no exception to a greater emphasis on service based jobs. These jobs typically do not have the regular “9 to 5” timeframe, but instead have later hours and weekend hours. Yakima Transit is currently not positioned to capture this growing market due to the short cut-off for weekend service. There is a demonstrated need for later service on weekdays and Saturdays and for continued service on Sunday.

CTR Employers Needing Service

Several employers with 100 or more employees that are subject to commute trip reduction (CTR) regulations are located within Yakima County. The majority of these employers are located within Yakima proper. In addition, there are three CTR employers in Selah, two in Union Gap, and one west of Yakima city limits. These employers further highlight the importance of bringing Yakima Transit service to these communities. The map titled *TransitCTR_final* at the end of this appendix shows the locations of large employers in Yakima County and their vicinity to Yakima Transit service. Moxee stands out as having two large employers without transit service in close proximity.

In addition, there are three CTR employers in Selah, two in Union Gap, and one west of Yakima city limits. These employers further highlight the importance of bringing Yakima Transit service to these communities. Figure 4 shows the locations of large employers in Yakima County and their vicinity to Yakima Transit service. Moxee stands out as having two large employers without transit service in close proximity.

Summary

Yakima Transit is showing increased ridership throughout the system. Some potential unmet needs include:

- A need for Sunday service. The service industry employees need access to service seven days a week.
- Longer service span for both weekdays and Saturday. The service industry employees need expanded access to service.
- With the increased on the urban area fringes, service area expansion for Yakima Transit may be necessary.
- All but three CTR work sites have access to transit services within a quarter mile of the work site.
- While many of the CTR work sites have access to transit service, the transit service does not connect the commuters from their residential locations to their work site locations. The coverage and frequencies for transit service is limited. These two factors may discourage commuters from using transit.
- Despite the lack of transit services, the 2005 overall drive alone rate for Yakima Valley CTR work sites is 70%. This rate compares favorably to the 2005 overall state drive alone rate which is 66%.

4. Regional Freight and Goods Transportation System

Introduction & Purpose

The Washington State Freight and Goods Transportation System (FGTS) is used to classify state highways, county roads and city streets according to the average annual gross truck tonnage they carry as directed by RCW 47.05.021(4). The FGTS is primarily used to establish funding eligibility for the Freight Mobility Strategic Investment Board (FMSIB) grants. In addition, it also supports Highways of Statewide Significance (HSS) designations, pavement upgrades, traffic congestion management, and other investment decisions.

The Freight Mobility Strategic Investment Board (FMSIB) is a 12-member Board that reviews, prioritizes, and recommends freight mobility projects of strategic importance.

The RTPO's role is to set forth a regional approach to freight mobility. The regional economy is dependent on the ability to provide and maintain key connecting highways to the region's communities.

System Description

Washington's Strategic Freight Corridors as defined by RCW 47.06A.10 are corridors economic importance within an integrated freight system that have the following characteristics:

- Serves international and domestic interstate and intrastate trade
- Enhances the state's competitive position through the regional and global gateways
- Carries four million or more gross tons of freight annually (T-1 and T-2)
- Carries five million gross tons annually on railroads
- New links to strategic corridors that enhance freight movement

Table 1 defines the FGTS classification system by annual tonnage.

Table 1. WSDOT Tonnage Classifications

FGTS Classification	Annual Tonnage
T-1	Greater than 10,000,000
T-2	4,000,000 to 10,000,000
T-3	300,000 to 4,000,000
T-4	100,000 to 300,000
T-5	At least 20,000 tons in 60 days

Routes classified as T-1 or T-2 are considered strategic freight corridors and are given priority for receiving FMSIB funding. See the map series titled FGTS at the end of this appendix. The maps have been divided in to Lower Valley, Upper Valley and the Metro area so that detail can be displayed on each map.

One of the eight strategic freight corridors in Yakima County is classified as a T-1 corridor. I-82 is the most significant corridor carrying more than 30 million tons annually. Four corridors carry 5 to 10 million tons annually. Three corridors carry more than 4 million tons.

Summary

- The primary freight route (T-1) through the region is the I-82 corridor, carrying over 30 million tons annually.
- At-grade rail crossings present the primary barrier to the movement of freight and goods

within County. There are approximately 14 at-grade rail crossings within Yakima County, (several within the City of Yakima).

