DOWNTOWN AND LOCAL STREET NETWORK PLAN

FOR THE

City of Mosier

Prepared by

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and
David Evans and Associates, Inc.

May 12, 2003

COGAN
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Acknowledgement

This project was funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Department of Land Conservation and Development. TGM grants rely on federal Intermodal Surface Transportation Efficiency Act and Oregon Lottery Funds.

The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

This plan is intended to help guide the future growth and development of Mosier, focusing specifically on future transportation facilities and development in downtown Mosier along the Historic Columbia River Highway (Highway 30 in downtown Mosier). It identifies proposed future road, bicycle, pedestrian and related public facilities, as well as future land uses, and design and building standards for the downtown. Implementation of the plan will help address the needs of residents and visitors to Mosier as the community continues to thrive and grow.

The plan builds upon a rich tradition of planning and community involvement in Mosier. It incorporates and is intended to further previous planning efforts for the city, including the Mosier 20/20 Plan, Mosier Waterfront Plant, planning for the Pioneer Cemetery, the Pocket Park and Mosier totem pole project and other community plans and efforts. The plan was developed with guidance throughout the project from a Project Advisory Committee (PAC) of community members. Other citizens of Mosier also were instrumental in shaping the plan through participation in two public meetings, attendance at PAC meetings, and by providing written comments.

Recommended elements of the downtown plan include:

- Accommodate bicycle and pedestrian traffic downtown through development of a bicycle/pedestrian path parallel to Highway 30.
- Plan for future development of additional businesses, consistent with the Mosier 20/20 Vision, on the north side of Highway 30, east of Main Street.
- Create a downtown that is visually attractive and reflects Mosier's unique character through development and design standards, including:
  - Site new buildings close to the street or bicycle/pedestrian path along Highway 30.
  - Limit the height of buildings on the north side of Highway 30 to one story to protect views from the south side of the road; allow for a second, lower story in the rear, as feasible.
  - Use landscaping adjacent to Highway 30 to delineate access to businesses and parking areas, and to create a pleasant, cohesive look for the downtown.
  - Encourage buildings to mirror the 1920s architecture style of historic buildings in Mosier by incorporating covered porches and walkways, peaked roofs, period style windows, bargeboards, trim boards and other, similar features.
  - Encourage use of materials such as wood lap siding, brick and rock. Discourage or restrict use of building materials such as metal siding, plywood siding and smooth cinderblock.

- Provide adequate parking for visitors. Locate shared parking for buildings north of Highway 30 behind and below the buildings. Locate parking for other new buildings next to or behind them (rather than in front).
- Create a public plaza/gathering space on the north side of Highway 30 that includes the Mosier Totem pole, as well as seating and other artistic elements.
- Construct a new public services building near the Totem Pole plaza that includes restrooms, visitor information and possibly relocated city offices, such as City Hall.
- Add gateway signs or interpretive kiosks at the east and west ends of the downtown.
- Create connections from the downtown to the Mosier Waterfront area.

Recommended transportation elements and standards for the City include:

- Create additional pedestrian and bicycle paths and connections to improve the ability of residents to walk or bicycle between homes, businesses and community facilities in Mosier in the following locations:
  - Between the Historic Columbia River Highway trail (to the Mosier Twin Tunnels) and downtown Mosier.
  - Along Highway 30, between Mosier and Rock Creeks.
  - Between Streamline Lane and Center Street (Fourth Avenue alignment).
  - Between Oregon Street and Idaho Street, extending Fourth Avenue.
  - Between the gravel streets south of town and Huskey Road as this area is developed in the future.
  - Connecting the city's Pocket Park to Wilson Street.
  - Footbridge over Mosier Creek constructed in conjunction with a water line, if the water line is needed in the future to provide water service to this part of Mosier.
- Establish and use consistent design and construction standards for future streets in Mosier, including new roads or those undergoing major improvements. Standards will vary by size and type of street.
- Create and use appropriate standards for design and construction of future bicycle and pedestrian trails.

Nearly all future transportation improvements are intended to address safety issues or improve options for traveling within or through Mosier. Projected increases in long range (20-year) traffic do not warrant construction of any new major roads or widening of existing roads, though some additional neighborhood streets may be needed to serve new residential developments.

In addition to the recommendations identified above, this plan includes unit cost estimates for construction of different types of roads and other public improvements and a summary of potential funding sources.

The remainder of this document provides a brief history of Mosier and describes existing conditions and proposed future transportation and development projects, standards and guidelines in more detail. Appendices to the plan include zoning ordinance and comprehensive plan provisions that will be used to implement the plan.

LOCAL HISTORY

The Mosier area has a rich history of human habitation by native peoples prior settlement by European Americans, as evidenced by numerous archeologically significant areas found throughout the Mosier region. Lewis and Clark passed through the area on their historic transcontinental journey from Missouri to the Pacific Ocean. Later, the Oregon Trail water route flowed past Mosier's doorstep.

In the mid-1860's, settlers of European ancestry migrated to and began to live in the Mosier area. The Mosier Pioneer Cemetery provides a reminder of these early immigrants. The Original Town of Mosier was platted in the late 1800's by Jefferson Mosier. The town capitalized on its location along the Columbia, access to the transcontinental railroad and proximity to rich agricultural lands, and by 1910, Mosier was a bustling community with over 40 businesses. However, sweeping changes overtook the town in the coming decades. In 1919, a fire wiped out much of Mosier's business section. Subsequent construction of Interstate 84 and damming of the Columbia River also had negative impacts on the town and it's access to the Columbia River.

Recently, the town and surrounding Mosier Valley have seen a growing influx of new residents and visitors as the scenic beauty of the area has attracted residents with artistic talents and/or sensitivity to the aesthetics of their surroundings. The opening of the restored section of the Historic Columbia River Highway between Mosier and Hood River, including the Mosier Twin Tunnels has significantly increased recreational opportunities and visitation near Mosier.

EXISTING CONDITIONS

This section describes existing land uses and key activity centers in Mosier – i.e., where people gather, shop and travel. It also describes the city's transportation system – roads, paths, trails and parking areas – in detail, including the location and condition of individual facilities, as well as current and future projected traffic levels.

GENERAL DESCRIPTION

The City of Mosier is located in northwest Wasco County. It is 65 miles east of Portland, Oregon and lies on the southern shoreline of the Columbia River. The town is generally platted in a rectangular grid pattern that feeds the Historic Columbia River Highway (HCRH). The town lies in the Columbia River Gorge National Scenic Area and is the service center for local agriculture in the Mosier Valley.

LAND USE AND ACTIVITY CENTERS

Land uses in Mosier are shown on three maps. Figure 1 identifies the urban growth boundary, city boundary, tax assessor's parcels, and existing zoning designations. Commercial land in the city is located along the Highway 30 and 3rd Street. A modest amount of land along the southern edge of the Mosier rock pit is zoned for industrial use. The remainder of land in the City is zoned for residential use. The City of Mosier's zoning and designations (see Figure 1) are:

- Residential 5,000 square feet minimum lot area – (R-5)
- Residential 10,000 square feet minimum lot area – (R-10)
- Open Space – (OS)
- Commercial – (C)
- Industrial – (I)

In most areas, land use corresponds to zoning. In other words, most land zoned for commercial use is either vacant or occupied by some type of business or community facility, while homes are found on properties zoned for residential use. However, in some cases, land use and zoning are not the same. Figure 2 and accompanying Table 1 generally describe individual land uses along the Highway 30 within Mosier.

Figure 3 further describes primary activity centers in the City, i.e., where people travel, meet and shop in Mosier. These include the Mosier Elementary School, Mosier Valley

Post Office, Mosier Library, Mosier Terrace, Mosier Grange, First Christian Church, and downtown businesses. With the exception of the Mosier Terrace and Mosier Grange, all of these community facilities and businesses are located either along 3rd Avenue or Highway 30. The new Waterfront Park is expected to be a future activity center.

Figure 1
City of Mosier Zoning Designations

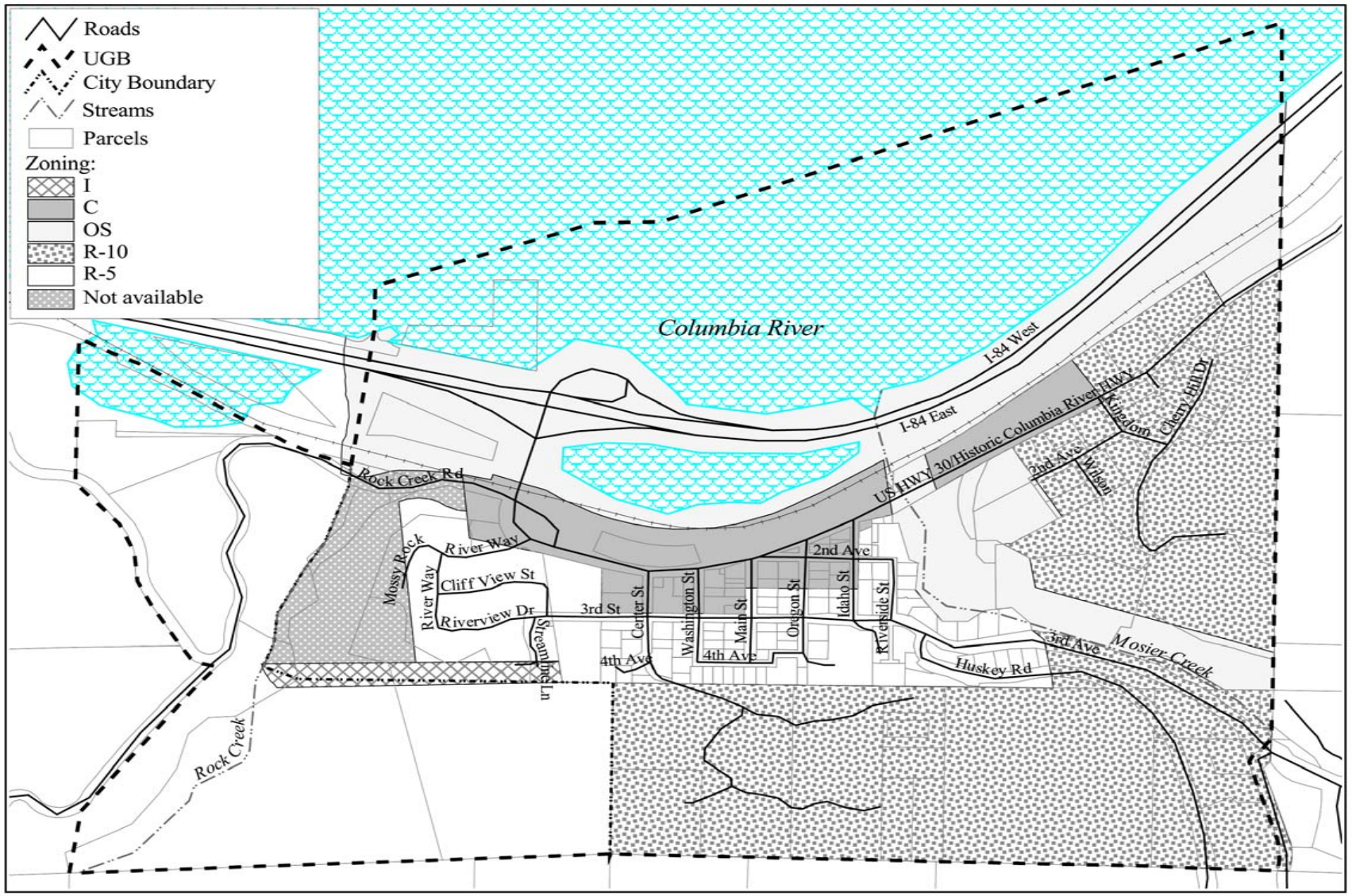


Figure 2
Tax Lots and Land Uses

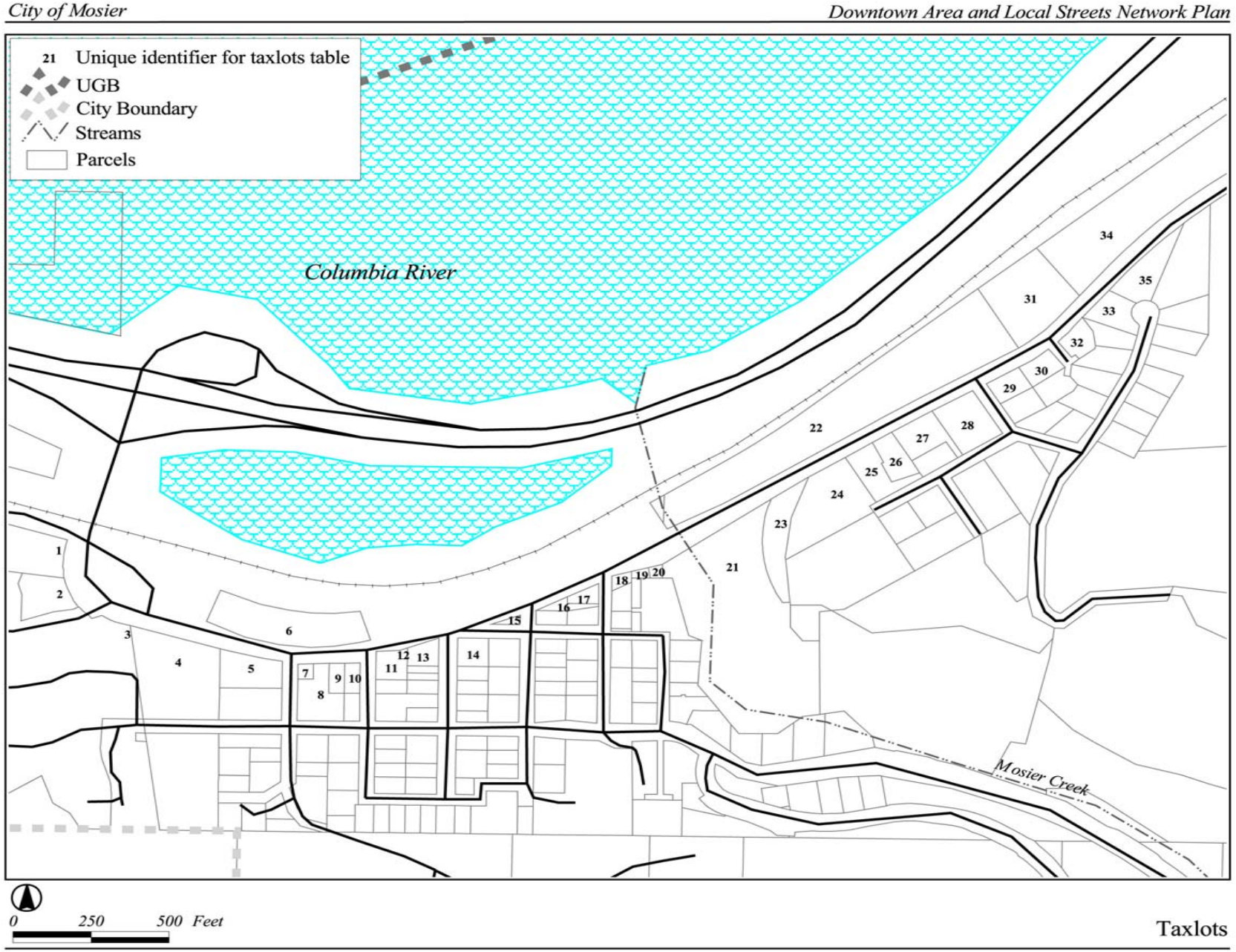
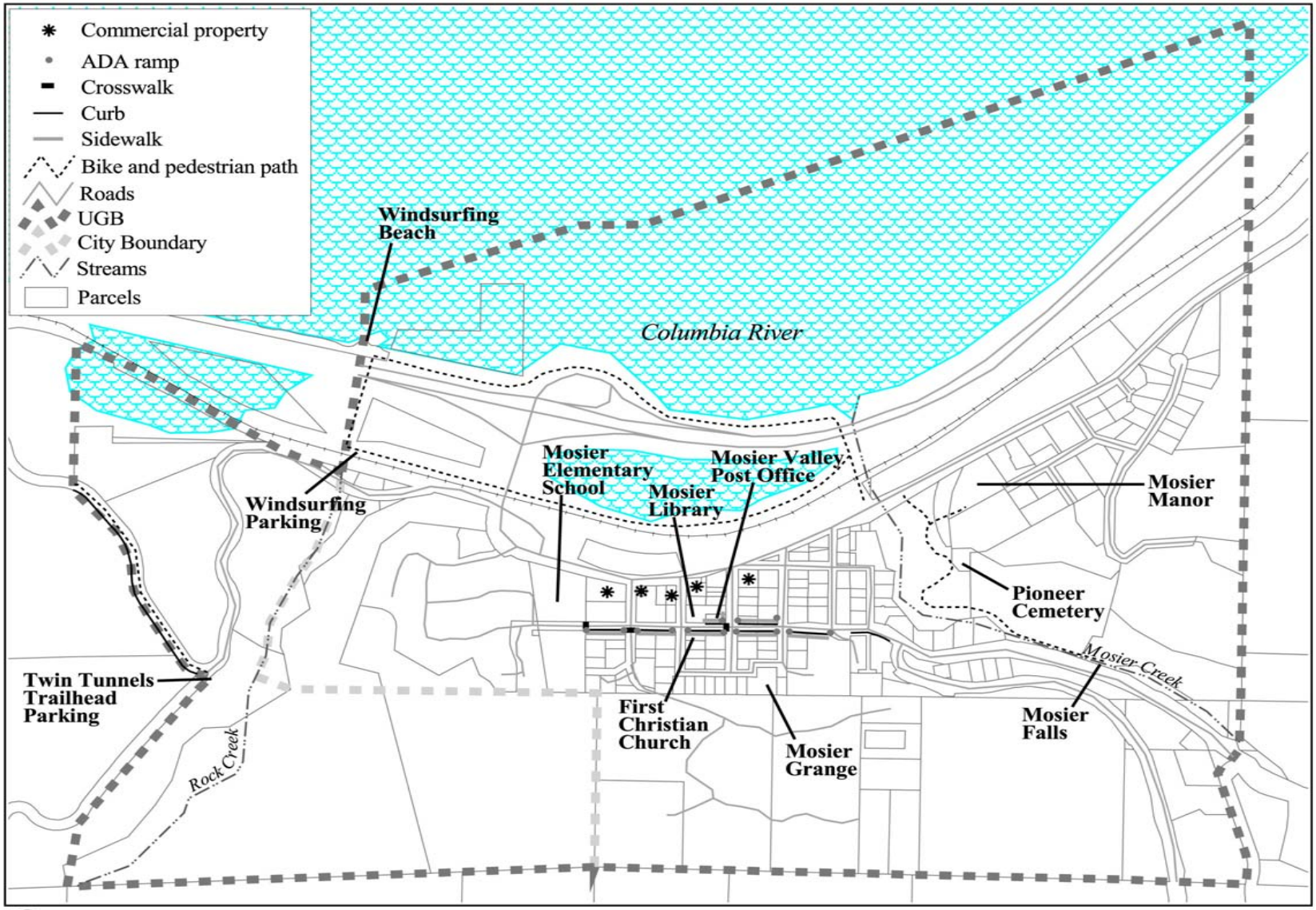


Table 1

Land Uses Adjacent to Highway 30 in Mosier

Map Number	Taxlot #	Property Class Code	Land Use Description
1	2N 11E 2 D 300	960	Vacant State-owned
2	2N 11E 2 D 202	200	Vacant commercial
3	2N 11E 2 D 201	207	Improved commercial
4	2N 11E 2 DA 300	921	School
5	2N 11E 1 CB 5200	201	Improved commercial
6	2N 11E 1 CB 5101	201	Improved commercial
7	2N 11E 1 CB 5000	201	Improved commercial
8	2N 11E 1 CB 4900	211	Commercial in a residential zone
9	2N 11E 1 CB 4800	991	Improved Port/other municipal
10	2N 11E 1 CB 4600	201	Improved commercial
11	2N 11E 1 CB 4400	201	Improved commercial
12	2N 11E 1 CB 4500	201	Improved commercial
13	2N 11E 1 CB 3700	101	Improved residential
14	2N 11E 1 CB 3600	201	Improved commercial
15	2N 11E 1 CB 2800	940	Vacant City-owned
16	2N 11E 1 CB 2700	200	Vacant commercial
17	2N 11E 1 CB 1400	211	Commercial in a residential zone
18	2N 11E 1 CB 400	201	Improved commercial
19	2N 11E 1 CB 300	101	Improved residential
20	2N 11E 1 CB 200	101	Improved residential
21	2N 11E 1 CA 3600	940	Vacant City-owned
22	2N 11E 1 400	200	Vacant commercial
23	2N 11E 1 CA 1200	940	Vacant City-owned
24	2N 11E 1 CA 1100	781	Multi-family residential
25	2N 11E 1 CA 1000	101	Improved residential
26	2N 11E 1 CA 1001	101	Improved residential
27	2N 11E 1 CA 800	109	Residential with Manufactured Structure
28	2N 11E 1 CA 700	101	Improved residential
29	2N 11E 1 BD 400	100	Vacant residential
30	2N 11E 1 BD 200	100	Vacant residential
31	2N 11E 1 BD 100	109	Residential with Manufactured Structure
32	2N 11E 1 AC 1200	100	Vacant residential
33	2N 11E 1 AC 1400	100	Vacant residential
34	2N 11E 1 AC 1600	990	Vacant Port/other municipal
35	2N 11E 1 AC 1500	100	Vacant residential

Figure 3
Activity Centers



Bicycle, Pedestrian and ADA Facilities, and Pedestrian Generators

GROWTH AND DEVELOPMENT TRENDS

Population growth in Mosier has been modest over the last 10 to 20 years. However, the town has experienced significant growth in traffic as a result of increased tourism and population in the surrounding Mosier Valley. Much of the increase in tourism can be directly attributed to the recent opening of the Historic Columbia River Highway trail (to the Mosier Twin Tunnels), a restored section of the Columbia River Historic Highway between Mosier and Hood River. The trail is popular with hikers and bicyclists and use is expected to continue to grow. The section of Highway 30 between Mosier and The Dalles also is popular with recreational bicyclists. In addition, Mosier has become a popular wind surfing site in the Columbia River Gorge. When the Mosier Waterfront Park improvements are complete, the impact of tourism and recreation on Mosier will become an increasingly important factor in the local economy.

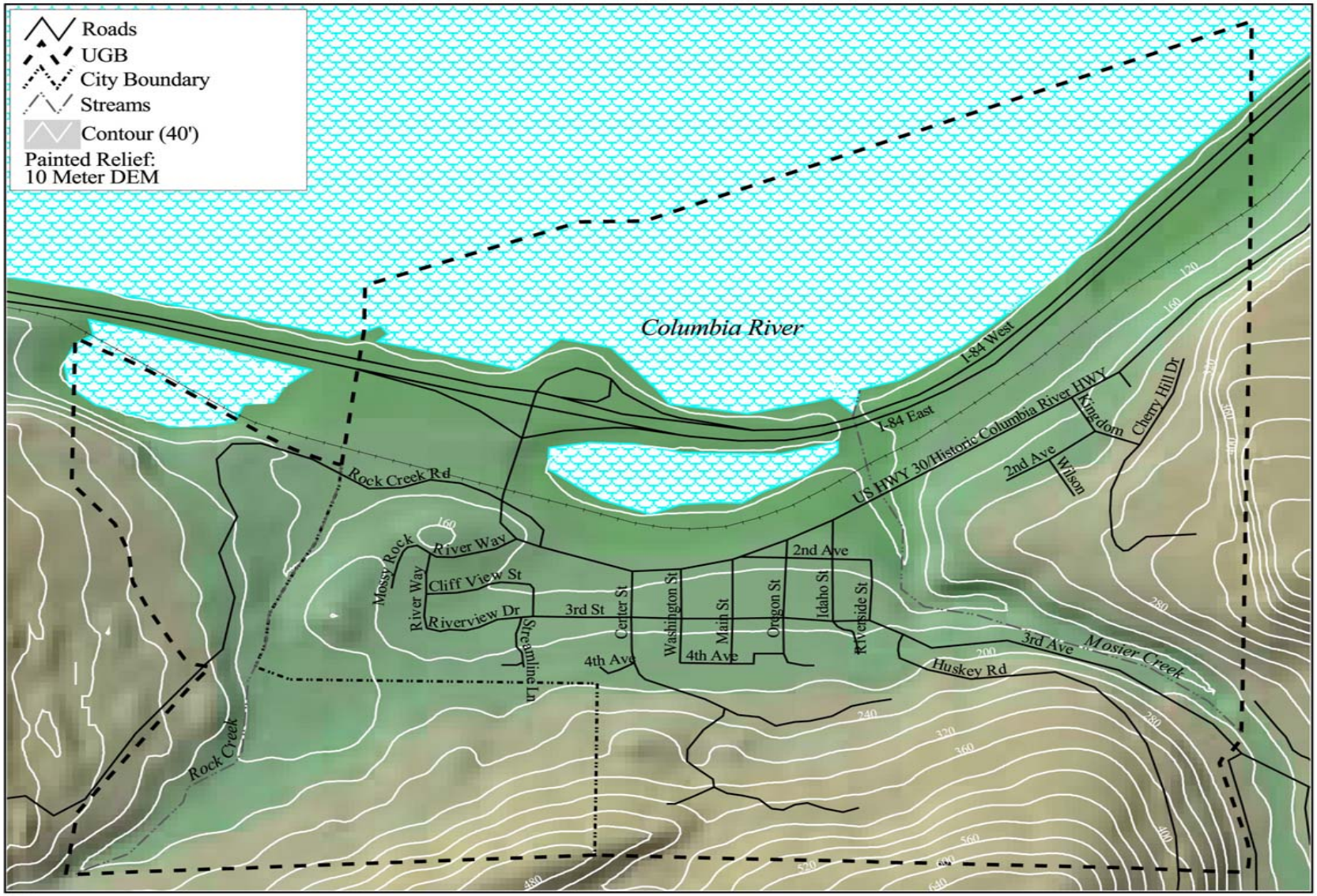
The number of people living in Mosier declined in the 1980s but has steadily increased since 1990, with 340 city residents in 1980, 244 in 1990, 410 in 2000, and 430 in 2002.

Future growth and development in Mosier are somewhat constrained by the city's location and physical setting. There are a number of vacant commercial properties in the downtown area that represent opportunities for future businesses, though development depends on the ability of the city or businesses owners to continue to lease or purchase land from the Union Pacific Railroad. A relatively limited amount of residential land is vacant or available for development and the intensity of development is limited by steep slopes to the south of town and adjacent to Mosier Creek. Future expansion of the City's UGB is similarly limited. Results of a community survey in 1999 and discussion among the PAC for this project, indicate that the majority of Mosier residents would not support further expansion of the UGB and would prefer to focus on enhancing the land within the existing boundary.

TOPOGRAPHY

The City of Mosier generally rises in elevation as one travels south. The downtown core is bounded by the City Lake to the north, Rock Creek to the west, and Mosier Creek to the east. Figure 4 indicates the topography of the City as well as water features located within Mosier. The topography map shows the contour lines at 20-foot intervals. Most homes and businesses within Mosier are located on hillsides and many have striking views of the Columbia River Gorge. Some also enjoy views of Mosier Creek and Falls.

Figure 4
Topography



Topography

TRANSPORTATION SYSTEM

Three major transportation routes bisect the City including Interstate 84, Highway 30 (an All American Road and designated National Historic Landmark), and the Union Pacific Railroad line. Mosier's roadway system has developed around Highway 30 with most roads either feeding off, or traveling parallel to the highway. Highway 30 is the spine of the roadway system in Mosier, serving as the main street in the city. Other major roads include Washington Street, 3rd Avenue/State Road and Huskey Street. The City also includes a number of bicycle and pedestrian trails.

Streets (grid/connectivity, width, pavement condition, classification)

Classification

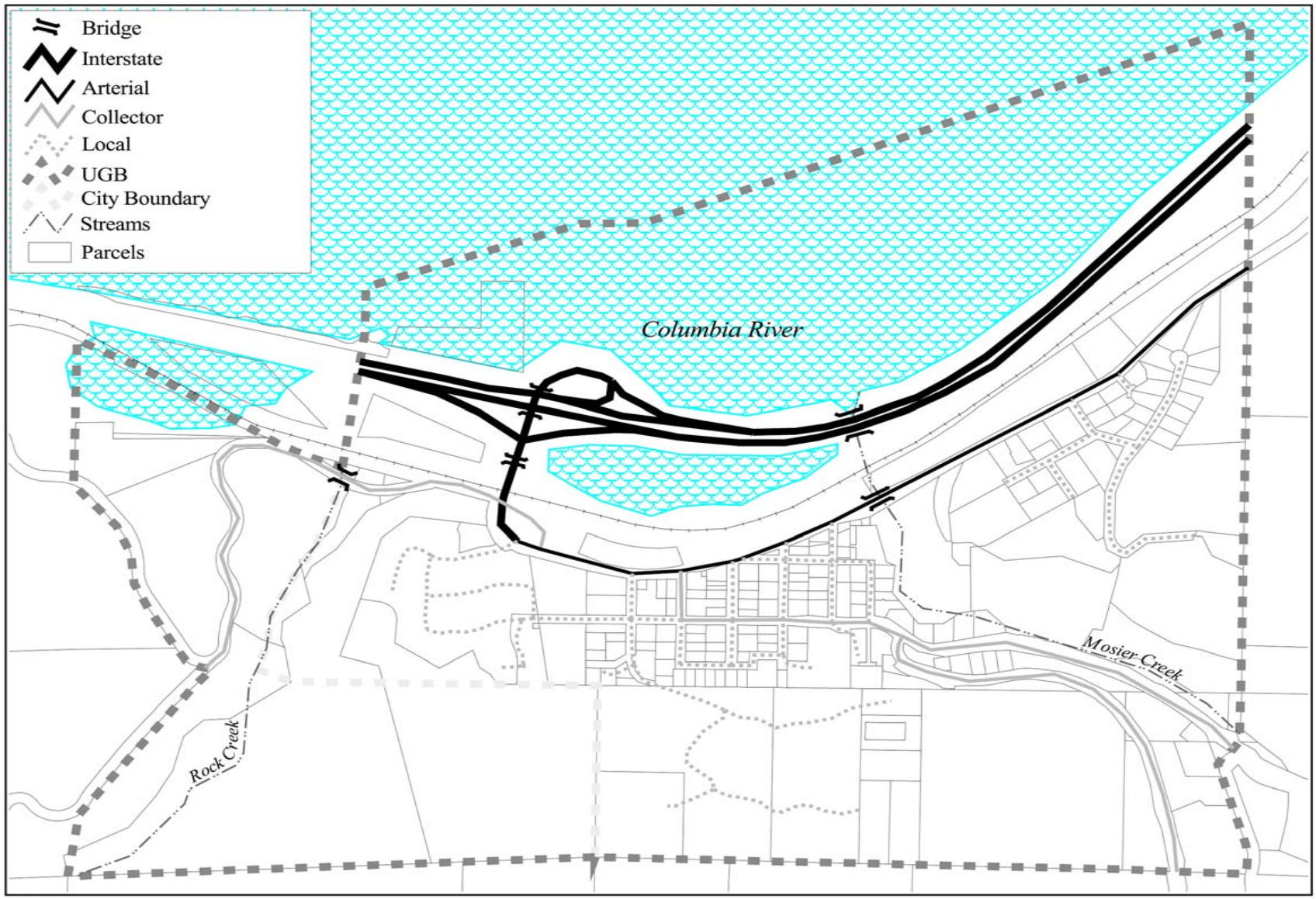
Roads in Mosier fall into the following general classifications:

- **Interstate Highways**. Interstate 84 is classified as an interstate highway. Interstates are the highest order of highway and are designed and constructed to have very limited access to adjacent lands. The primary function of I-84 is to facilitate "interstate" travel. It is designed as a high speed/high volume highway. Mosier is connected to I-84 via interchange Number 69, which connects I-84 with Highway 30 in Mosier.
- **Arterials**. These roads typically link different communities, places or land uses that generate a significant amount of traffic and freeways or other arterial streets. Arterials connect cities and other major traffic generators. They serve both through traffic and trips of moderate length, and access is usually controlled. Arterials typically are high-volume roadways due to the combination of local and through traffic. Depending on adjacent land uses, speeds range between 25 and 55 mph. The section of the Historic Columbia River Highway (Highway 30, east of Rock Creek Road) in Mosier is the only arterial in the City.
- **Collectors**. These roads typically serve as primary travel routes within neighborhoods or between different land uses (e.g., commercial and residential areas). Collector roadways are intended to carry local traffic, including limited through traffic. In Mosier, Rock Creek Street, 3rd Avenue/State Road, Washington Street, and Huskey Street are classified as collectors.
- **Residential/local streets**. These provide direct access to homes and other neighborhood land uses. Local roads are designed to carry relatively small amounts

of traffic at relatively slow speeds. All roads not classified as an interstate, arterial or collector streets in Mosier are classified as local roads.

Figure 5 shows the classification of each road in Mosier (*next page*).

Figure 5
Functional Classification of Roads



Pavement Condition and Width

Typically, pavement condition is rated on a scale ranging from "very good" to "very poor," including rankings of very good, good, fair, poor, and very poor.[1] Most sections of roads within Mosier are paved and appear to be in Fair to Good condition. A complete listing of local street pavement conditions is provided in Appendix A and shown in Figure 6.

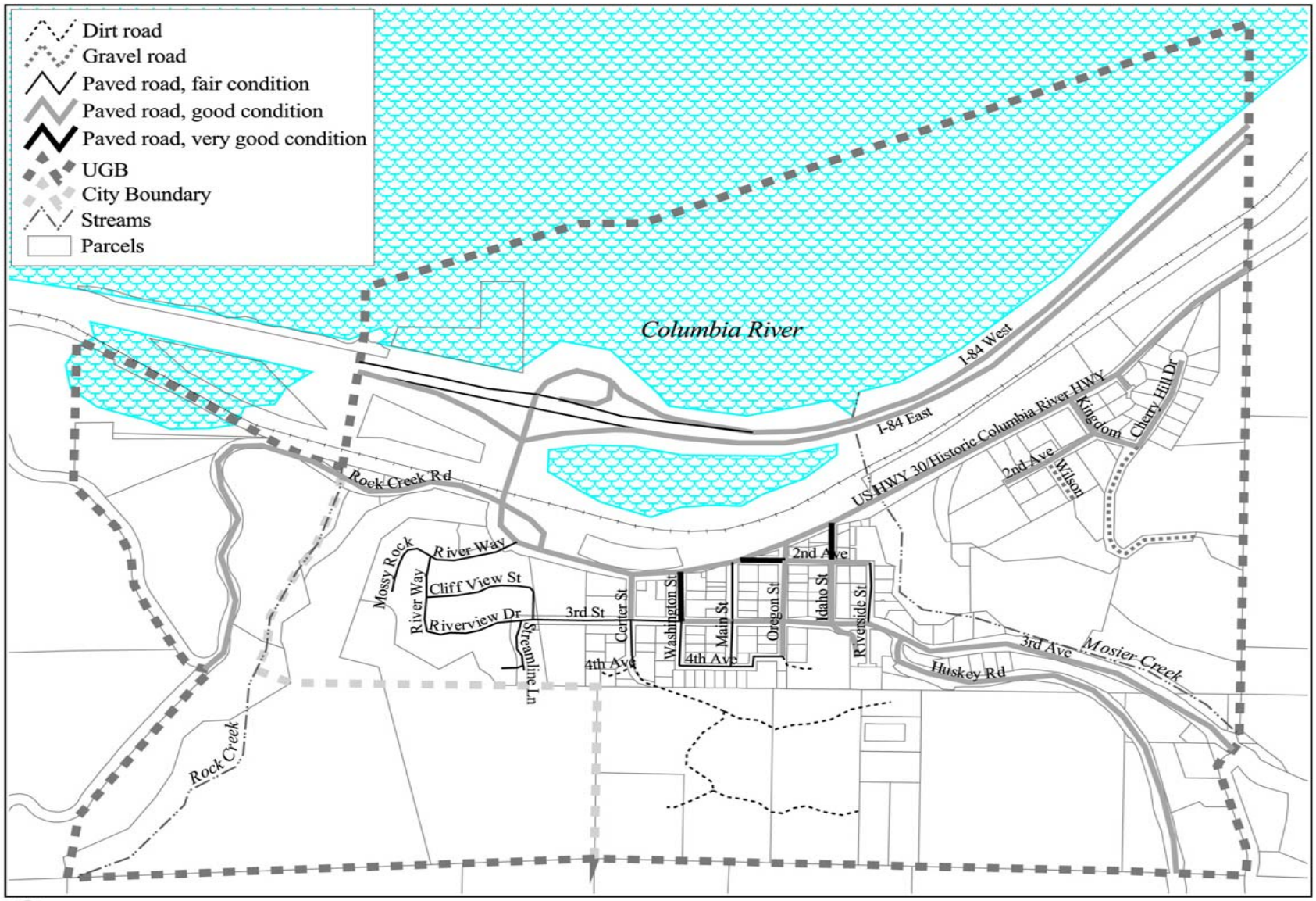
Although the pavement on many roads in Mosier may be in fair and good condition, anecdotal information indicates that some roads are not constructed according to accepted engineering design standards and/or practices. Some roads in the city may lack adequate road base or proper drainage, and the asphalt and/or chip seal used to pave roads may be placed on native soil. As a result, these roads may require more frequent maintenance, with a reduced pavement life.

Paved local streets range from 15 to 31 feet wide, with most streets measuring 16 to 24 feet. Paved on-street parking is provided along sections of 3rd Avenue and Main Street. Cars park parallel to the curb along 3rd Avenue and perpendicular along Main Street. Excluding the shoulders used for resident parking along local streets, only a few roads within town have paved shoulders. The terrain throughout Mosier generally slopes up to the south. The speed is typically 25 mph except along private streets or within established signed school zones where the speed is reduced to 20 mph when children are present.

The roadway width and number of lanes for all roads within Mosier are shown in Figure 7.

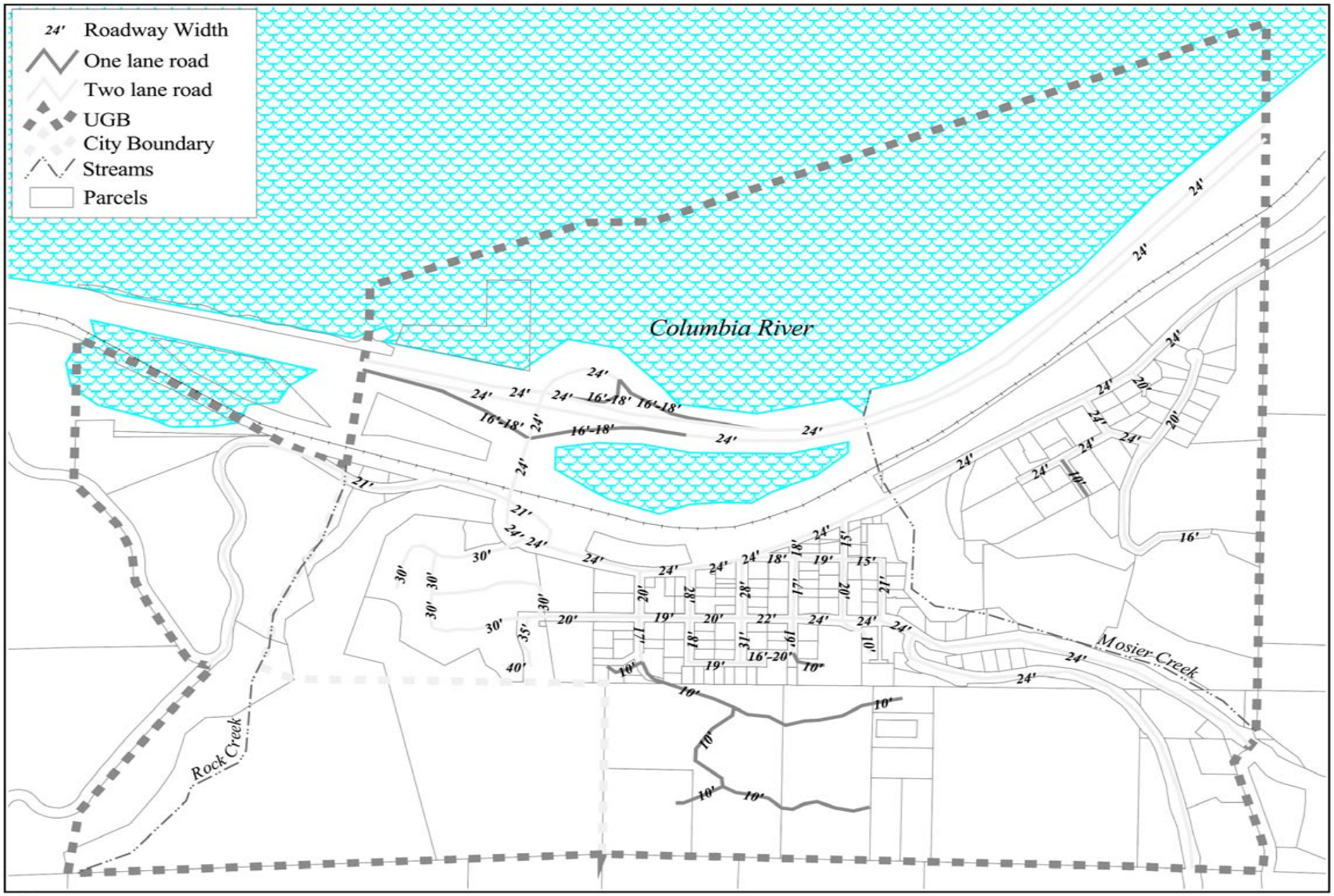
[1] General pavement conditions were evaluated based on field observations in Mosier in 2002, using a 1994 report provided by the Oregon Department of Transportation (ODOT) Pavements Unit titled, *Pavement Rating Workshop, Non-National Highway System* as a reference for comparison and ranking. The ODOT report provides color photographs of roadways that display these characteristics, which aids in field investigation and rating of pavement condition.

Figure 6
Pavement Conditions



Pavement Condition

Figure 7
Roadway Width and Number of Lanes



Roadway Width and Number of Lanes

Connectivity

The bulk of the city's street system is based on a small grid pattern. Fourth Avenue is the only street that is discontinuous, as it does not connect between Center and Washington Streets. Based on property boundaries and right-of-way lines, as well as the number and location of houses in this area, connecting the two segments of 4th Avenue would be extremely difficult and is not recommended. Another issue is whether or not to connect the Kingdom subdivision section (east of town) to the rest of town. Considering the cost of adding a bridge over Mosier Creek as well as other issues including traffic levels, connecting Kingdom does not appear to be warranted either.

Pedestrian and bicycle facilities

Pedestrian System

The most basic transportation option is walking. While walking is one of, if not the most popular forms of exercise in the United States and can be performed by people of all ages and all income levels, it is not often considered a means of travel. The relatively small scale of the City of Mosier is conducive to walking as a means of meeting everyday travel needs. Mosier's roadway system has developed around the Highway 30 with most roads either feeding off of or traveling parallel to the highway. Although the city's scale supports walking, there are a number of opportunities to improve facilities specifically designed for pedestrians.