- I-82, US-97, SR-24, and US-12 have the highest percent trucks, ranging from 15% to over 40% percentage trucks. These routes are significant in the overall State and regional freight system.
- US-12 provides an alternate mountain pass (White Pass) corridor to I-90 (Snoqualmie Pass) and US-2 (Stevens Pass).

5. Air and Rail Transportation System

Introduction & Purpose

The air transportation system in Yakima County complements the rail, motorized, and non-motorized transportation systems in the movement of goods and people.

The primary purpose of the air transportation system in Yakima County is to provide users access to broader national and/or international air transportation systems. In addition to commercial passenger and freight services, airports like those in Yakima County may also facilitate in any one of the following activities:

- Medical Transport (Blood, Tissues, Organs, MEDEVAC)
- Search and Rescue
- Forestry and Wildlife (Firefighting and Wildlife Tracking)
- Recreation

The YVCOG can work to provide and/or facilitate access to the airports for all forms of transportation from within Yakima County.

Rail Transportation System

Rail services in Yakima County are provided by Burlington Northern & Santa Fe (BNSF), and the Columbia Basin Railroad Company (CBRW). Union Pacific also retains trackage rights in parts of the county. No passenger rail service is currently provided in Yakima County. The map titled ***Rail_Air_final*** at the end of this appendix illustrates the air and rail system in Yakima County.

System Description

Air Transportation System

Three airports provide service to the County of Yakima as illustrated in 5A. The airports include the Yakima Air Terminal – McAllister Field, the Sunnyside Municipal Airport, and the Tieton State (Rimrock) Airport.

Yakima Air Terminal – McAllister Field Airport

- The only Primary Service airport in the county and the only airport that provides scheduled commercial flights for passengers and cargo. Daily scheduled flights are provided by Horizon Air while Xtra Airways provides intermittent charter flights.
- In 2015 approximately 62,300 passengers enplaned at the airport on an average of 4 scheduled daily departures. Because of a steady increase in passengers, Alaska Airlines added the fourth flight in and out of Yakima.
- The Washington State Department of Transportation Aviation Division estimates that the airport in Yakima generates approximately 488 jobs resulting in approximately \$8.7 million dollars in labor earnings and \$31.7 million dollars in economic activity for commercial service visitors alone.
- Taxis, rental cars, hotel shuttles, and pick-up/drop-off zones are available to facilitate transport to and from the airport. Yakima Transit routes 7 and 9 also provide service to the airport.
- The primary access route to the airport is along Valley Mall Boulevard.

Sunnyside Municipal Airport

- This general aviation airport does not provide scheduled commercial passenger or cargo service.

- The Washington State Department of Transportation Aviation Division estimates that the airport in Sunnyside generates approximately 76 jobs resulting in approximately \$1.2 million dollars in labor earnings and \$4.5 million dollars in economic activity.
- Primary access to the airport is along E. Edison Road

Tieton State (Rimrock) Airport

- Serves aircraft in distress, provides access to the Rimrock recreational area, and serves as a fire fighting post and air search and rescue control point.
- The Airport is located at the end of Tieton Reservoir Road which can be accessed from SR 12.

Rail Transportation System

Burlington Northern & Santa Fe (BNSF)

- Owns most of the tracks through Yakima County.
- Leases to CBRW to provide freight rail access to smaller cities and short haul lines in Yakima County.

Columbia Basin Railway Company (CBRW)

- Operates approximately 60 miles of lines in Yakima County leased from BNSF
- Serves the cities of Grandview, Sunnyside, Toppenish, White Swan, Yakima, Union Gap, Granger, Fruitvale, and Moxee.
- Operates a short-haul line leased from Yakima County, called the Toppenish Simco & Western (TS&W) line, between White Swan and Toppenish that principally serves two sawmills in the Yakima Nation.
- WSDOT funded upgrades to the TS&W line are planned to be completed by the end of 2007 and will accommodate increased traffic from two Yakama Nation sawmills
- The Yakama Nation sawmills provide **250** local jobs.
- Since 1994, carloads on the TS&W line have risen from 30 per year to over 1,500

Rail Transportation System

- There currently is no passenger rail service in Yakima County. Amtrak provides thruway service (bus service) by coordinating with Genie Tours. Service from the City of Yakima to the Pasco and Seattle Amtrak Stations.
- Types of freight and annual tonnage hauled by the railroads would is not readily available. This information would provide insight into the relative importance of rail and truck freight transportation in Yakima County