Sidewalks make up the majority of Mosier's existing pedestrian system. Sidewalks have been built along 3rd Avenue between Mosier Elementary School and Idaho Street as well as along Main Street in front of the Post Office. All these sidewalks appear very new and are in good condition. Most of the sidewalks are directly adjacent to the roadway, with the exception of the northern sidewalk section along 3rd Avenue in front of the Post Office, which is set back four feet from the street. Sidewalk widths range between five and six feet. All have curb ramps in compliance with the American with Disabilities Act (ADA).

The sidewalks in Mosier primarily are located to connect and serve the city's activity centers, including the elementary school, the community church – First Christian Church, the Post Office, and the library. These community resources likely generate the highest levels of pedestrian traffic. Other activity centers not currently connected by

sidewalks include the Mosier Grange as well as eating and shopping establishments along Highway 30.

In addition to the sidewalks described above, a 16-foot pedestrian/bicycle path is located along the abandoned Highway 30 alignment between the Mosier Twin Tunnels and Rock Creek Road. On all other city streets, pedestrians share the road with motor vehicles. Mosier's relatively low traffic volumes and speeds allow for safe sharing of the roadway between pedestrians and motor vehicles.

In addition to the sidewalks and paved trail noted above, unpaved pedestrian trails have been constructed in two areas in Mosier. A system of trails is currently being constructed in the Mosier Waterfront Park area. It includes a loop trail around the City Lake and a connecting trail adjacent to the Columbia River. This trail is four-feet wide and constructed of crushed rock over a rock base of basalt cobble stones and chips. It is accessible from Rock Creek only at this time. A second trail system is found along the east side of Mosier Creek, starting from Highway 30 and ending at an overlook above Mosier Falls. The trail passes through the Pioneer Cemetery and the city's Pocket Park, with viewpoints in those areas. This trail is relatively narrow in most places. A future connection is planned between this trail and the trails in the Waterfront area.

Bikeway System

Like pedestrians, bicyclists often are overlooked when considering transportation facilities. Bicycles take up little space when traveling on the road or when parked, do not contribute to air or noise pollution, and offer relatively higher speeds than walking.

The only dedicated bicycle facility at Mosier is the Historic Columbia River Highway State Trail, which provides access to the Mosier Twin Tunnels. It was constructed by the Oregon Department of Transportation (ODOT) and is managed by the Oregon Parks and Recreation Department. The facility includes a 16-foot pedestrian/bicycle path that connects Mosier to the historic Twin Tunnels on old Highway 30, and Hood River. While it does not include a dedicated bicycle lane or path, the section of Highway 30 between Mosier and The Dalles is a popular cycling route and sees significant use. The state has published a "Columbia River

Gorge Bike Map, available on the Internet, that promotes cycling on the Historic Columbia River Highway. Bicycle parking facilities are located in front of the WildFlower Café on Main Street and in front of Steve's Route 30 Desserts & Classics near the corner of Highway 30 and Washington Street.

The *1995 Oregon Bicycle and Pedestrian Plan* recommends shoulder bikeways along arterial roads (state highways) be paved to a minimum of six feet in width in urban areas, and four feet on low volume highways in rural areas. Other state guidelines identify shoulders as narrow as two feet along low volume rural collector and local roadways as adequate to serve bicyclists. On roads that do not have four to six-foot shoulders, bicyclists and motor vehicles are expected to safely share the roadway.

Based on the relatively low traffic volumes and speeds in Mosier, it is reasonable to expect bicyclists and motor vehicles to safely share the roadway on most streets. It is unlikely that lack of bike lanes reduces bicycle use and safety in most areas of Mosier. At the same time, higher-volume roads such as Highway 30 present challenges and potential safety concerns for bicyclists, particularly the section of the highway between Rock Creek and the Twin Tunnels trailhead, which is moderately steep, relatively curvy and narrow, and has limited to no shoulders. This is particularly important for recreational bicyclists passing through Mosier. In addition, bicycle amenities such as bike parking and storage facilities may have an impact on the ability and convenience of bicycling in Mosier.

Figure 8 illustrates the locations of Mosier's existing bicycle and pedestrian facilities including sidewalks, curbs, crosswalks, and ADA ramps.

Access

Typically, state, county or city transportation planning agencies identify standards for the location and spacing of roads and driveways that provide access to adjacent properties. These are called "access management" standards. Access management standards adopted by the State of Oregon in the *1999 Oregon Highway Plan* set forth specific requirements for new streets, driveways, alleyways and other types of access to state highways. For the most part, the downtown core area of Mosier along Highway 30 does not meet state access spacing standards for local streets and private driveways. Some of the lots have driveways spanning the full property width. Figure 9 shows current access locations along Highway 30, as well as the location of existing buildings along the highway. The city currently does not have access management standards for any other streets in Mosier.

Parking (on-street, off-street)

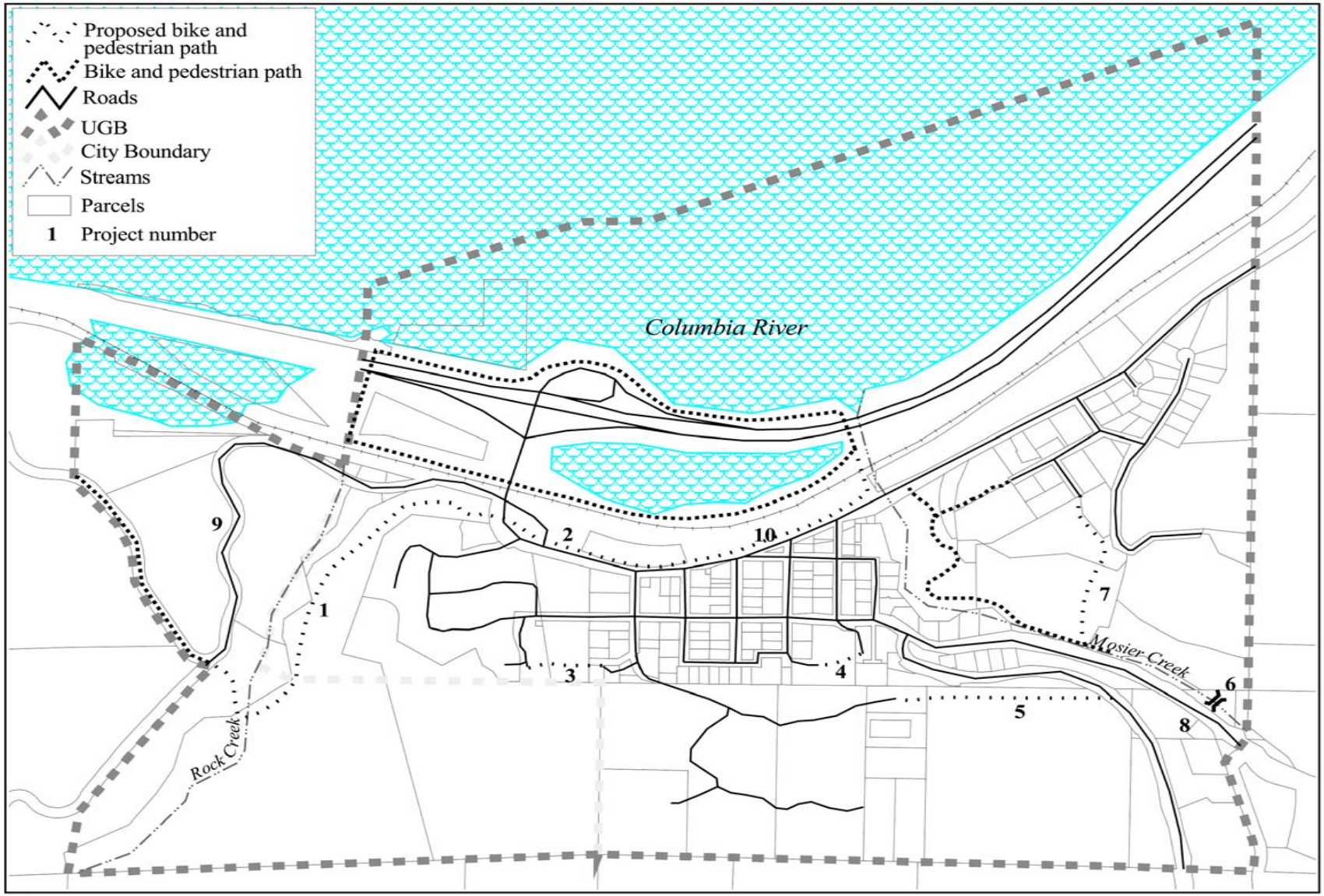
Parking is allowed on the street on most roads in Mosier, with the exception of Highway 30. Off-street parking is provided at most businesses along Highway 30, as well as on a city-leased gravel lot east of the Fruitgrowers east parking lot. Figure 9 indicates access to parking areas and businesses along Highway 30 in Mosier.

Traffic levels (capacity analysis, level of service)

There is limited available data on traffic levels within Mosier. The only data available are for traffic along the state highways in town. The Oregon Department of Transportation (ODOT) reports traffic volumes on sections of each state highway every year at the same locations. The most current volumes available are from 2001, with historical traffic data dating back to 1978. Each year, ODOT counts one-third of the state highway system, meaning that traffic on highways within Mosier is counted once every three years. In between the years counts are taken, traffic volumes are estimated based on traffic growth trends in nearby areas.

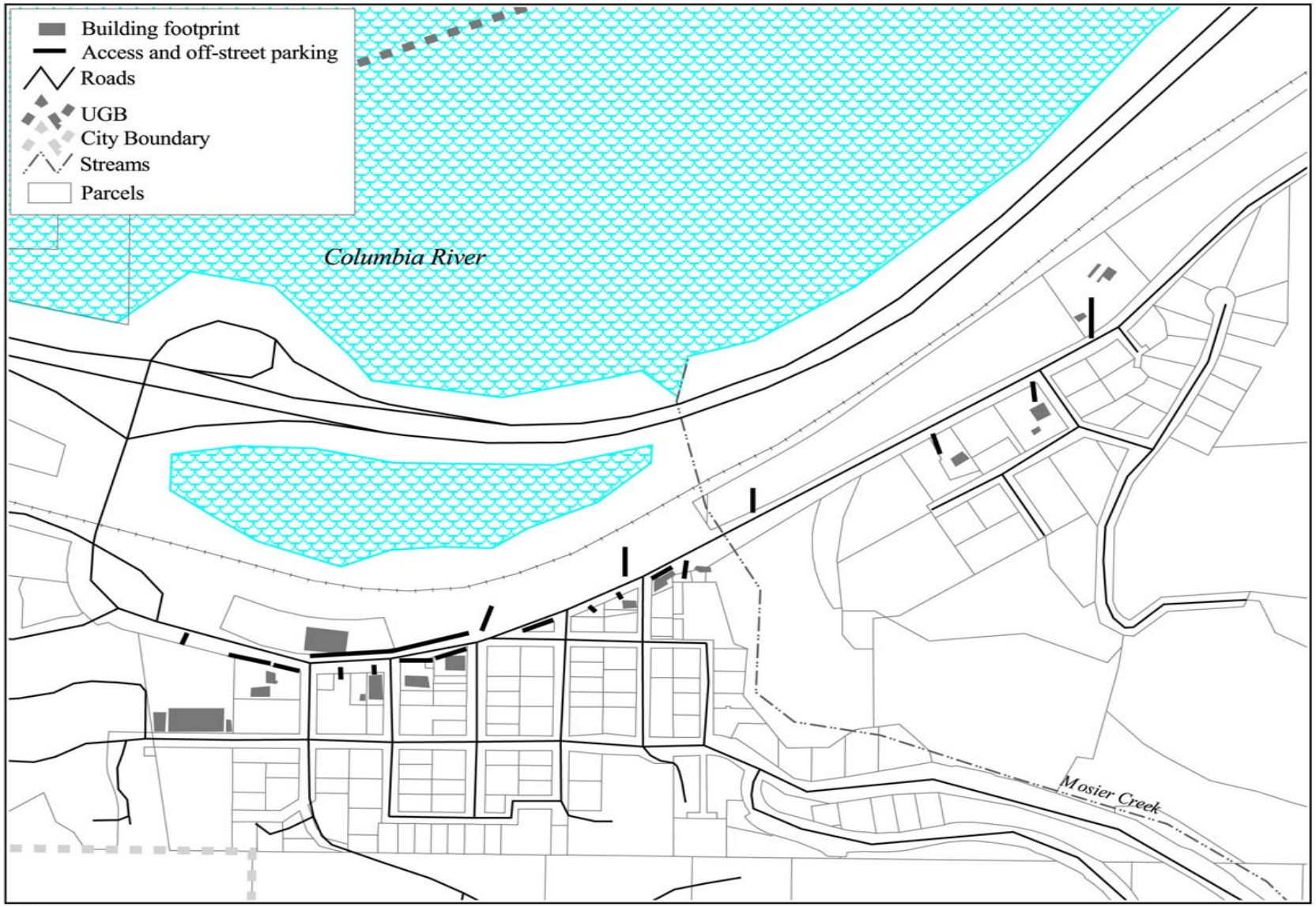
Traffic data available from ODOT comes in the form of measures of average daily traffic (ADT), which represents the typical average amount of traffic in all lanes passing a given roadway location in both directions over a 24-hour period. This average is based on traffic counts taken over a period of several days and provides a snapshot of traffic levels along a given road.

Figure 8
Existing and Proposed New Bicycle and Pedestrian Facilities



Proposed Bike and Pedestrian Paths and Transportation Improvement Projects

Figure 9
Accesses and Off-Street Parking Along Highway 30



Accesses and Off-Street Parking on the Historic Columbia River Highway

For this project, traffic volumes were only analyzed along Highway 30, as traffic on I-84 does not directly impact land in Mosier and counts along Highway 30 reflect the amount of traffic accessing Mosier from I-84, as well as local traffic. The 2001 traffic volumes are summarized below:

- West city limits, 0.15 mile north of connection to I-84 – 2,400 vehicles per day (VPD).
- 0.01 mile east of connection to I-84 – 2,400 VPD.
- 0.01 mile west of Washington Street – 2,100 VPD.
- 0.01 mile west of Oregon Street – 540 VPD.
- On Mosier Creek Bridge – 520 VPD.
- East city limits of Mosier – 520 VPD.

Roads typically are designed to safely accommodate a certain level of traffic without unacceptable delays for drivers. The level of traffic assumed for the purposes of this analysis is called the "design hourly volume" (DHV). State guidelines specify that the DHV should represent the 30th highest hourly traffic volume recorded along the roadway segment during a given year. For example, if the total number of vehicles in both directions is counted at a specific roadway location for every hour throughout the year, and those hourly volumes are ranked from highest to lowest, the DHV would be the 30th highest hourly volume of the year. This 30th highest hourly volume provides a relatively stable estimate of typical traffic levels during a time when traffic is relatively heavy but ensures that roads are not built to accommodate the absolute busiest hour of the busiest day of the year. Planning for this highest traffic hour would cause roads to be overbuilt for the vast majority of time.

Estimated DHV's within Mosier along Highway 30 are:

- West city limits, 0.15 mile north of connection to I-84 – 360 vehicles per hour (VPH).
- 0.01 mile east of connection to I-84 – 360 VPH.
- 0.01 mile west of Washington Street – 315 VPH.
- 0.01 mile west of Oregon Street – 81 VPH.
- On Mosier Creek Bridge – 78 VPH.
- East city limits of Mosier – 78 VPH.

Transportation engineers use two systems to measure how well a street or intersection manages traffic (i.e., how congested it is). The first is the ratio of traffic volume to road capacity or the volume-to-capacity ratio (V/C). In other words, it is the amount of traffic on a given stretch of road or intersection divided by the maximum amount that can be accommodated. The second is "level-of-service" (LOS). Level of service measures how congested a road or intersection typically is based on how long cars have to wait to go through a particular intersection or how fast traffic moves, relative to the

posted speed limit. LOS is measured on a scale of A to F, with "A" referring to a road that operates well and "F" to one that is failing to adequately handle traffic (one with long wait times and lots of congestion). The *1999 Oregon Highway Plan* requires that V/C ratios be used to assess performance on state highways.

Within Mosier, the volume-to-capacity ratio is measured using existing data on DHV traffic levels along Highway 30 (described above) in conjunction with an estimate of the traffic capacity of the road. The estimated traffic capacity of Highway 30 is based on average capacities of typical state highways in combination with specific conditions in Mosier, including the speed limit, topography and number of intersections. The estimated two-way capacity of Highway 30 through Mosier is 2,000 vehicles per hour.

The resulting volume-to-capacity ratio for the segment of highway just west of Washington Street was 0.16. In other words, during the 30th busiest hour, traffic on the street is at about 16% of the maximum capacity the street could carry. In addition to analyzing the highway, the intersection of the Washington Street and Highway 30 also was analyzed. The analysis shows that this intersection has a LOS of B and has a volume-to-capacity ratio of 0.13. Both these numbers indicate that the state highway, as well as all intersections within Mosier, are estimated to be relatively uncongested most of the time and operating well within state performance standards.

Future Conditions and Improvements

This plan is intended to lay the foundation for future development downtown and proposed improvements to the transportation system throughout the City over the next 20 years. Building on economic development objectives in the Mosier 20/20 Vision, it envisions new commercial development downtown, as well as a new community gathering space and public services building, additional bicycle and pedestrian connections, landscaping and other public improvements. It also identifies standards and guidelines for the development and construction of public and private improvements, as well as cost estimates and potential funding sources for public facilities.

To enhance the connections between businesses, community buildings and other activity centers, the plan identifies future bicycle and pedestrian connections and includes design standards to ensure that roads and trails are built in a consistent, adequate manner. Proposed transportation improvements are recommended to improve the safety and mobility of Mosier residents and visitors.

Future Land Use and Development

No significant zoning or land use changes are proposed in Mosier as part of this plan. Land along Highway 30 between Rock Creek Road and Kingdom Street, and 3rd Avenue between Center and Main streets will continue to be zoned for commercial use, while most other areas will continue to be zoned primarily for residential use. Within the commercial zone, a mixture of commercial and residential uses also will be allowed, with residences allowed above commercial uses on the south side of the street and below businesses on the north side.

As noted previously, additional commercial growth is expected downtown as the town grows in population and as more people visit the City's waterfront area, as well as the adjacent trail to the Mosier Twin Tunnels, and other nearby recreational and scenic areas. Additional commercial development is envisioned on vacant properties north of Highway 30, some of which currently are leased by the City from the Union Pacific Railroad.

Access and Parking

Parking will be located in three general areas:

- For **existing businesses**, in existing individual parking areas next to, behind or in front of existing buildings.
- For **new businesses on the south side of Highway 30**, in individual or shared lots (preferred) next to buildings.
- For **new businesses on the north side of the highway**, in a shared parking area behind future buildings north of the Highway. There will be two entrances to this parking area from Highway 30 near Main and Idaho Streets, with an exit onto the highway adjacent to the Fruitgrowers building's west entrance. Traffic in the parking area will move from east to west only. Approximately 30 to 75 parking spaces could be located in this area, assuming a single row of diagonal spaces and depending on the exact boundaries of the parking area.

Future parking areas and access are shown on Figure 10. Access to parking areas and businesses will be delineated by landscaping (see Figures 10 and 11).

Public Improvements

The following public improvements are proposed downtown:

- **Totem pole and plaza**. The City currently is working with artist Jeff Steward, on the design a totem pole that will become a local landmark and focal point for the downtown. It is proposed to be surrounded by a public plaza, flanked by rock walls

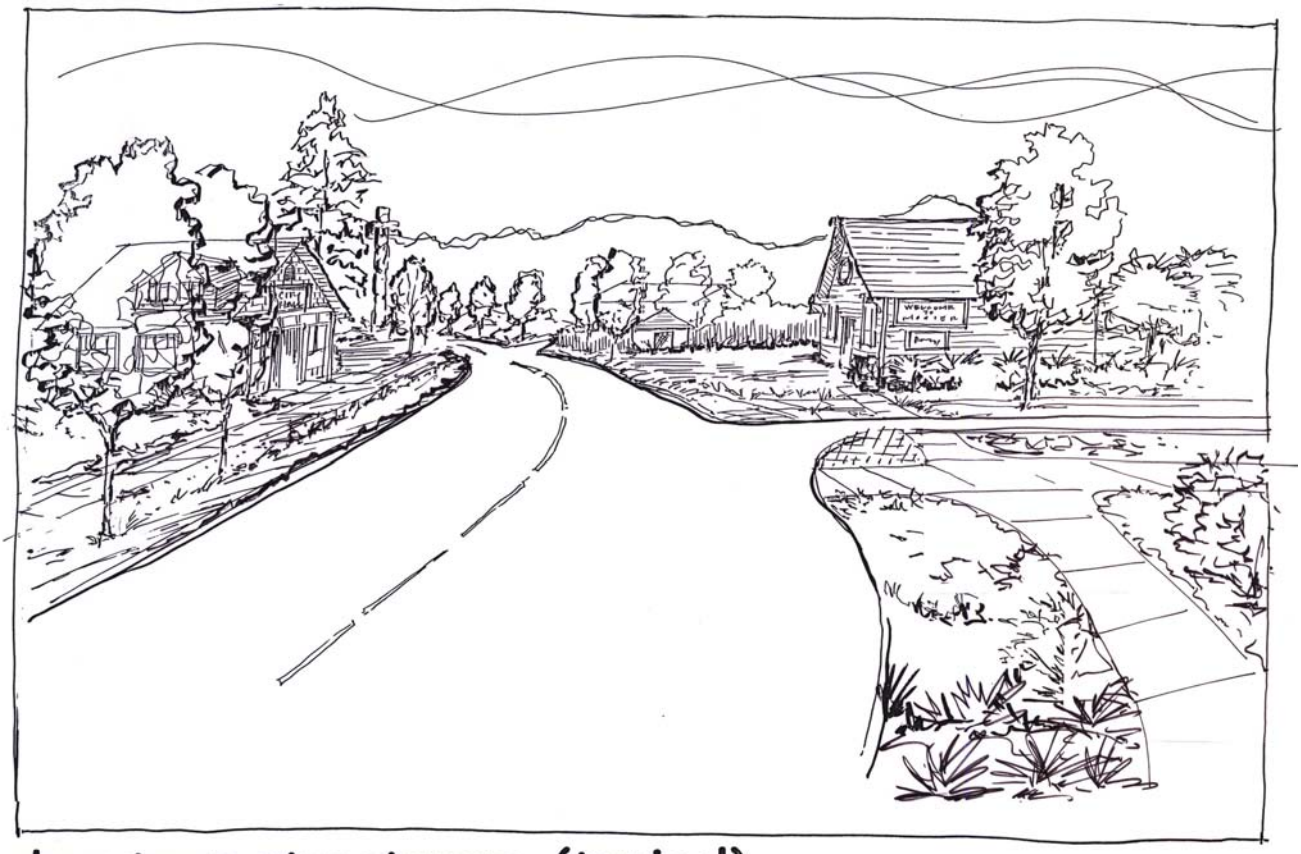
and include seating and artistic elements, such as mosaic tiles created by Mosier 4th and 5th grade elementary school students. It is recommended to be located north of Highway 30, just of the eastern Hood River Growers parking lot (east of Main Street). This location provides an adequate sized flat site, with minimal grading required and access to existing parking. An alternative location would be just east of Washington Street. This location could provide better views of the City and but likely would require additional site preparation and grading.

- **New city services building**. A new city building is proposed to be located near the totem pole plaza. It could potentially house city administrative offices (i.e., City hall), public restrooms and possibly a visitors center, community meeting room and/or other facilities. It would provide services for both residents and visitors.
- **Pedestrian/bicycle path**. A new bicycle and/or pedestrian path would travel the length of the downtown adjacent to Highway 30. Between Mosier Creek and Center Street, it is proposed to be a multi-use bicycle/pedestrian path (12 feet wide), located on the south side of the Highway. Between Center and Washington Streets, it would be a pedestrian-only path, also on the south side of the Highway. Between Washington Street and Mosier Creek, it would be a pedestrian path, located on the north side of Highway 30 (see Figure 10). All locations are subject to a variety of factors, including available land for right-of-way and drainage facilities, and topographic constraints.
- **Bicycle parking, lighting, seating and other facilities**. Bicycle parking would be required to be provided for new commercial businesses. It would be located to allow convenient access to businesses and community buildings, without interfering with pedestrians and bicyclists using adjacent paths and walkways. Benches or other outdoor seating would be provided at the Totem Pole plaza and possibly in conjunction with new businesses on a voluntary basis. Lighting would be desirable, though no specific locations or standards have been identified in this plan.
- **Interpretive Panel**. A new interpretive sign is planned for construction in the triangular parcel of land west of Oregon Street and south of Highway 30.
- **Gateway Sign at West End of Mosier**. It is recommended to move the existing "Welcome to Mosier" sign now located near River Way or create a new "gateway"

sign for Mosier located east of the I-84 interchange/Highway 30 intersection so that it is visible to all travelers entering the City from the West and I-84.

Figure 10 shows the location of these improvements. Unit construction cost estimates are provided in Tables 8 and 9 (pages 59-61).

Figure 10
Downtown Improvements



downtown streetscape (typical)

Bicycle and Pedestrian Facilities

As described above, a new pedestrian bicycle path is proposed along Highway 30 to improve bicycle and pedestrian connectivity within and through the downtown. Where it is a multi-use bicycle/pedestrian path, it would be a paved 12-foot wide path, detached from the roadway and flanked by intermittent landscaping adjacent to the road in some areas to help delineate access to parking areas and provide a strong, cohesive design element in the downtown. Where it is a pedestrian path, it would be four to six feet wide and also accompanied by vegetation – either a new planted vegetation strip or existing vegetated berms or trees (e.g., east of Washington Street on the north side of Highway 30).

In addition, a new connecting bicycle/pedestrian trail is proposed between the downtown and the Twin Tunnels trailhead. This path would provide an alternative to Rock Creek Road for pedestrians and bicyclists. It would make use of an existing vacant road bed that starts from Highway 30 near the trailhead, cross Rock Creek, then run approximately parallel to the creek on the east side, before connecting near the I-84 interchange to Highway 30 and the bicycle/pedestrian path described above. Other proposed future bicycle and pedestrian connections are described on page __.

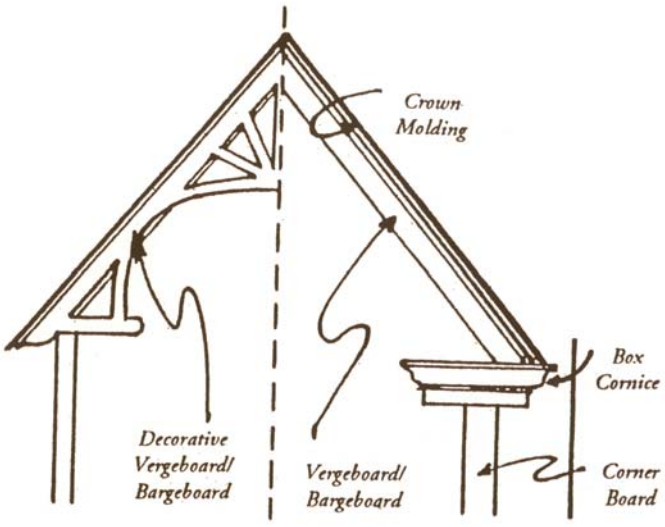
Landscaping

Landscaping would be used on either side of Highway 30 where feasible and appropriate to delineate driveways or other access points, enhance the appearance of the downtown and provide a buffer between the bicycle/pedestrian path and roadway. Use of native plants would be encouraged. Use of existing vegetation (e.g., the planted berm in front of the Fairydell Store or the trees along Highway 30, east of Washington Street) also would be recommended.

Because of the rural nature of downtown Mosier, traditional street tree planting at regular intervals will be supplanted by tree and shrub groups in landscape areas. Tree grates are not anticipated.

Architectural Character and Design

Design standards and guidelines are proposed to ensure a pleasing, consistent look and feel to the downtown, build on Mosier's unique history and appearance, preserve views of the Columbia River, and promote energy efficiency. Design standards and guidelines have been developed to help guide the location and height of buildings relative to the street, architectural design of buildings, and materials to be encouraged or avoided. General standards also are provided for potential new street lighting, furniture and other fixtures. The design standards and guidelines described below will be applied to new buildings. Existing buildings will not have to conform to these standards unless they undertake major expansions. Even in these cases, many of the standards will be voluntary. All of the standards and guidelines described below will be implemented by the City's zoning ordinance. Where needed, graphics will provide illustrations or clarifications.



Setbacks

Setbacks refer to the distance between a building and adjacent property lines. Future commercial buildings in Mosier are

proposed to be located relatively close to the street or right-of-way. A "build-to" line is proposed to be located approximately ten feet from the existing right-of-way (or proposed location of the new bicycle/pedestrian path). The front of any new buildings would need to be located on this line.

Building height and siting

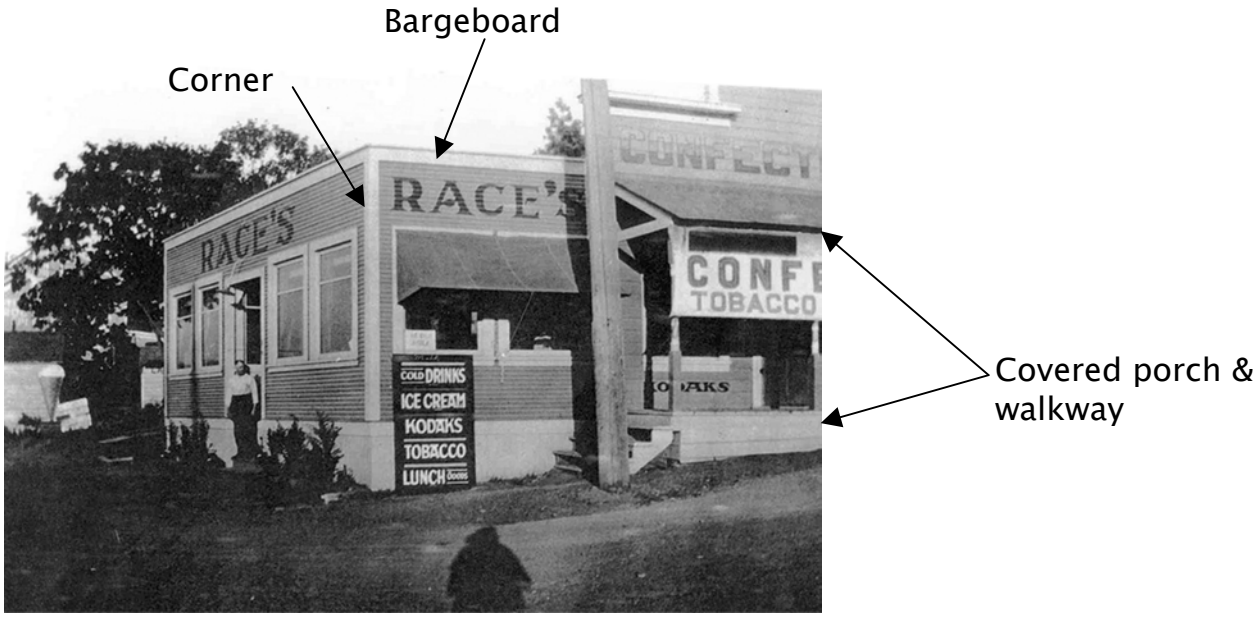
To retain views from other buildings in Mosier, new buildings along the north side of Highway 30 will be limited to 18 feet in height above the elevation of the adjacent section of Highway 30 (i.e. one-story on the street side). Where the grade drops off to the north, a second lower story could be allowed.

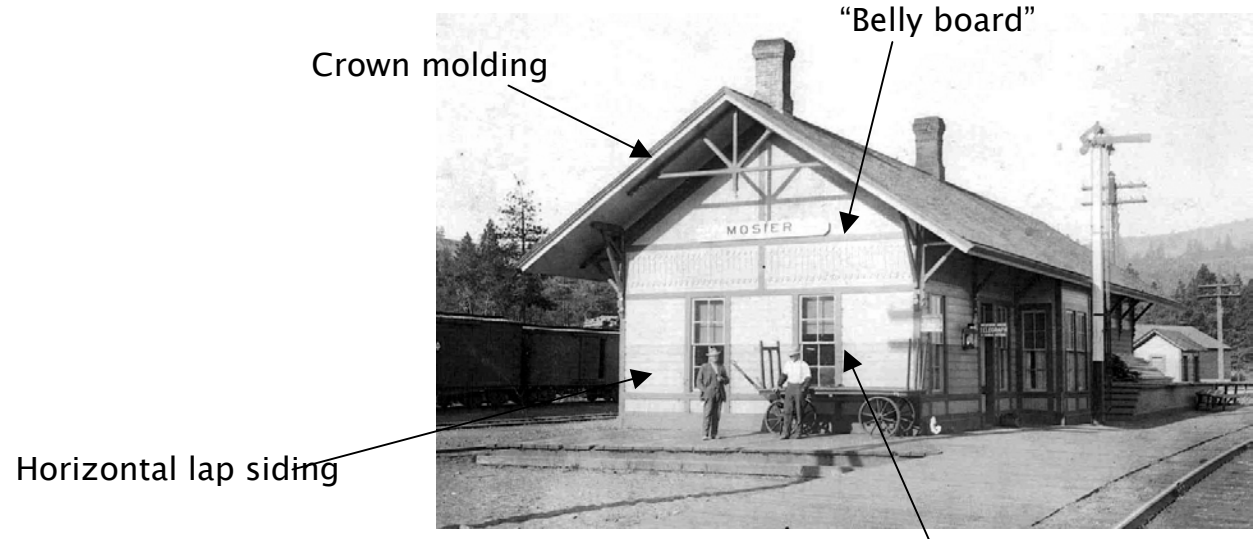
Architectural elements and design features

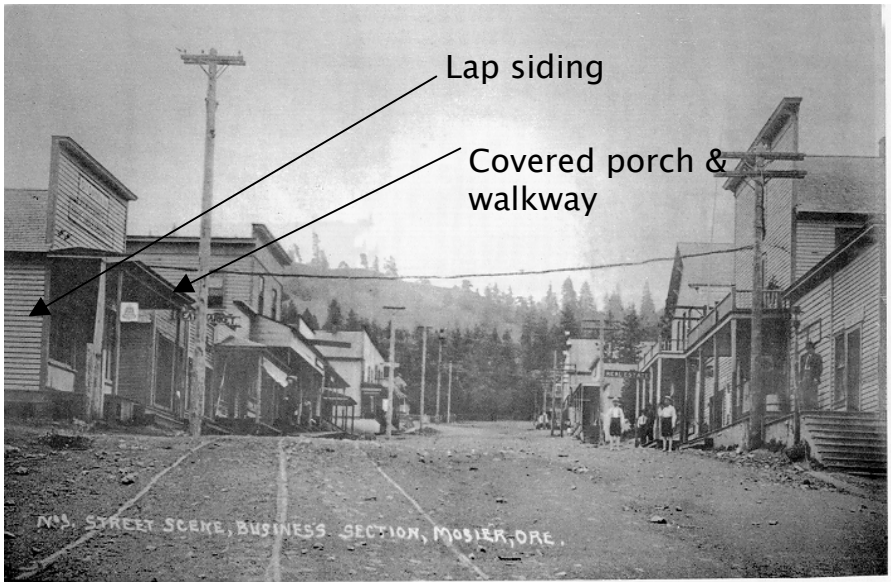
Quality architectural design is a key to long term development of an attractive, cohesive downtown. Some communities identify a desired architectural or design theme and strictly regulate the design of buildings consistent with that theme. Sisters, Oregon is a good example of this approach. Other cities take a somewhat more flexible but still fairly directive approach by requiring use of consistent architectural details consistent with a certain period architectural style. Others take an even more flexible approach by establishing general requirements for compatibility between new and existing buildings in terms of height, size and shape of new buildings. Many communities combine such standards with a design review process for new commercial, public and, in some cases, residential uses.

For Mosier, architectural design standards will be used to encourage use of specific architectural elements typically used in historic buildings in Mosier constructed in the early 1900's such as the following:

- Pitched roofs
- Covered porches or walkways
- Craftsman style windows
- Bargeboards
- Lap or decorative siding
- Crown molding

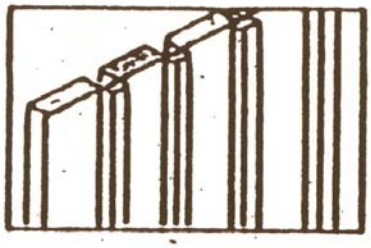

Bargeboard
Corner
RACE'S
COLD DRINKS
ICE CREAM
KODAKS
TOBACCO
LUNCH
TOBACCO
Covered porch & walkway


"Belly board"
Crown molding
MOSIER
Horizontal lap siding
Craftsman-style

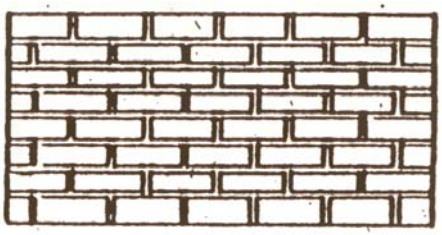

Lap siding
Covered porch & walkway
STREET SCENE, BUSINESS SECTION, MOSIER, ORE.

Use of materials encouraged or allowed

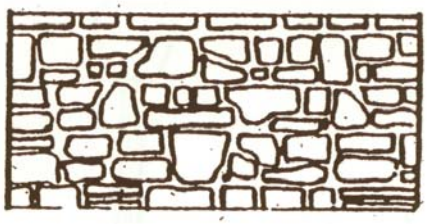
In conjunction with specific architectural elements, use of specific types of materials in new buildings will help create a certain look and feel for the downtown desired by the community. The city's zoning ordinance will encourage use of specific materials in construction of new buildings or major renovations. Conversely, certain other materials will be discouraged. Some materials will be allowed on a limited basis only. The following table summarizes requirements regarding use of exterior building materials.



Board & Batten Siding



Running Board Brickwork



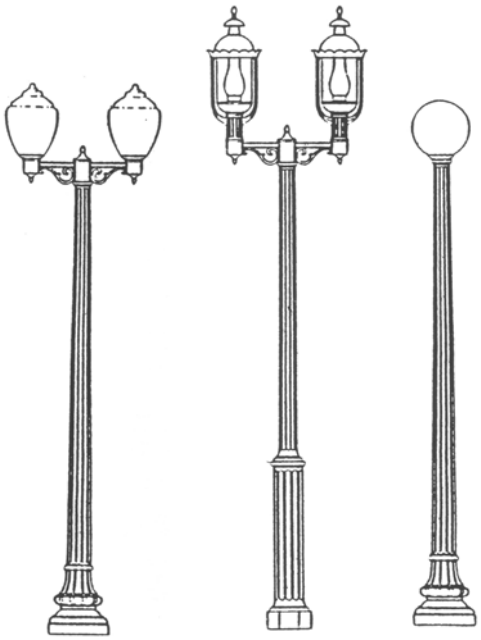
Coursed Rubble Stonework

Table 2
Building Materials for Future Commercial Uses

Material	Encouraged	Allowed but not encouraged	Limited use allowed	Discouraged
Wood lap siding	✓			
Rock	✓			
Faux Rock	✓			
Brick	✓			
Board and batten	✓			
Metal roofs 2		✓		
Smooth block (i.e., bare cinderblock)				✓
Stucco / faux Stucco	✓			
Metal or plastic siding			✓	
Plywood Siding			✓	

Notes:

1. No more than 15 percent of the total surface area may be covered by this material.
2. Colors are encouraged to be light earth tones; vibrant or highly reflective colors are discouraged.



Street furniture and fixtures

Street furniture will include benches, ornamental light poles, trash containers and store front signage suggestions. Standards for lighting and fixtures along Highway 30 must comply with policies and standards for the Historic Columbia River Highway and approved by the Historic Highway Advisory Committee. All street furniture will be "turn of the (19th) century period" style.

TRANSPORTATION SYSTEM

This section of the plan includes a local street plan and standards for future streets and trails in the City of Mosier. It begins with an analysis of future traffic projections. It provides guidelines as to where to construct local streets and describes areas where local streets may not be feasible. It describes recommended network connectivity and other transportation projects for both streets, and pedestrian and bicycle paths. This section of the plan also includes recommended access management standards for city streets, county roads and the state highway, and performance standards for streets (city streets, county roads and state highways) and trails. It concludes with information about costs and funding sources for future improvements, including recommended funding sources for specific types of facilities.

Traffic Forecasts (capacity analysis, level of service)

This traffic analysis relies on existing, available traffic data. In Mosier, the only available traffic data is that collected by ODOT for Highway 30 (the Historic Columbia River Highway) and I-84. Existing data was described earlier in this plan. The traffic levels described there for Highway 30 have been projected over the next 20 years to identify future traffic levels and the potential need for future transportation improvements. Traffic forecasts are based on historic growth on the state highway system. For this analysis, it is assumed that traffic on the state highways will grow over the next 20 years according to the same linear trends that have occurred over the last 20 years.[2] Based on the state's estimates, traffic forecasts for the year 2022 have been estimated for Mosier, with the following resulting average daily traffic (ADT):

[2] Traffic forecasts for state highways have been developed by the Transportation Planning Analysis Unit (TPAU) of ODOT. TPAU develops historical traffic growth trendlines by plotting the ADT volumes for each reported highway location in the years where actual ODOT counts were taken. They also investigate suspect count information and adjust traffic volumes for their forecasts as needed. Using a linear regression process, the linear trendline that best fits the volume data points is determined. This historical trendline is then used to forecast future traffic volumes over the 20-year planning horizon. As new data is added to TPAU's database, the trendlines are refined. State highway locations that have displayed increasing 20-year historical traffic growth are assumed to continue to grow according to the 20-year historical linear trendline growth rate. Locations displaying negative historical traffic

- West city limits, 0.15 mile north of connection to I-84 – 3,560 VPD.
- 0.01 mile east of connection to I-84 – 3,440 VPD.
- 0.01 mile west of Washington Street – 3,840 VPD.
- 0.01 mile west of Oregon Street – 500 VPD.
- On Mosier Creek Bridge – 500 VPD.
- East city limits of Mosier – 380 VPD.

Future traffic levels in Mosier along Highway 30 in 2022 are described below. They are shown as design hour volumes (DHV's), which are used to determine how well roads will operate in the future (i.e., how congested they may be).

- West city limits, 0.15 mile north of connection to I-84 – 535 DHV.
- 0.01 mile east of connection to I-84 – 515 DHV.
- 0.01 mile west of Washington Street – 575 DHV.
- 0.01 mile west of Oregon Street – 75 DHV.
- On Mosier Creek Bridge – 75 DHV.
- East city limits of Mosier – 55 DHV.

As described previously, transportation engineers use two systems to measure how well a street or intersection manages traffic (i.e., how congested it is). The first is the ratio of traffic volume to road capacity or the volume-to-capacity (V/C) ratio. In other words, it is the amount of traffic on a given stretch of road or intersection divided by the maximum amount that can be accommodated. The second is "level-of-service" (LOS). Using the estimated traffic capacity of Highway 30, 2,000 vehicles per hour, the volume-to-capacity (V/C) ratio in 2022 for the segment of highway just west of Washington Street was 0.29. In other words, during relatively busy times of the day and year, traffic levels on this section of will be about 29% of the road's capacity. In addition to analyzing the highway, the intersection of the Washington Street and Highway 30 was analyzed. The Washington Street approach to the intersection in 2022 will operate at LOS B and has a V/C ratio of 0.33. Therefore, the state highway as well as all intersections within Mosier are expected to operate well within adopted state standards in the *1999 Oregon Highway Plan*.

Standards

This plan includes a variety of standards for construction of new roads and trails in Mosier. The standards are intended to ensure uniform construction of new roads that meet the needs of the community in a cost-effective manner and are relatively safe, aesthetic, and easy to administer when new roads are planned or built. As part of this

growth are assumed to remain unchanged, displaying neither increased or decreased traffic volume growth. This supports TPAU's belief that negative traffic volume growth is not sustained over long periods of time.

project, these standards are defined in more detail in the city's zoning ordinance. Standards have been developed for the following:

- Street and trail design - widths for each classification of road, trails, parking, sidewalks, and planting strips, as well as the thickness of the road base and overlay.
- Access management - minimum distances between new access points such as driveways and new streets.
- Parking – location and size requirements for on and off-street parking.
- Performance standards – acceptable levels of traffic and congestion based on state and local standards and guidelines.

Street Design Standards

Design standards depend on how a particular type of road is meant to function. The function is determined by traffic levels and speeds, safety, and capacity characteristics. Most roads within Mosier are paved and appear to be in fair to good condition, although anecdotal information from representatives of the Oregon Department of Transportation indicates that some roadways may not have an adequate base and consequently may deteriorate faster than otherwise would be expected. These roads are generally paved 16 to 24 feet in width to accommodate two travel lanes and have gravel shoulders. The existing rights-of-way along City roads are typically 60 feet though they can be less in some areas.

Design and construction standards for arterial, collector, and local streets and alleys are summarized in the following pages and illustrated in Figures 11 through 16. Some existing roads do not meet these standards. These standards are meant to apply only to newly constructed or reconstructed roads. Retrofitting all existing roads is not envisioned or recommended. Where rights-of-way are not adequate to meet these standards in the event of future improvement standards, lower thresholds will be identified for the width of sidewalks and parking areas.

Recent trends in land use planning are toward narrower streets and rights-of-way. Use of narrower streets has the following beneficial impacts to the community in both the short and long term:

- Helps reduce the amount of paved surface, resulting in less runoff, and less cost for developers. Narrower rights-of-way result in less need to acquire or dedicate land.
- Tends to have a calming effect on traffic speeds, improving safety in residential areas.
- Can add to a sense of community for local residents.
- Typically requires lower operation and maintenance costs for the city.
- A higher percentage of property stays on the tax rolls.

The following street design standards were developed with those benefits in mind, as well as with input from the Mosier community.

- **Arterials.** These roads connect cities and other major traffic generators. The only arterial in Mosier is the Historic Columbia River Highway (Highway 30). Because the Historic Columbia River Highway is listed in the National Register of Historic Places and included in the Columbia River Gorge National Scenic Area, no changes are proposed to the highway's existing 24-foot width, nor are curbs, sidewalks, shoulders, bikeways, or on-street parking proposed. The cross section standard for arterials is shown in Figure 11.

  Arterials shall include 24-foot pavement width (two 12-foot wide travel lanes) with 4-foot wide gravel shoulders within a 60-foot wide right-of-way. In some areas, bicyclists and pedestrians will be accommodated on 10-foot wide paved paths (on one or both sides of the road) separated from the roadway by a 4-foot wide landscaped strip. In other areas, bicyclists will continue to share the roadway with motor vehicles. Parking will be accommodated in off-street parking areas outside of the right-of-way. This standard will apply to the Historic Columbia River Highway (Highway 30), east of the intersection of Rock Creek Road and Highway 30.

- **Collectors.** Collectors connect residential neighborhoods with arterial streets. They typically carry local traffic, including limited through traffic, with higher levels of traffic than local streets. The collectors in Mosier are Rock Creek Road, 3rd Avenue, State Street, Washington Street, and Huskey Street. Two design standards were developed for the collectors: an "urban" standard with on-street parking, curbs, and sidewalks; and a "rural" standard with shoulder bikeways and no on-street parking, curbs, or sidewalks.

  The urban cross section standard for collectors is shown in Figure 12. Urban collectors shall include a 36-foot pavement width (two 11-foot wide travel lanes and two 7-foot wide parking strips) within a 60-foot wide right-of-way. Pedestrians will be accommodated on five-foot wide separated or six-foot wide attached concrete sidewalks. Because of the low traffic volumes in Mosier, bicycles will share the road with autos. This standard will apply to any future reconstruction of 3rd Avenue and Washington Street. Where the existing right-of-way (ROW) is less than 60 feet, the following differences will be allowed. Where the ROW is 50 feet, sidewalks will be five feet wide. Where the ROW is 40 feet, sidewalks will be five feet wide and parking will be allowed only on one side of the road, reducing the paved road width to 30 feet.

  The rural cross section standard for collectors is also shown in Figure 12. Rural collectors shall include a 36-foot pavement width (two 12-foot wide travel lanes and two 6-foot wide shoulder bikeways inside the UGB and four-foot outside the UGB) within a 60-foot wide right-of-way. Parking will be accommodated off-street, on gravel drainage swales. Bicyclists and pedestrians will be accommodated on the

shoulders. This standard will apply to any future reconstruction of Rock Creek Road, State Street, and Huskey Street. However, this standard will not apply to the portion of Rock Creek Road that also is designated as the Historic Columbia River Highway.

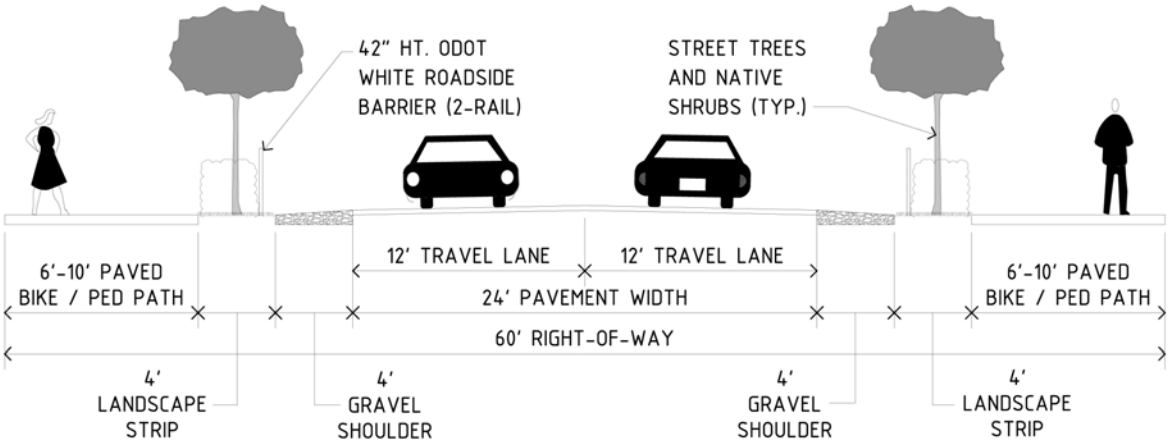
- **Local Roadways.** Local roadways provide access to adjacent properties. They are designed to carry very small volumes of traffic at relatively slow speeds. The cross section standard for local streets is shown in Figure 13. Local streets shall include a 22-foot pavement width (two 11-foot wide travel lanes) within a 50-foot wide right-of-way. On-street parking will be accommodated outside the paved travel lanes on gravel drainage swales. Bicyclists and pedestrians will share the roadway with motorized vehicles. This standard shall apply to all new or reconstructed roads not designated as collectors or arterials.
- **Alleys.** Alleys can be a useful way to reduce the width of local streets by providing rear access and parking for residential areas. Including alleys in a subdivision design allows homes to be placed closer to the street and eliminates the need for garages to be the dominant architectural feature. This pattern, once common, recently has been revived as a way to build better neighborhoods. In addition, alleys can be useful in commercial and industrial areas, allowing access by delivery trucks that is off the main streets. Alleys shall be encouraged in new developments in the urban area of Mosier. Alleys shall consist of a 16-foot improvement within a 20-foot right-of-way, as shown in Figure 13.

Road construction standards

Construction standards address the type and depth of materials used in the various roadway layers (e.g., pavement surface, base rock, etc.). These standards are related to key design parameters such as heavy truck volumes, environmental conditions, and soil conditions. They may differ based on many variables including the types of materials used, the design truck volumes to be served, and the desired life of the pavement. Because of greater traffic volumes, specifically truck volumes, state highways (i.e., arterials) typically have a thicker section than collectors, local streets, or alleys. Experience in other rural eastern Oregon communities indicates that past pavement performance has been well served by designing asphalt pavements with a minimum of 6 inches of base rock and 2 inches of asphalt concrete.

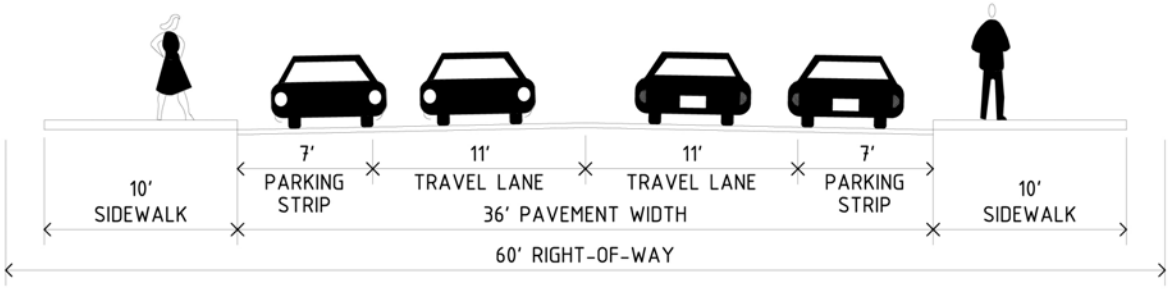
These minimum guidelines should be followed in future asphalt pavement designs unless results of a specific pavement design warrant modifications. Detailed pavement designs also may follow procedures outlined in the *1993 AASHTO Guide for Design of Pavement Structures* published by the American Association of State Highway Transportation Officials (ASSHTO) or the *1998 Asphalt Paving Design Guide* published by the Asphalt Pavement Association of Oregon. The construction details for arterials, collectors, local streets, and alleys are shown in Figures 14 through 16. The cost estimates described later in this plan are based on these standards (see Tables 8 and 9, (pages 59-61).

Figure 11
Design Standards for Arterial Streets



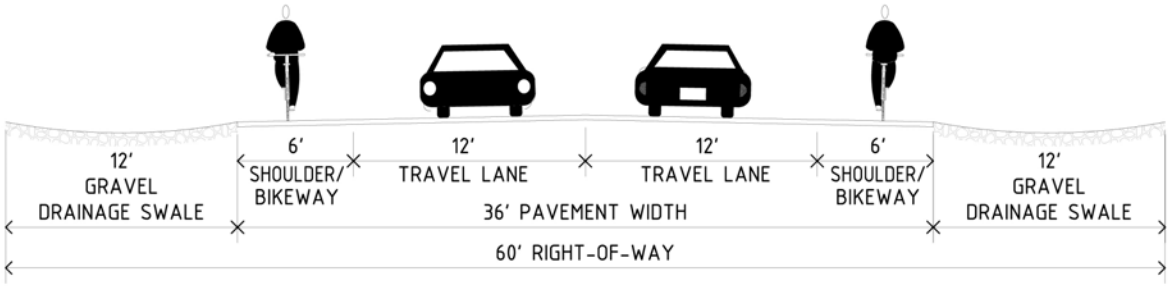
Arterial Street
Design Standard

Figure 12
Design Standards for Collector Streets



URBAN COLLECTORS

NOTE: THIS CROSS SECTION DOES NOT APPLY TO ROCK CREEK ROAD.

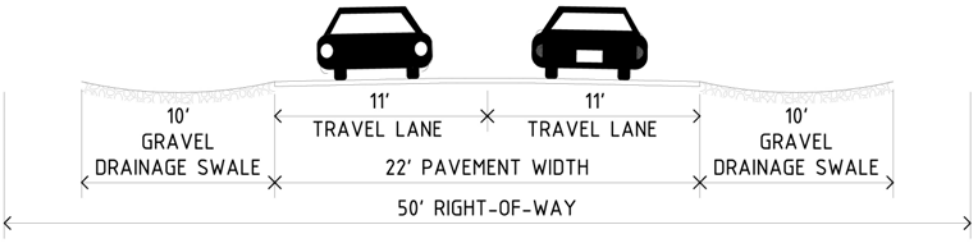


RURAL COLLECTORS

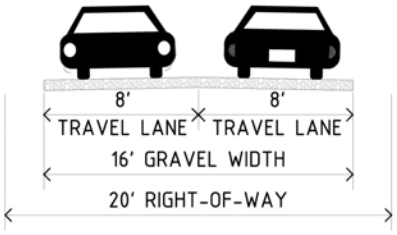
NOTE: PARKING AND SIDEWALK WIDTHS MAY VARY DEPENDING ON AVAILABILITY OF EXISTING RIGHT-OF-WAY.

Collector Street
Design Standard

Figure 13
Design Standards for Local Streets and Alleys



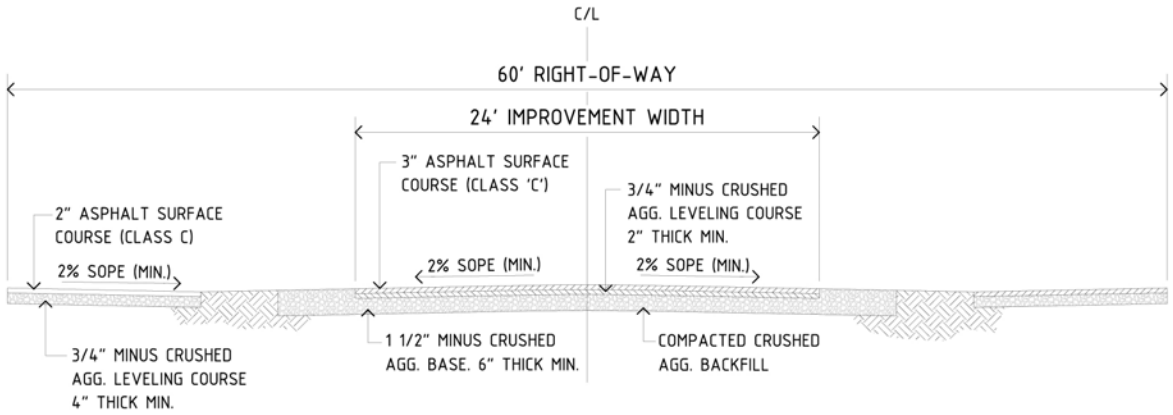
LOCAL STREETS



ALLEYS

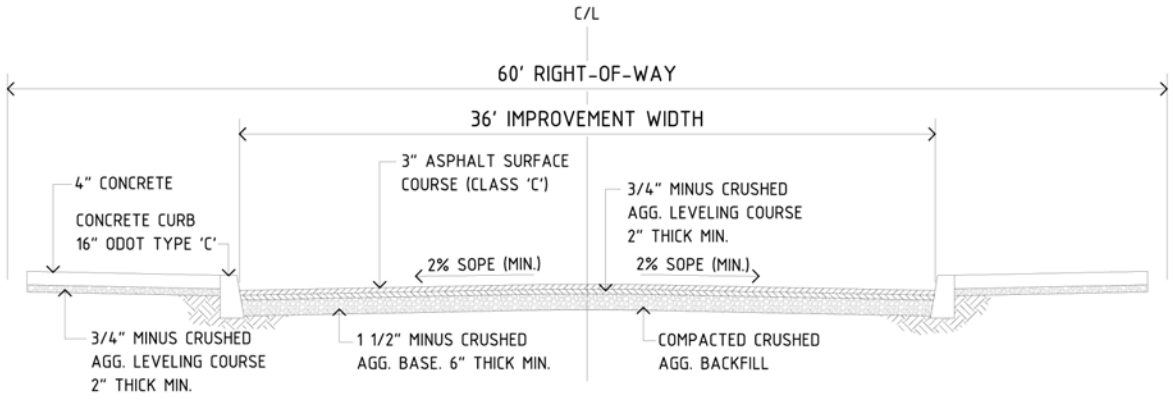
Local Street and Alley
Design Standard

Figure 14
Construction Standards for Arterial Streets



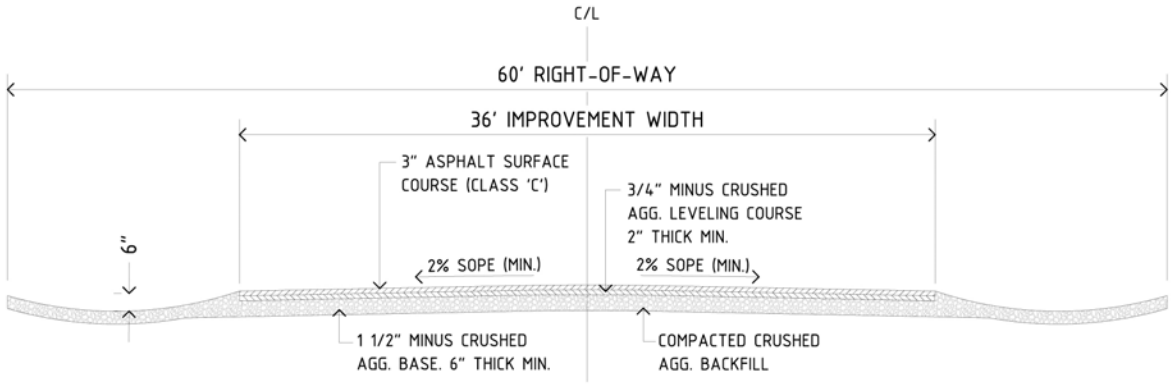
Arterial Street
Section Detail

Figure 15
Construction Standards for Collector Streets



URBAN COLLECTORS

NOTE: THIS CROSS SECTION DOES NOT APPLY TO ROCK CREEK ROAD.

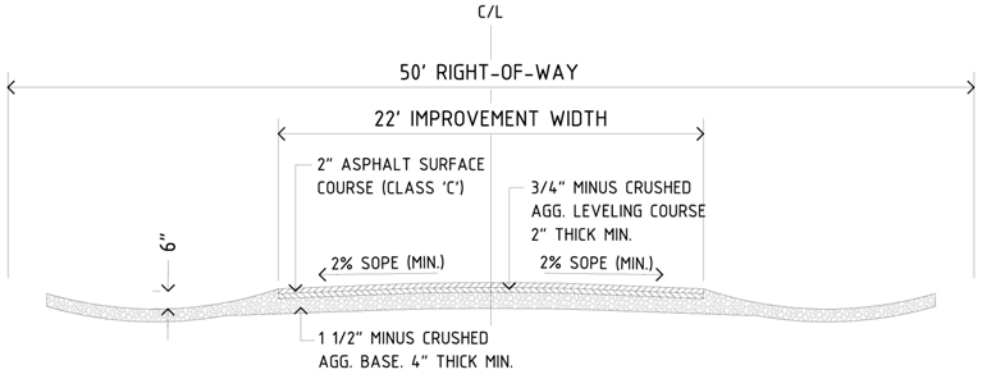


RURAL COLLECTORS

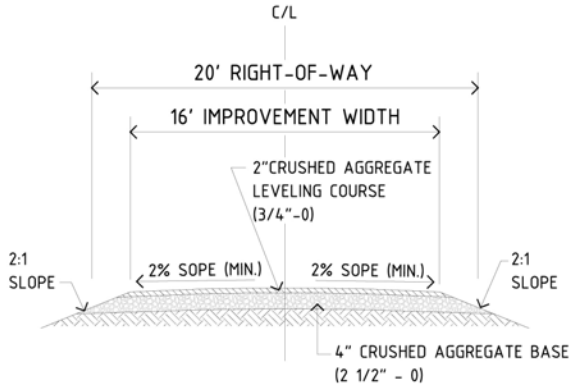
NOTE: PAVEMENT WIDTH MAY VARY DEPENDING ON AVAILABILITY OF EXISTING RIGHT-OF-WAY.

Collector Street
Section Detail

Figure 16
Construction Standards for Local Streets and Alleys



LOCAL STREETS



ALLEYS

Local Street and Alley Section Detail

Access management

Access management is an important tool for maintaining a transportation system. Too many access points along major streets increase the potential for conflicts between vehicles entering and exiting driveways, and vehicles traveling on the road. This leads to more delays and resulting deterioration in the level of service on the road, as well as safety impacts. Research shows a direct correlation between the number of access points and collision rates. Well-managed access planning can minimize the costs of local transportation improvements, which otherwise would be needed to provide additional capacity and/or access improvements.

The Oregon *Transportation Planning Rule* (TPR) defines access management as measures regulating access from public roads and private driveways to streets, roads and highways. The TPR also requires new connections to arterials and state highways be consistent with state access management standards. As Mosier continues to develop, its roads will become more heavily used and relied upon for a variety of travel needs. As a result, it will become increasingly important to properly manage access as new development occurs.

The number of access points to an arterial can be managed through the following techniques:

- Restrict spacing between access points (driveways) based on the type of development and the speed along the arterial street.
- Share access points between adjacent properties.
- Provide alternative access via collector or local streets where possible.
- Provide service drives to prevent spill-over of vehicle queues onto the adjoining streets.
- Offset driveways to produce T-intersections that minimize the number of conflict points between traffic using the driveways and through traffic.
- Develop and adopt local ordinances that require connections between adjacent parking areas.

➢ **Access Management Standards for City Streets and County Roads.** Table 3 shows the access spacing standards on city streets and county roads by road classification. New access points on city streets and county roads will need to meet these standards unless the Mosier downtown is designated as a Special Transportation Area, which would provide further flexibility in these standards. The only arterial in Mosier is Highway 30; access management standards for this road are described in the following section and are shown in Table 4.

Existing developments and accesses will not be affected by these access management standards until either a land use action is proposed (e.g., change in

zoning or requested new access); a safety or capacity deficiency is identified that requires specific mitigation; a specific access management strategy/plan is developed; existing properties along the roadway are redeveloped; or a major construction project is begun on the street.

These access management standards generally are not intended to eliminate existing intersections or driveways but will be applied as new development occurs. Over time, as land is developed and redeveloped, access to roadways is expected to meet these guidelines. In addition, if there is a recognized problem, such as an unusual number of accidents, these techniques and standards can be applied to retrofit existing roadways.

Table 3
Access Management Standards for City Streets and County Roads

Classification	Spacing Between Intersections of Public Streets1	Spacing Between Private Driveways and Alleys
Arterial	See Table 4	See Table 4
Collector	300 feet	100 feet
Local	300 feet	Access to Each Lot

Note:

1. Measurement of the approach road spacing is from center to center on the same side of the roadway.

- **Access Management Standards for State Highways.** Access management standards for state highways are based on standards in the *1999 Oregon Highway Plan* as implemented through state administrative rules. Highway 30 in Mosier is classified as a District Highway. District Highways typically provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. In urban areas, they are expected to facilitate moderate to low-speed traffic flow and accommodate pedestrian and bicycle movements. Inside urban areas, local access is given a higher priority than in rural areas. Access management standards on state highways within Mosier are described as follows and are shown in Table 4.

Table 4

1999 Oregon Highway Plan Access Management Classification System

Posted Speed	District Highway Spacing Standards
Greater than 55 mph	700 feet
50 mph	550 feet
40 & 45 mph	500 feet
30 & 35 mph	400 feet
25 mph or Less	400 feet

Note:

1 Measurement of the approach road spacing is from center to center on the same side of the roadway.

Street performance standards

Transportation engineers have established various standards for measuring the capacity of roads and intersections to handle traffic. For state highways, the volume-to-capacity ratio (V/C) described earlier must be used to assess performance. Another method which can be used to assess performance on local streets and intersections is a level of service (LOS) that describes the degree of delay or congestion for a given road or intersection. Level of Service measurements range from A, where traffic flow is relatively free-flowing, to F, where the street system is totally saturated with traffic and movement is very difficult. These measures are quantified in Table 5. Level of Service D typically represents a minimum acceptable standard.

Table 5

Level of Service Criteria For Unsignalized Intersections

Level of Service	Delay Range (seconds/vehicle)	Expected Delay to Minor Street Traffic
A	<= 10	Little or no delay
B	> 10 <= 15	Short traffic delays
C	> 15 <= 25	Average traffic delays
D	> 25 <= 35	Long traffic delays
E	> 35 <= 50	Very long traffic delays
F	> 50	Extreme traffic delays

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209, 2000, p. 17-2.

- **Performance Standards for City Streets and County Roads.** The *2000 Highway Capacity Manual*, Transportation Research Board Special Report 209, 2000, explains how to calculate level of service. Based on that guidance, appropriate standards for an acceptable level of service or performance on a given street have been developed by David Evans and Associates, Inc. For city streets and county roads, the acceptable standard of level of service is LOS D during the afternoon/evening peak hour. A lesser standard is acceptable at unsignalized intersections where the approaching minor street has low traffic levels and the volume-to-capacity ratio is less than 0.90, and the 95th percentile vehicle queue is less than four vehicles during the peak hour. Furthermore, average daily traffic volumes on local streets shall not exceed 1,500 vehicles per day (VPD). Average daily traffic volumes on collectors shall not exceed 5,000 VPD.

- **Performance Standards for State Highways.** The *1999 Oregon Highway Plan* establishes standards for the state highway system[3]. Inside Urban Growth Boundaries (and outside Metropolitan Planning Organizations and Special Transportation Areas where speed limits are less than 45 mph), District Highways, such as Highway 30 in Mosier, should operate at or below a volume-to-capacity ratio of 0.85 (roughly corresponding to Level of Service D). These standards apply to both highway segments intersections, whether signalized or unsignalized.

Parking

On-street parking standards are identified in the street design standards described previously. Off-street parking standards are described in amendments to the city's zoning ordinance. They identify a minimum number of vehicle and bicycle parking spaces for specific types of residential, commercial and other land uses, as well as size requirements for parking spaces and associated circulation areas. In addition, they will recommend use of shared parking and other measures to more efficiently accommodate parking needs. Shared parking is proposed to be located in the downtown area north of Highway 30, between the railroad berm and businesses along the north side of the Highway as shown in Figure 10 on page 29.

[3] 1999 *Oregon Highway Plan*, Table 6, Maximum Volume-to-Capacity Ratios for Peak Hour Operating Conditions.

Pedestrian and Bicycle Facility Design Standards

While roadway performance standards focus on capacity and delay, these are rarely concerns for trails. For trails, the most important issues relate to safety. Roadway crossings, line-of-sight at crossings and corners, curve radii, grade, surface treatment, and maintenance are critical components of trail design. In the event that a trail is expected to be used by large numbers of people and/or mixed uses such as skaters, joggers, and bicyclists, adequate width is important. In urban areas, a paved width of 10-12 feet is recommended for multi-use bicycle/pedestrian paths. Where topography, land availability or other conditions do not allow for this, narrower trails can be constructed, particularly if they are intended for pedestrians only. A minimum width of three to four feet will be required for pedestrian trails. If the trail is to be used regularly at night, pedestrian scale lighting is recommended for security and safety. The *Oregon Bicycle and Pedestrian Plan* (1995) provides complete guidelines for path design in Section II.6.

Connectivity Improvements

In the future, local streets shall be developed whenever practicable to improve connectivity within and between neighborhoods. Streets should be laid out to the extent practical given the topography of the area in a rectangular grid pattern to provide or continue a network of inter-connecting streets. Streets should be oriented on an east-west axis to the greatest extent possible to ensure solar access for lots within the land division. The grid pattern may be modified to adapt to topography and natural conditions.

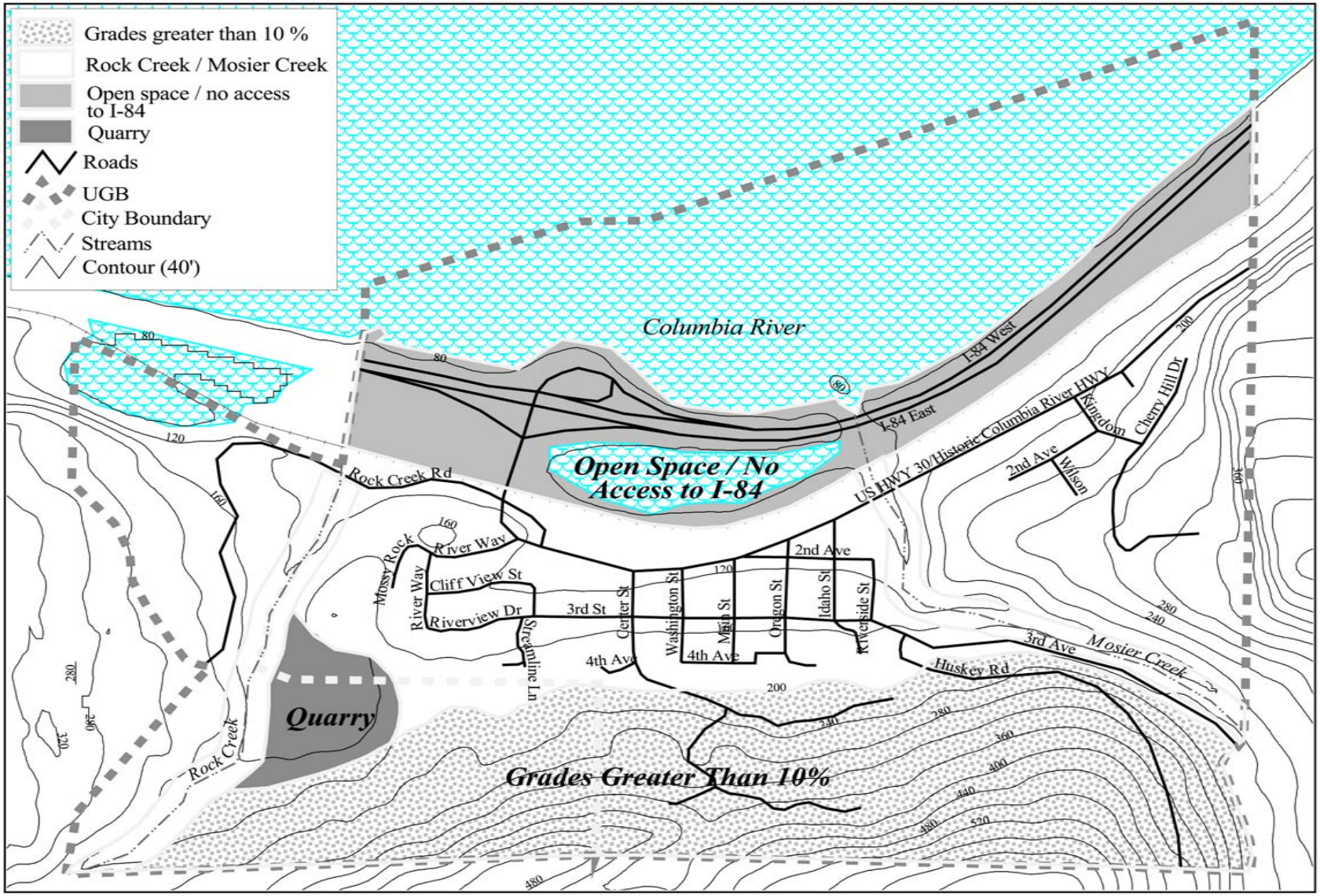
In some areas, one or more of the following conditions may make local street connections infeasible or impractical:

- Natural slopes are greater than 10 percent, and it is not practical to construct streets with grades of 10 percent or less. However, roads will be allowed with grades up to a maximum of 12%.
- Presence of a wetland, water body, or other environmentally sensitive feature such as an identified wildlife habitat that cannot be realistically crossed because of topography, environmental concerns, or visual impacts.
- Existing development on an adjacent property of sufficient value or importance to make a local street connection impractical.
- Access management standards on state highways.

Five areas in Mosier were identified as being areas where new, *direct connections between existing streets* are not feasible. However, these would not preclude future construction of new roads in some areas (e.g., southern portions of the city) if the new roads do not exceed maximum grade requirements or conflict with the other criteria identified above. These areas are shown in Figure 17 and are described below.

- Approximately the southern one-third of the city. This area has natural slopes greater than 10 percent. As noted above, new streets could be constructed in this area if they do not exceed 12%; ideally, a maximum grade of 10% is recommended.
- The quarry in the southwest corner of the city. This area has slopes greater than 10 percent. New roads in this area would need to have grades of less than 12%.
- Rock Creek along the city's western edge. Rock Creek lies within a steep canyon that cannot be crossed in a cost-effective manner.
- Mosier Creek along the city's eastern edge. Mosier Creek lies within a steep canyon that cannot be crossed in a cost-effective manner. This area is also zoned Open Space. Urbanization within the Open Space zone is not permitted.
- The Open Space Zone along the city's northern limits. Urbanization within the Open Space zone is not permitted. The east-west lying I-84 and railroad tracks also create barriers to new north-south local street connections. The access spacing standard on interstate highways (3 miles) in the *1999 Oregon Highway Plan* prevents any new interchanges from being constructed on I-84 in Mosier. New at-grade street crossings of the railroad will not be allowed unless existing at-grade crossings are closed.

Figure 17
Areas Where Additional Direct Street Connections to Existing Roads May Not Be Feasible



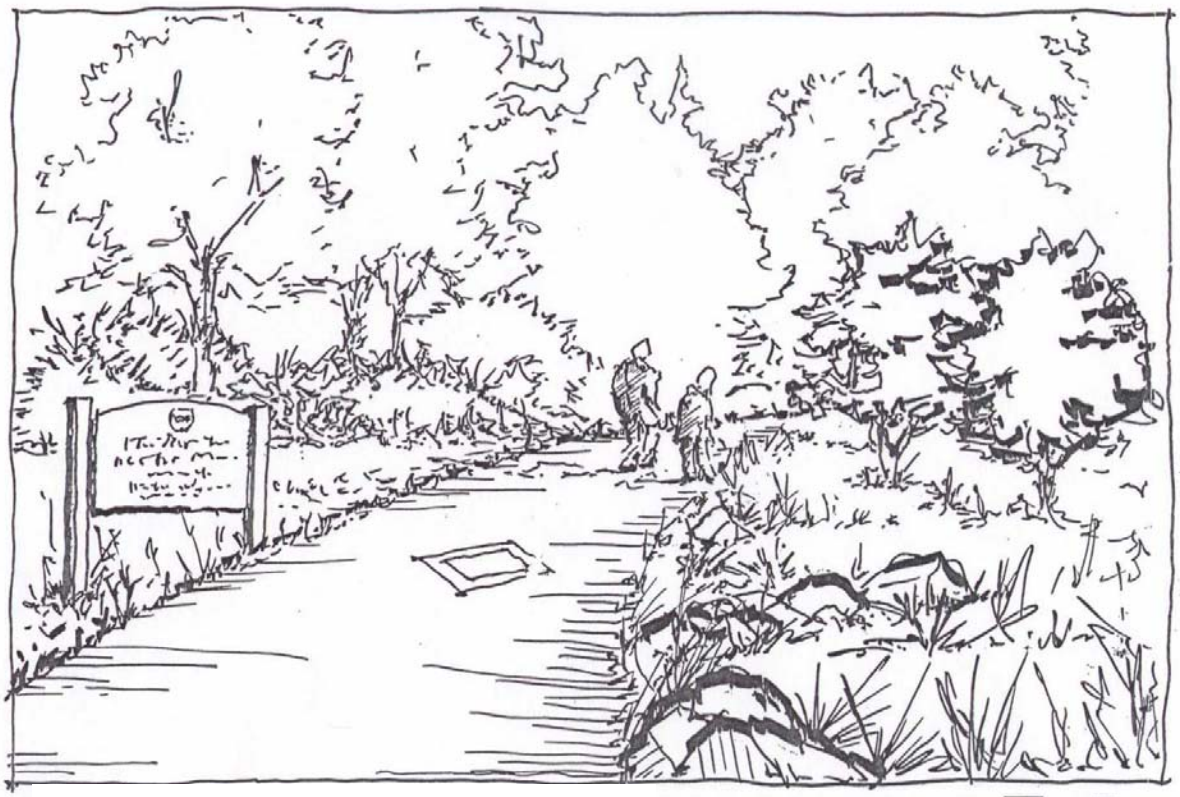
Areas Where Additional Street, Trail, and Path Connections Are Not Feasible

The City of Mosier has been established on a small grid system. Fourth Avenue is the only street that appears discontinuous since it does not connect between Center Street and Washington Street. Based on the parcel and right-of-way boundaries as well as the number of houses which the western segment accesses, it is not recommended that this local street be connected. Another connectivity issue is whether or not to connect the Kingdom subdivision section (east of town) to the rest of town. Considering the cost of adding a bridge over Mosier Creek as well as other issues including traffic volumes and usage, connecting Kingdom to town does not appear to be warranted. No other local street connectivity improvements were identified.

Where appropriate (e.g., at dead-end streets or along blocks more than 600 feet in length) pedestrian and bicycle access corridors should be provided to minimize travel distance between subdivisions, parks, schools, primary trails, and collector or arterial streets. These corridors should provide a reasonably direct connection between likely pedestrian destinations. A "reasonably direct connection" will minimize out of direction travel for people likely to use the connection considering terrain, safety and likely destination. Members of the PAC and public identified eight future pedestrian and bicycle connectivity improvements. These pedestrian and bicycle connections are shown in Figure 18 and described below:

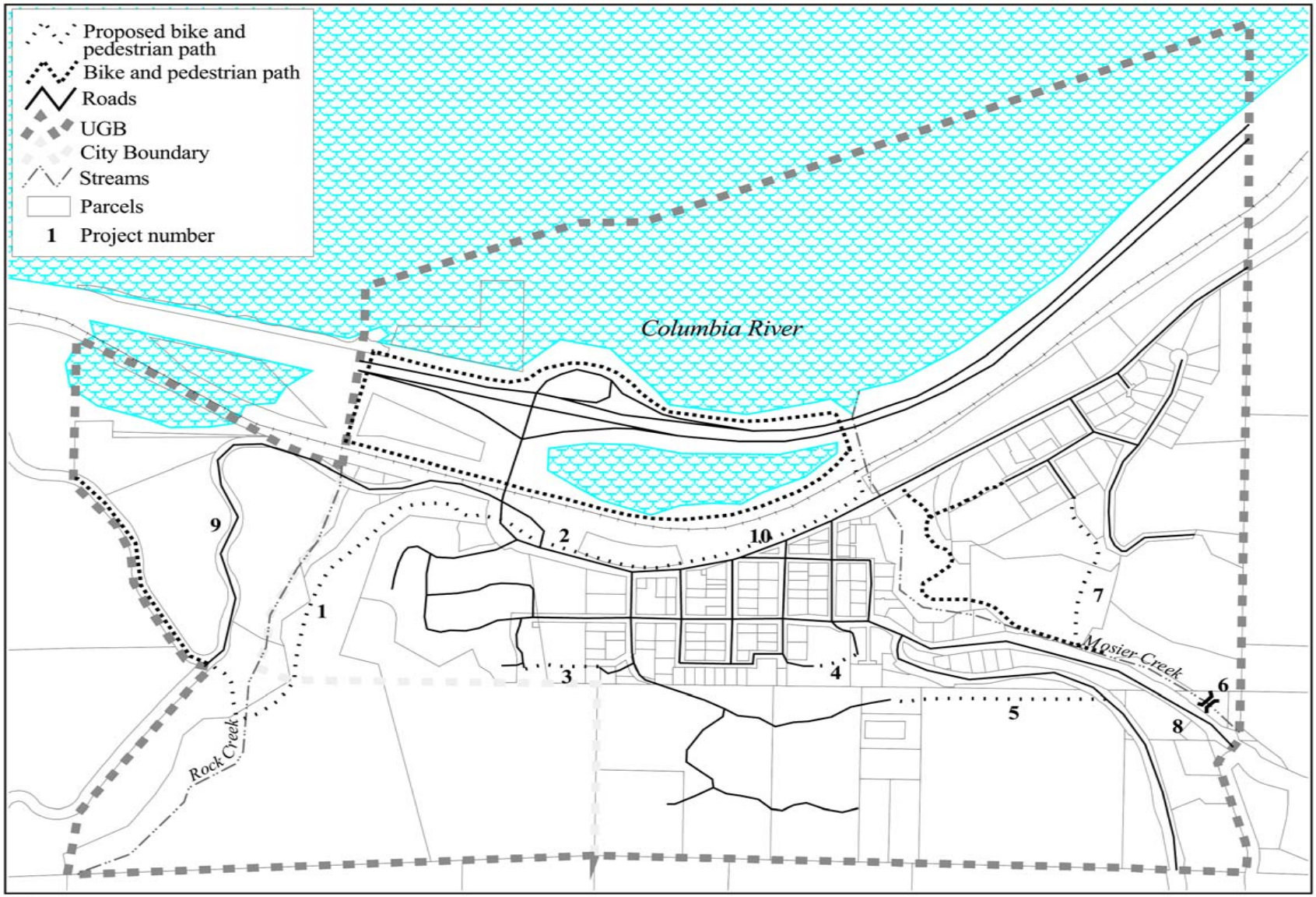
- New pedestrian and bicycle path between the Senator Mark O. Hatfield East Trailhead parking area and downtown Mosier. This path would provide an alternative to Rock Creek Road for pedestrians and bicyclists. Rock Creek Road is a narrow road that does not have shoulders, bike lanes, or sidewalks. Improvements to this road would be difficult to add within the existing road right-of-way, due to steep embankments and rock outcroppings on both sides. It also is part of the Historic Columbia River Highway, which precludes the possibility of widening it.
- New pedestrian and bicycle path between Mosier Creek and Rock Creek along Highway 30. This path would extend an existing path system and provide direct access between downtown Mosier and the open space north of downtown. It is described in more detail in previous sections of this plan.
- New pedestrian and bicycle path between Streamline Lane and Center Street (Fourth Avenue alignment). This path is in an area where new local street connections are infeasible due to steep terrain.

- New pedestrian and bicycle path between Oregon Street and Idaho Street (Fourth Avenue alignment). This path is in an area where new local street connections are infeasible due to steep terrain.
- New pedestrian and bicycle path between the gravel streets south of town and Huskey Road. This path is in an area where new local street connections are problematic due to steep terrain.
- New pedestrian path connecting the city's Pocket Park to Wilson Street.
- Footbridge over Mosier Creek constructed in conjunction with a water line, if the water line is needed in the future to provide water service to this part of Mosier.



Multi-Use Path Concept

Figure 18
Proposed Transportation Improvements



Proposed Bike and Pedestrian Paths and Transportation Improvement Projects

Other Improvements

Two other transportation improvements also were identified by the PAC and other community members, including:

- Signage along Highway 30 in the downtown area to improve safety for bicyclists and pedestrians.
- Safety improvements on 3rd Street to address potential bicycle/pedestrian/vehicle conflicts in the vicinity of the Mosier Falls overlook trail accessed from 3rd Street. These safety improvements could take a variety of forms, including parking restrictions, shoulder widening, traffic calming devices, or modifications to the back side of the guardrail (i.e., trim existing bolts) to allow pedestrians to walk on the back side of it.

In addition to these improvements, a study of circulation of truck traffic within Mosier is recommended to improve circulation and reduce conflicts among trucks, autos, bicycles and pedestrians during the fruit growing and harvest season. This study could result in recommendations for new signage and improvements or modifications to existing intersections in Mosier.

Prioritization of Improvement Projects

Proposed improvement projects have been prioritized based on recommendations from the PAC and other community members based on comments provided at public meetings (Table 6). They are prioritized in terms of their proposed schedule – short-term (one to five years), medium-term (five to 10 years) or long term (10 to 20 years). In addition to these priorities, it was noted that the two highest priority projects for the community are the trail between the Senator Mark O. Hatfield East Trailhead parking area and downtown Mosier (project #1) and the bicycle/pedestrian path along Highway 30 between Rock Creek and Mosier Creek (project #2).

Table 6
Proposed Transportation Improvements

	Projects	Priority/Schedule		
	New bicycle and pedestrian paths	***Medium-term***	***Long-term***	***Short-term***
1	From Twin Tunnels Trailhead to Downtown Mosier	●		
2	Between Mosier and Rock Creeks along Highway 30	●		
3	Between Streamline Lane and Center Street, extending Fourth Avenue			●
4	Between Oregon Street and Idaho Street, extending Fourth Avenue			●
5	Between the gravel streets south of town and Huskey Road as future development occurs			●
6	Footbridge over Mosier Creek constructed in conjunction with a water line *			●
7	Connecting the city's Pocket Park to Wilson Street		●	
	Other improvements			
8	Safety improvements on Third Street, east of Riverside Street	●		
9	Safety signage on road between Twin Tunnels Trailhead and Downtown Mosier	●		
10	Signs or other means to indicate that bicycles share road with cars on Historic Highway downtown	●		

FUNDING

Obviously, the improvements proposed in this plan will cost money to implement. The City will need to identify and obtain funding from a variety of sources, including local, state, federal and private programs to achieve this plan's objectives. Unit costs for specific types of improvements are described below as are possible and recommended funding sources for specific types of improvements.

Unit Costs

Roads

Cost estimates have been prepared for roads meeting the design and construction standards described in the preceding sections. The estimates are based on standard unit costs for similar projects conducted elsewhere. As shown in Table 7, the unit cost of construction for the arterial standard is $42.67 per linear foot. The unit cost of construction for the urban collector standard is $110.00 per linear foot and the unit cost of construction for the rural collector standard is $46.67 per linear foot. The unit cost of construction for the local street standard is $22.00 and the unit cost of construction for the alley is $5.34 per linear foot. Detailed costs in the tables are expressed in cost per cubic yard (CY), square yard (SY) and linear foot (LF).

Table 7
Unit Costs for Street Construction Projects

Description	Unit Cost	Cost per Linear Foot
Arterial Streets		
Asphalt (3 inches of Class C) 24 ft. wide	$6/SY	$16.00
Leveling rock (2 inches of ¾" minus) 24 ft. wide	$18/CY	$2.67
Base rock (6 inches of 1½" minus) 32 ft. wide	$18/CY	$10.67
Asphalt (2 inches of Class C) 20 ft. wide	$4/SY	$8.89
Leveling rock (4 inches of ¾" minus) 20 ft. wide	$18/CY	$4.44
Total		$42.67
Urban Collector Streets		
Asphalt (3 inches of Class C) 36 ft. wide	$6/SY	$24.00
Leveling rock (2 inches of ¾" minus) 36 ft. wide	$18/CY	$4.00
Base rock (6 inches of 1½" minus) 36 ft. wide	$18/CY	$12.00
Concrete curb, 16 inch, ODOT Type C	$14/LF	$14.00
Concrete sidewalk (4 inches conc. over ¾" minus)	$56/LF	$56.00
Total		$110.00
Rural Collector Streets		
Asphalt (3 inches of Class C) 36 ft. wide	$6/SY	$24.00
Leveling rock (2 inches of ¾" minus) 36 ft. wide	$18/CY	$4.00
Base rock (6 inches of 1½" minus) 56 ft. wide	$18/CY	$18.67
Total		$46.67
Local Streets		
Asphalt (2 inches of Class C) 22 ft. wide	$4/SY	$9.78
Leveling rock (2 inches of ¾" minus) 22 ft. wide	$18/CY	$2.44
Base rock (4 inches of 1½" minus) 44 ft. wide	$18/CY	$9.78
Total		$22.00
Alleys		
Leveling rock (2 inches of ¾" minus) 16 ft. wide	$18/CY	$1.78
Base rock (4 inches of 1½" minus) 16 ft. wide	$18/CY	$3.56
Total		$5.34

Notes (cont'd from Table 8)

1. Estimates do not include any earthwork or grading of subgrade.
2. Estimates do not include mobilization, cleanup, or temporary control of traffic.
3. Estimates do not include any storm drain improvements.
4. Estimates do not include any adjustment to existing utilities.
5. Curb, sidewalk, and separate path estimates include both sides of the street.
6. Sidewalks are 4 inches of concrete over 2 inches of base rock and are 10 feet wide.
7. Estimates are based on prevailing wages and similar sized projects in the recent past. No warranty is made as to their accuracy.

Other Facilities

Costs estimates for other public improvements, including bicycle/pedestrian paths, parking area paving, landscaping and street furniture/fixtures, are summarized in Table 8.

Table 8

Typical Unit Costs for Other Public Facilities

Description	Unit Cost	Cost per LF, SF, or EA
Asphalt Path		
Asphalt (2 inches of Class C) 10 ft. wide	$4.00 / SY	$4.44 / LF
Leveling rock (4 inches of ¾" minus) 10 ft. wide	$18.00 / CY	$2.22 / LF
Total		$6.66 / LF
Unimproved Paths (Alternatives)		
Graded Native Soil (4 ft width)	$1.50 / SY	$0.67 / LF
Bark Chips (4 ft. width / 6 inch depth)	$35.00 / CY	$2.59 / LF
¾" minus Crushed Rock (4 ft width / 2 inch depth)	$4.00 / SY	$1.78 / LF
Total		$5.04 / LF
Parking Lot Paving		
Asphalt (2 inches of Class C)	$4.00 / SY	$0.44 / SF
Leveling rock (2 inches of ¾" minus)	$18.00 / CY	$0.11 / SF
Base rock (4 inches of 1½" minus)	$18.00 / CY	$0.22 / SF
Total		$0.77 / SF
Landscaping		
Topsoil Backfill (Assume 6" at Planting areas)	$24.00 / CY	$0.44 / SF
Street Trees (2 inch caliper / 25 ft on center)	$185.00 EA	No Total
Irrigation (Assume Automatic Drip System)	$0.75 / SF	$0.75 / SF
Shrubs / Groundcover	$1.00 / SF	$1.00 / SF
Total		$2.19+ / SF
Rail Fence at Roadway		
Two-Rail / 2" x 6" / 30" Ht (Similar to Historic)	$24.00 / LF	$24.00 / LF
Total		$24.00 / LF
Street Furniture		
Period Light Posts (100 ft. on center typical)	$3500.00 / EA	$3500.00 / EA
Benches (2 per block)	$350.00 / EA	$350.00 / EA
Trash Receptacles	$350.00 / EA	$350.00 / EA
Total		No Total

Notes:

1. Abbreviations: LF = linear foot; SF = square foot; CY = cubic yard; SY = square yard; EA = each.
2. Estimates do not include any earthwork, grading of subgrade, mobilization, cleanup, temporary control of traffic, storm drain improvements, or adjustment to existing utilities.
3. These estimates are based on prevailing wages and similar sized projects in the recent past. No warranty is made as to their accuracy.

Funding Sources

A variety of funding sources may be used to finance future public improvements in Mosier, including various federal, state, local and private funding mechanisms (see Table 10). A full range of possible financing tools have been reviewed and are described in detail in Appendix B, including a discussion of the advantages and disadvantages of each. They are summarized in the table below. Those that may be more feasible for use by Mosier are identified in the table and described further below. For those not recommended for further exploration, the disadvantages appear to outweigh the advantages. The following section (Funding Recommendations) identifies recommended funding measures to be explored or pursued for specific transportation planning and construction projects or other public improvements.

Table 9

Potential Funding Sources for Improvement Projects

TYPE OF FUNDING			CONSIDER USE IN MOSIER
PUBLIC FUNDING SOURCES			
➢	*State and Federal Funding*		
	◆	Dedicated State and Federal Funding	No
	◆	State and Federal Grants	Yes
➢	*Local Funding Sources*		
	◆	General Fund/Property Taxes	Yes
	◆	Shared State Revenues (Gas Tax)	Yes
	◆	Local Gas Tax	No
	◆	General Obligation (GO) Bonds	No
	◆	Special Revenue Bonds	No
	◆	System Development Charges	No
	◆	Franchise and Utility Fees	No
PRIVATE FUNDING SOURCES			
➢	*Developer or Property Owner Funding*		
	◆	Developer Dedications	Yes
	◆	Private Developer Agreements	No
	◆	Local Improvement Districts (LIDs)	Yes
	◆	Dedication of Land or Easements/Exactions	Yes
➢	*Other Private Funding Sources*		
	◆	Private Donations Through Grants	Yes
	◆	Community Volunteer Efforts	Yes

State and Federal Grants

A variety of state and federal grant programs could be used to help fund future transportation projects in Mosier. In recent years, the City of Mosier has been extremely

successful in obtaining state grants for local planning and construction projects. In the last three years, the City has obtained the following state and federal grants:

- Columbia River Gorge National Scenic Area Economic Development and Recreation grant for the major waterfront project.
- Oregon Department of Land Conservation and Development for planning.
- Oregon State Parks and Recreation for the Pocket Park development.
- Office of Economic and Community Development for the waterfront project.
- Oregon State Arts Commission for the totem pole project.
- Oregon Department of Transportation/Department of Land Conservation and Development Transportation and Growth Management (TGM) Grant for this project.

Specific grant programs recommended for further investigation by the city include the following:

- **Special Public Works Fund** loans and grants for projects that promote economic development.

  Contact Information: Oregon Economic and Community Development Department, 1-800-233-3306

- **Special City Allotments program** sponsored by the Oregon Department of Transportation. This allows small communities up to $25,000 worth of construction dollars for small street improvements in the community on streets which are not on the state highway system.

  Contact Information: Don Aman (ODOT), (503) 986-3880

- **National Recreational Trails program**.

  Contact Information: Oregon Department of Parks and Recreation, Sean Loughran, State Trails Coordinator, 503-378-4168 ext 246

- **National Scenic Byways program**.

  Contact Information: Pat Moran (ODOT) or Jeanette Kloos (ODOT) 503-731-8324

- **Transportation Enhancement grant program**.

  Contact Information: Pat Fisher (ODOT), Patricia.R.Fisher@state.or.us, (503) 986-3528

- **Columbia River Gorge National Scenic Area Economic Development and Recreation grant program**.

  Contact Information: Oregon Investment Board, The Dalles, (541) 296-2266

- **Oregon Bicycle and Pedestrian Program**. Federal and state grants for bicycle and pedestrian projects on local streets would require a local 20% match.

  Contact Information: Michael Ronkin (ODOT), (503) 986-3554

- **Transportation and Growth Management (TGM) Program**. This program is coordinated by the Oregon Department of Transportation and used for transportation and land use planning projects by local communities. Currently, at least 50% of each project must focus on transportation planning. A TGM grant was used to prepare this plan. Subsequent TGM grants possibly could used to draft more detailed plans of specific connectivity or other proposed transportation improvement projects identified in this plan.

  Contact Information: Cindy Lesmeister (ODOT), (503) 373-0050 ext. 228

- **Immediate Opportunity Grant Program**. The Oregon Economic and Community Development Department (OECDD) and ODOT collaborate to administer this program designed to assist local and regional economic development efforts. The program provides approximately $7 million per year through state gas tax revenues. The maximum amount of any grant under the program is $500,000. Primary factors in determining eligibility of projects include the potential to improve public roads; inclusion of an economic development-related project of regional significance; creation or retention of primary employment; and ability to provide local funds (50/50) to match grant.

  Contact Information: Jack Svadlenak, ODOT, (503) 986-3467

General Fund

Funding for local projects may come from the City's General Fund, which is primarily financed from property tax revenue. Property taxes historically have been the primary revenue source for local governments. The City of Mosier has a tax rate of $1.4128 per $1,000 of assessed value. In 2002, the total Measure 50 assessed value of all property within the city limits of Mosier was $19,161,096 (not including publicly owned lands exempt from taxation). Non-exempt land located between the city limits and the urban growth boundary has an assessed value of $532,440. The City had a total annual budget of $1,419,500 in 2002. However, this includes a large grant from the US Forest Service for construction of Mosier's waterfront area. The budget typically is significantly lower, with an annual operating budget of around $60,000. The 2002 budget for the City's *Street Fund* was $41,230. This fund typically is used for a combination of maintenance, new construction and other improvement projects. It is recommended that the city continue to use a portion of its street fund to fund transportation improvements.

Shared State Revenue

Every jurisdiction in Oregon receives a share of state collected motor vehicle fuel taxes. Most communities account for this revenue in their general fund, along with other discretionary funds, but tend to use the money for street maintenance or transportation improvements. Rarely is the gas tax share adequate to finance both maintenance and capital improvement needs. Gas taxes have not been raised frequently enough in Oregon to keep pace with rising maintenance needs and most communities need to

augment them with other funds just to satisfy local maintenance needs. Currently, the City of Mosier receives approximately $16,200 per year in shared gas tax revenues. If other sources of revenue were available to cover maintenance needs, the gas tax revenue could be used to construct system improvements. The City is allowed to pledge its annual gas tax revenue to retire debt and borrow against it (see Revenue Bonds). Though shared gas tax revenues can provide only a very nominal amount of funding for road improvements, given the need to use them for maintenance needs as well, they should be considered as a secondary source if maintenance needs are low.

Developer Dedications/Exactions

Typically, local governments require developers of new subdivisions or partitions to construct local streets that are part of these developments. Streets generally must be constructed to city standards. The city ultimately assumes ownership of these improvements and takes over the operation and maintenance of the street system in the new development when the final plat is accepted or requires the developer to form a local road district. The costs of the new roads are passed through by the developer in the purchase price of the lots and homes. Recent court cases have placed limits on the type and level of "exactions" that may be imposed on a developer, especially for "off-site impacts." Furthermore, given Mosier's size the very limited likelihood that a single development there will be large enough to require off-site improvements, this tool will most likely be used only for development of new local streets in new subdivisions in Mosier.

Local Improvement Districts (LIDs)

Within existing developed areas, the most common method to improve streets to a higher standard is the Local Improvement District (LID). In a Local Improvement District, the benefiting property owners agree to pay a fair share of the cost for improvements adjacent to their property based on a common formula (e.g. frontage foot or property area). In effect, the City acts as a general contractor, administering the construction, advertising for bids, inspection, and so forth and then collects money from benefiting properties to pay for the improvements. Local Improvement Districts are not very common in small communities because of the reluctance to incur additional cost by the homeowner for such improvements. In addition, LIDs are relatively difficult and costly to administer. LIDs are most effective in addressing a retro-fit improvement need - such as building sidewalks, improving a street, or installing street lights - when property owners ask for the improvement. LIDs would be recommended for use in Mosier only if one were requested by a group of property owners seeking a specific improvement.

Dedication of Land or Easements

In some cases, property owners may be willing to dedicate a portion of their property for a street or trail. Alternatively, the City may require they provide an easement to allow use of the road or trail by the public while retaining ownership of the entire property. This tool is frequently used by other local jurisdictions, particularly in efforts to complete disjointed trail systems. It is recommended that the City require easements in such cases as conditions of approval when a property is redeveloped or rezoned.

Private Donations Through Grants

The City may be able to apply for and secure private grants to construct all or a portion of future improvements, particularly those devoted to bicycle and pedestrian use or recreation; that complement local economic development or open space objectives; or that create public artworks. The City currently is pursuing a grant for the totem pole project through the Meyer Memorial Trust grant program. Other possible community grant foundations to consider include the Oregon Community Foundation (*Portland Office, 503-227-6846*) and the National Arbor Day Foundation (*Nebraska City, NE, 402-474-5655*).

Community Volunteer Efforts

Mosier has an outstanding tradition of community volunteerism. Residents of the city and surrounding area have committed many hours of their time to assist with a variety of volunteer efforts, including the Mosier 20/20 Vision planning effort; annual town cleanups attracting over 100 people each time; waterfront project planning and implementation; Pocket park development, including land acquisition; and most recently, the Mosier Charter School, which opens this month. In addition, the City has been highly successful in securing volunteers from programs such as Americorps, which has played a significant role in the waterfront project and overall cleanup and environmental restoration in town . The Oregon National Guard is another potential source of volunteer labor. The Guard's volunteer labor program has been utilized by a variety of local jurisdictions and non-profit groups to help construct community and public facilities. Given Mosier's tradition of volunteerism, this is expected to continue to be a source of assistance in completing some transportation or related projects.

Funding Recommendations

The following table includes recommendations for types of funding mechanisms to explore for specific possible improvement projects (Table 10).

Table 10
Funding Recommendations

PROJECT	POTENTIAL FUNDING SOURCE
Bicycle and pedestrian facility planning	**State and Federal Grants**
	◆ TGM program ◆ Transportation Enhancement program ◆ National Scenic Byways grant program ◆ Oregon Bicycle and Pedestrian Program
Bicycle and pedestrian facility construction	**State and Federal Grants**
	◆ Immediate Opportunity Funds ◆ Oregon Bicycle and Pedestrian Program ◆ Special Public Works Fund ◆ National Scenic Byways grant program ◆ Transportation Enhancement program Developer dedications/exactions Dedication of Land or Easements
Highway 30 streetscape improvements	**State and Federal Grants**
	◆ Immediate Opportunity Funds ◆ Special Public Works Fund Private grants ◆ Meyer Memorial Trust ◆ Oregon Arts Foundation ◆ National Arbor Day Foundation Community volunteer efforts City General Fund
City public services building	**Private grants**
	Oregon Community Foundation Public/private partnerships Community volunteer efforts – donation of time and materials

IMPLEMENTATION

This plan is expected to be implemented through the following actions:

- Updating and implementing the City's Comprehensive Plan, particularly policies related to land use and transportation.
- Updating and implementing the City's Zoning Ordinance, included adopting and administering new requirements related to transportation, development and design guidelines and standards.
- Pursuing opportunities to finance and construct recommended improvements, particularly through application for state, federal and private grants.

Following is a more detailed description of these implementation actions.

RECOMMENDED COMPREHENSIVE PLAN AMENDMENTS

Following are recommended revisions to the Mosier Comprehensive Plan. New language is underlined. Recommended deletions are shown in "strikethrough" format.

PHYSICAL CHARACTERISTICS, SOILS section, replace the existing topography map with the map produced as part of this project.

COMMUNITY FACILITIES AND SERVICES, PLACES OF HISTORIC SIGNIFICANCE section, add the following bullet to the list of significant historical sites in Mosier:

- Sections of the Historic Columbia River Highway within the City of Mosier. The Highway has been designated as a National Historic Landmark.

PUBLIC UTILITIES, TRANSPORTATION section, add the following text (underlined) and figure:

Three major transportation routes bisect the City including Interstate 84, Highway 30 (an All American Road and designated National Historic Landmark), and the Union Pacific Railroad line. Mosier's roadway system has developed around Highway 30 with most roads either feeding off, or traveling parallel to the highway. Highway 30 is the spine of the roadway system in Mosier, serving as the main street in the city. Other major roads include Washington Street, 3rd Avenue/State Road and Huskey Street. The City also includes a number of bicycle and pedestrian trails.

Roads in Mosier fall into the following general classifications:

- **Interstate Highways**. Interstate 84 is classified as an interstate highway. The primary function of I-84 is to facilitate "interstate" travel. It is designed as a high speed/high volume highway. Mosier is connected to I-84 via interchange Number 69, which connects I-84 with Highway 30 in Mosier.

- **Arterials**. Arterials connect cities and other major traffic generators. They serve both through traffic and trips of moderate length, and typically are high-volume roadways due to the combination of local and through traffic. The section of the Historic Columbia River Highway (Highway 30) is the only arterial in Mosier.
- **Collectors**. These roads typically serve as primary travel routes within neighborhoods or between different land uses (e.g., commercial and residential areas). Collector roadways are intended to carry local traffic, including limited through traffic. In Mosier, Rock Creek Street, 3rd Avenue/State Road, Washington Street, and Huskey Street are classified as collectors.
- **Residential/local streets**. These provide direct access to homes and other neighborhood land uses. Local roads are designed to carry relatively small amounts of traffic at relatively slow speeds. All roads not classified as an interstate, arterial or collector streets in Mosier are classified as local roads.

Figure __ shows the classification of each road in Mosier.

See Figure 5, page __, Road Classification Map]

Typically, pavement condition is rated on a scale ranging from "very good" to "very poor," including rankings of very good, good, fair, poor, and very poor. Most sections of roads within Mosier are paved and appear to be in Fair to Good condition.

Although the pavement on many roads in Mosier may be in fair and good condition, anecdotal information indicates that some roads are not constructed according to accepted engineering design standards and/or practices. Some roads in the city may lack road base, proper drainage, and the asphalt and or chip seal used to pave roads placed on native soil. As a result, these roads may require more frequent maintenance, with a reduced pavement life.

Although the pavement on many roads in Mosier may be in fair and good condition, anecdotal information indicates that some roads are not constructed according to accepted engineering design standards and/or practices. Some roads in the city may lack road base, proper drainage, and the asphalt and or chip seal used to pave roads placed on native soil. As a result, these roads may require more frequent maintenance, with a reduced pavement life.

The only dedicated bicycle facility at Mosier is the Historic Columbia River Highway State Trail, which provides access to the Mosier Twin Tunnels. It was constructed by the Oregon Department of Transportation (ODOT) and is managed by the Oregon Parks and Recreation Department. The facility includes a 16-foot pedestrian/bicycle path that connects Mosier to the historic Twin Tunnels on old Highway 30, and Hood River. While it does not include a dedicated bicycle lane or path, the section of Highway 30 between Mosier and The Dalles is a popular cycling route and sees significant use. The state has published a "Columbia River Gorge Bike Map, available on the Internet, that promotes cycling on the Historic Columbia River Highway. Bicycle parking facilities are located in front of the WildFlower Café on Main Street and in front of Steve's Route 30 Desserts & Classics near the corner of Highway 30 and Washington Street.

PUBLIC UTILITIES section, eliminate the map of traffic counts which follows the description of the Water System.

LAND USE, LAND USE NEEDS section, replace the existing zoning map with the one produced for this project.

POLICY STATEMENTS, POLICIES, Transportation section, make the following changes:

C. That Mosier shall provide and encourage a safe, convenient and economic transportation system for citizens when financially ~~feasable~~feasible.

D. That new streets and those with major improvements will be constructed to consistent standards as defined in the City's zoning ordinance.

E. That access on city streets will be managed to ensure a balance of mobility and access to individual properties; access shall be governed by access management standards as defined in the City's zoning ordinance.

F. That future bicycle, pedestrian and street connections will be undertaken as needed and as funding allows to ensure accessibility to community facilities and activity centers.

G. That improvements to Highway 30 will be consistent with standards and guidelines for the Historic Columbia River Highway.

POLICY STATEMENTS, POLICIES, Social-economic section, make the following changes:

G. That development of Mosier's downtown will enhance the appearance and quality of life for community residents and visitors and support economic development objectives.

H. That development of Mosier's downtown will build on the unique character of the community and be consistent with development standards and guidelines as defined by the Mosier Zoning Ordinance.

PROPOSED ZONING ORDINANCE REVISIONS OR AMENDMENTS

Following are recommended revisions to the Mosier Zoning Ordinance. New language is underlined. Recommended deletions are shown in "strikethrough" format.

Definitions section, add the following:

1. "Major road improvement" means all road improvement projects that are not considered routine maintenance or pavement preservation projects (e.g., construction of new roads; widening of existing roads; construction of curbs and/or sidewalks; construction, replacement and repair of bridges; paving gravel roads,

applying oil mats on gravel roads; removal of existing paved surfaces; addition or removal of subgrade material).

Chapter 2, Section 2.7.B.5., make the following change:

5. Parking lots of 4 or more spaces, new or expanded, and/or the equivalent of paving equal to 4 or more parking spaces; shared parking lots may include up to the maximum combined number of spaces specified in section 4.13 of this ordinance.

Chapter 2, Section 2.7.D.4-7., make the following changes:

45. Maximum Building Height:
    a. For buildings south of Hwy 30, 35 feet

    b. For buildings north of Hwy 30, 1 story or 18 feet as measured from top of the pavement of Hwy 30.

56. Parking Regulations: Parking is required and shall comply with the applicable parking regulations in Chapter 3.

67. Lighting: Artificial lighting shall be subdued and shall not shine, cause glare, or be unnecessarily bright on surrounding properties. Both interior and exterior lighting shall take into consideration the viewshed and shall be dimmed or shaded as much as possible after closing without compromising safety and security. Flood lights on poles higher than 15 feet are prohibited.

Chapter 3, first page, make the following changes:

CHAPTER 3
SUPPLEMENTAL PROVISIONS

Section:

3.12 General Requirements for Parking Lots
3.13 General Exceptions to Yard Requirements
3.14 General Exceptions to Building Height Limitations and Setbacks
3.15 Animals and livestock in the city's Residential Zones
3.16 Access for non-residential uses on adjacent parcels
3.17 Transportation Facility Design and Construction Standards
3.18 Architectural Design Standards for Commercial Uses

Chapter 3, Section 3.12 (Requirements for Parking Lots), add the following new subsections (F-H):

F. Parking lots in commercial zones shall be located as follows:

1. For new developments on the south side of Highway 30, parking lots shall be located on the side or rear of buildings.

2. For new developments on the north side of Highway 30, parking lots shall be located in the rear of buildings with provisions for shared parking among multiple businesses.

3. Shared parking will be allowed and encouraged for all commercial uses.

a. Required parking facilities for two or more uses, structures, or parcels of land may be satisfied by the same parking facilities used jointly, to the extent that the owners or operators show that the need for parking facilities does not materially overlap (e.g., uses primarily of a daytime versus nighttime nature), and provided that the right of joint use is evidenced by a recorded deed, lease, contract, or similar written instrument establishing the joint use.

b. Provision of an equivalent number of parking spaces in a shared parking facility or district may be allowed in lieu of provision of on-site parking required in subsection 3.12.E.4. of this ordinance.

4. The following minimum number of parking spaces shall be provided in commercial areas:

a. Business, general retail, personal services. General - one space for 350 square feet of gross floor area. Furniture and appliances - one space per 750 square feet of gross floor area.

b. Churches and places of public assembly, including fraternal organizations. One space per four fixed seats.

c. Professional Offices. Medical and Dental Offices or Facilities - one space per 350 square feet of gross floor area; General Offices - one space per 450 square feet of gross floor area.

d. Hotels and motels. One space for each guest room, plus one space for the manager.

e. Restaurants, bars, ice cream parlors and similar uses. One space per four seats or one space per 100 sq. ft. of gross leasable floor area, whichever is less.

f. Residential uses.

- Single family detached housing. 2 parking spaces shall be provided for each detached single family dwelling or manufactured home on an individual lot.
- Two- and three-family housing. 1.5 spaces per dwelling unit.
- Multi-family and single family attached housing. 1.5 spaces per dwelling unit.
- Rooming and boarding houses, dormitories. Two spaces for each three guest rooms, or one per three beds, whichever is more;

g. Light Industrial uses. One space per two employees on the largest shift or for each 850 square feet of gross floor area, whichever is less, plus one space per company vehicle.

h. Public utilities (gas, water, telephone, etc.), not including business offices. One space per two employees on the largest shift, plus one space per company vehicle; a minimum of two spaces is required.

i. Day care centers having 13 or more children. One space per two employees; a minimum of two spaces is required.

j. Schools. One and one-half space per classroom, or the requirements for public assembly areas as set forth herein, whichever is greater.

G. Dimensional standards for parking stalls are illustrated in Figure __. (optional)

H. Bicycle parking shall be provided in commercial zones. Bicycle parking shall meet the following standards:

1. Bicycle parking for commercial business customers shall be provided along the street at a rate of at least one space per use. Individual uses may provide their own parking, or spaces may be clustered to serve up to six (6) bicycles.

2. Bicycle parking shall be conveniently located with respect to both the street right-of-way and at least one building entrance (e.g., no farther away than the closest parking space).

3. Bicycle parking should be incorporated whenever possible into building design and coordinated with the design of street furniture when it is provided. Street furniture includes benches, street lights, planters and other pedestrian amenities.

4. Bicycle parking shall not interfere with pedestrian passage, leaving a clear area of at least 36 inches between bicycles and other existing and potential obstructions.

Chapter 3, Add the following new sections 3.17 (Transportation Facility Design and Construction Standards) and 3.18 (Architectural Design Standards for Commercial Uses):

Section 3.17 – Transportation Facility Design And Construction Standards. Road design and construction standards is to ensure that future new or improved roads are built to a consistent and adequate standard to provide an adequate life for the facility, minimize operation and maintenance costs, and meet safety, mobility and connectivity needs. New roads or those where major road improvements are undertaken will meet the standards described below and illustrated in the figures referenced in the following subsections.

A. Standards shall vary by classification. Classifications for existing roads are shown in Figure __.

See Figure 5, page 14, Road Classification Map]

B. Design standards for right-of-way, pavement width, shoulders, sidewalks, planting strips and other required features are prescribed in Table __ and Figures __.

Table __. Road Design Standards

Right-of-way	Pavement width	Parking	Shoulders	Planting Strip	Sidewalks/ multi-use path	Drainage swale
Arterials						
60’	24’	None	4’, both sides	4’, both sides	6-10’, one or both sides	Optional
Urban Collectors[1]						
60’[3]	36’	7’, both sides[4]	None	None	10’, both sides[5]	None
Rural Collectors[2]						
60’[3]	36’	None	6’, both sides	None	None	12’, both sides
Local Roads						
50’ – 60’	22’	None	None	None	None	10’, both sides
Alleys						
20’	16’	None	2’, both sides	None	None	None

Notes:

1. Applies to future reconstruction of Washington or 3rd Streets.
2. Applies to future reconstruction of Rock Creek Road, Huskey or State Streets.
3. May vary, depending on existing conditions.
4. May eliminate on one or both sides if right-of-way is insufficient.
5. May reduce to 5’ if right-of-way is insufficient to accommodate a full standard.

See Figures 11-13, pages 40, 31, 43, Road Design Standards

C. Construction standards for new or reconstructed roads shall meet the standards prescribed in Figures __.

See Figures 14-16, pages 44-46, Road Construction Standards

D. Maximum grade for new roads. The maximum allowable grade for new public roads will be 12%. The maximum recommended grade is 10%.

E. Maximum block and cul-de-sac length. The maximum block length for local roads in new subdivisions or other residential developments shall be 600 feet. Maximum cul-de-sac length shall be 200 feet.

F. Bicycle and multi-use path design and construction standards. In urban areas, a paved width of 10-12 feet is recommended for multi-use bicycle/pedestrian paths. Where topography, land availability or other conditions do not allow for this, narrower trails

can be constructed, particularly if they are intended for pedestrians only. A minimum width of three to four feet shall be required for pedestrian trails. If the trail is to be used regularly at night, pedestrian scale lighting is recommended for security and safety.

Section 3.18 – Architectural Design Standards For Commercial Uses - These architectural guidelines and standards are intended to create a unified look for Mosier's downtown, build on the City's unique character, provide detailed, human-scale design, and afford flexibility to use a variety of building styles. These standards shall apply to all new buildings within areas zoned for commercial use.

A. Architectural Design Features. The following design features or elements should be incorporated in the design of new or reconstructed buildings. Examples illustrations and photos are shown in Figures __ - __.

1. Regularly spaced craftsman-style windows.

2. Pitched or gabled roofs.

3. Covered walkways or porches.

4. Bargeboards, corner trim boards or other accent trim boards.

5. Lap or decorative siding.

6. Crown or cornice molding.

See illustrations and photos on pages 31, 33, 34 and 35 of Architectural Design Standards or Guidelines

B. Use of Building Materials.

1. Building materials to be encouraged, discouraged or limited in use in construction of new or reconstructed commercial buildings are specified in Table __.

Table . Guidelines for Use of Building Materials in New or Reconstructed Buildings in Commercial Areas

Material	Status
Wood lap siding	E
Rock	E
Faux Rock	E
Brick	E
Board and batten	E
Metal roofs[1]	A
Smooth block (i.e., bare cinderblock)	D
Stucco / faux Stucco	E
Metal or plastic siding	R
Plywood Siding	R

Notes:

A = allowed; E = encouraged; D = discouraged; R = restricted (no more than 15% of the total exterior area of the building may be covered by this material)

1. Colors are encouraged to be light earth tones; vibrant or highly reflective colors are discouraged.
2. Use of sustainable construction materials and practices and renewable energy sources is encouraged in construction of new buildings.

C. Review and Approval. Architectural Design standards shall be administered through the site plan approval process and subject to a Type 2 approval process as described in section 7.2 of this ordinance.

Chapter 5, Make the following changes to section 5.4.9 (Authority and Basis for Conditions):

9. Access shall be consistent with access management standards. Access management spacing standards for collector streets (see section __, Figure __) shall be as described in Table __.

Table __
Access Management Standards for City Streets and County Roads

Classification	Spacing Between Intersections of Public Streets[1]	Spacing Between Private Driveways and Alleys[1]
Collector	300 feet	100 feet
Local	300 feet	Access to Each Lot

1. Measurement of the approach road spacing is from center to center on the same side of the roadway.

Chapter 7, Make the following changes to section 7.2 (Summary of the city's Decision Making Process):

7.2 - Summary of the city's Decision Making Process. The following decision making processes chart shall control the city's review of the indicated permits:

Summary of Approval Procedures

Permit Type	I	II	III	IV
Partition	X			
Subdivision			X	
Planned Unit Development (PUD)			X	
Final Plat	X			
Conditional Use Permit (CUP)		X		
Commercial Use Design Standards		X		
Sign permit		X		
Major Variance			X	
Minor Variance		X		
Zone Change or Plan Amendment			X	X
Zone change Upon Annexation	X			
Similar Use Determination		X		
Nonconforming Use Verification			X	
Alteration/expansion of a Nonconforming Use		X	X	
Formal Code Interpretation		X		
Lot Line Adjustment or Abandonment	X			
Modification (material deviation) to a Prior Approval	X	X	X	X
Minor Modification (not a material deviation) to a Prior Approval		X		

ADDITIONAL RECOMMENDED IMPLEMENTATION ACTIONS

Other recommended implementation actions include:

- Further prioritize implementation projects and efforts.
- Pursue government and private sector grant opportunities as described in Funding Recommendations section of this plan through the following activities:
  - Contact appropriate representatives to obtain grant application and other relevant information. Pursue additional planning grants initially to help further define selected improvement projects, where needed.
  - Work with ODOT personnel to identify deadlines and requirements for selected grants.

  - Prepare grant applications for priority projects, including grants to plan and define selected improvements in more detail.
  - Further define proposed improvement projects using unit cost estimates provided in this plan and other information developed through planning grants.
- Enlist community and volunteer support for donation of land and easements and construction of public improvements, where possible.

Appendix A: Mosier Detailed Street Inventory

Appendix B: Detailed Description of Financing Tools

TECHNICAL MEMO #4

PUBLIC FUNDING SOURCES FOR TRANSPORTATION IMPROVEMENTS

This memorandum describes a variety of possible sources of funding for future transportation projects in Mosier, including the following:

- PUBLIC FUNDING SOURCES
  - State and Federal Funding
    - Dedicated State and Federal Funding
    - State and Federal Grants
  - Local Funding Sources
    - General Fund/Property Taxes
    - Shared State Revenues (Gas Tax)
    - Local Gas Tax
    - General Obligation (GO) Bonds
    - Special Revenue Bonds
    - System Development Charges
    - Franchise and Utility Fees
- PRIVATE FUNDING SOURCES
  - Developer or Property Owner Funding
    - Developer Dedications
    - Private Developer Agreements
    - Local Improvement Districts (LIDs)
    - Dedication of Land or Easements/Exactions
  - Other Private Funding Sources
    - Private Donations Through Grants
    - Community Volunteer Efforts

A brief summary is provided for each specific tool, along with a list of associated advantages and disadvantages.

PUBLIC FUNDING SOURCES

State and Federal Funding

Dedicated State and Federal Funding

Funding for state highway improvement projects can come from a variety of sources including the Federal Highway Administration, the Interstate Highway Fund, other federal agencies, state fuel taxes and vehicle registration fees, and other dedicated and discretionary state funds. This funding potentially could be used to finance improvements to state roads in Mosier, i.e., the Columbia River Historic Highway. Proposed improvements would need to be identified in the Department of Transportation's Transportation Improvement Program (STIP). The STIP has five funding categories which include *Modernization, Pavement Preservation, Operations, Safety,* and *Bridge*. The state allocates available resources to projects identified in each STIP category using criteria established by the Oregon Transportation Commission and in collaboration with the Area Commissions on Transportation, ODOT staff, and local partners. Projects proposed to be included in the STIP must compete with other needed projects around the state and typically must satisfy a significant need to address a capacity (modernization), pavement preservation, operations, bridge or safety issue (e.g., add more needed lanes or reduce accidents). As identified in the adopted Oregon Highway Plan, the state's transportation improvement program is significantly under-funded. Without a demonstrated need to make improvements to the Historic Highway in Mosier, as well as the likely inability to do so given historic preservation considerations, it is unlikely that anything more than preserving the existing facility would be funded in the STIP.

Advantages

- Non-local source of revenue; no competition with other local funding sources.
- Could provide substantial revenue amount, if feasible.

Disadvantages

- Limited primarily to spending on improvements to state facilities.
- Limited given existing conditions of Historic Highway and state budget.
- 20% local match required.

State and Federal Grants

Local projects that provide special benefits may be eligible for state grants, such as a Community Development Block Grant for projects that primarily benefit low income residents or Special Public Works Fund loans and grants for projects that promote economic development.

Another potential mechanism for financing street improvement projects is the off-system grant program sponsored by the Oregon Department of Transportation. This allows small communities up to $25,000 worth of construction dollars for small street improvements in the community on streets which are not on the state highway system. Unfortunately, $25,000 will pay for only a limited amount of improvements.

Several federal and state funding programs provide money for pedestrian and bicycle improvements, including the federal Transportation Enhancement Program, the National Recreational Trails program and the Oregon Bicycle and Pedestrian Program. Federal and state grants for bicycle and pedestrian projects on local streets would require a local 20% match. In addition, some of these projects may help to promote tourism in Mosier, making the projects eligible for funding by programs administered through Oregon Economic and Community Development (OECDD) or the federal Economic Development Administration (EDA).

Other state grant programs include:

- Transportation Safety Grants Program. The objective of this program is to reduce the number of transportation-related accidents and fatalities by coordinating a number of statewide programs. Funds are intended to be used as seed money, funding a program for three years. Eligible programs include those relating to impaired driving, occupant protection, youth, pedestrians, speed, enforcement, and bicycle and motorcycle safety. Capital construction cannot be funded through this program.
- Special Transportation Fund Grants. This program awards funds to maintain, develop, and improve transportation services for people with disabilities and people over 60 years of age. Financed by a two-cent tax on each pack of cigarettes sold in the state, total annual grants are approximately $5 million. Three-quarters of these funds are distributed to mass transit districts, transportation districts, and, where no such districts exist, to counties, on a per-capita formula. The remaining funds are distributed on a discretionary basis.
- Immediate Opportunity Grant Program. The Oregon Economic and Community Development Department (OECDD) and ODOT collaborate to administer this program designed to assist local and regional economic development efforts. The program provides approximately $7 million per year through state gas tax revenues. The maximum amount of any grant under the program is $500,000. Local governments that have received grants under the program include Washington County, Multnomah County, Douglas County, the City of Hermiston, Port of St. Helens, and the City of Newport. Primary factors in determining eligibility of projects include potential to improve public roads; inclusion of an economic development-related project of regional significance; creation or retention of primary employment; and ability to provide local funds (50/50) to match grant.

- Oregon Transportation Infrastructure Bank. This program is a revolving loan fund administered by ODOT to provide loans to local jurisdictions, including cities, counties, special districts, transit districts, tribal governments, ports, and state agencies. Eligible types of projects include construction of federal-aid highways, bridges, roads, streets, bikeways, pedestrian accesses, and right-of-way costs for all federal-aid (Title 23) projects (major collector or higher roads). Capital outlays for equipment such as buses, light-rail cars and lines, maintenance yards, and passenger facilities (under Title 49) also are eligible. This funding source may not be available in the future, as it is being phased out.

In recent years, the City of Mosier has been extremely successful in obtaining state grants for local planning and construction projects. In the last three years, the City has obtained the following state and federal grants:

- U.S. Forest Service grant for the major waterfront project.
- Oregon Department of Land Conservation and Development for planning.
- Oregon State Parks and Recreation for the Pocket Park development.
- Office of Economic and Community Development for the waterfront project.
- Oregon State Arts Commission for the totem pole project.
- Oregon Department of Transportation/Department of Land Conservation and Development Transportation and Growth Management (TGM) Grant for this project.

Advantages

- Non-local source of revenue; no competition with other local funding sources.
- Mosier has strong track record of receiving previous grants.
- Provides ability to leverage other opportunities such as community volunteer efforts to other grants.

Disadvantages

- Requires city to prepare grant application.
- Competitive process; Mosier would compete with other communities with similar needs throughout the state.
- Direct appropriation through the TEA-21 program would require congressional sponsorship and approval.
- Local match required for selected grants.

Local Funding Sources

General Fund

Funding for local projects may come from the City's General Fund, which is primarily financed from property tax revenue. Property taxes historically have been the primary revenue source for local governments. This dependence has changed somewhat with the passage of several property tax limitation measures approved by Oregon voters in the 1990s. Ballot Measure 5, approved in 1990, amended the Oregon Constitution to limit the property tax rate for purposes other than payment of certain voter-approved general obligation debts. As a group, all non-school taxing authorities, including cities, are limited to $10 per $1,000 of assessed valuation. All tax base, serial, and special levies are subject to the tax rate limitation. In November 1996, Oregon voters passed Ballot Measure 47, which placed further limitations on property taxes and fees. The measure limits 1997-98 property taxes to the lesser of the 1995-96 tax minus 10 percent, or the 1994-95 tax. It limits future annual property tax increases to three percent, with some exceptions. Local governments' lost revenue may be replaced only with state income tax, unless voters approve replacement fees or charges. The result of these measures is that the City may not increase its permanent tax rate; increases in the assessed value of existing property is limited to 3% per year; and the total tax rate of all local taxes, including serial levies or bonds may not exceed $10 per $1,000 of assessed valuation.

The City of Mosier has a tax rate of $1.4128 per $1,000 of assessed value. In 2002, the total Measure 50 assessed value of all property within the city limits of Mosier was $19,161,096 (not including publicly owned lands exempt from taxation). Non-exempt land located between the city limits and the urban growth boundary has an assessed value of $532,440. The City had a total annual budget of $1,419,500 in 2002. The 2002 budget for the City's *Street Fund* is $41,230. This fund typically is used for a combination of maintenance, new construction and other improvement projects.

Advantages

- No grant application or request from any other entity is required.
- Transportation projects could be combined with other public works projects (e.g., water or sewer line replacement) to reduce selected construction costs (e.g., excavation costs).

Disadvantages

- Transportation improvements compete with other public facility needs for limited local funding.
- Construction projects will add to total future annual maintenance needs.

Shared State Revenue

Every jurisdiction in Oregon receives a share of state collected motor vehicle fuel taxes. Most communities account for this revenue in their general fund, along with other discretionary funds, but tend to use the money for street maintenance or transportation improvements. Rarely is the gas tax share adequate to finance both maintenance and capital improvement needs. Gas taxes have not been raised frequently enough in Oregon to keep pace with rising maintenance needs and most communities need to augment them with other funds just to satisfy local maintenance needs. Currently, the City of Mosier receives approximately $16,200 per year in shared gas tax revenues. If other sources of revenue were available to cover maintenance needs, the gas tax revenue could be used to construct system improvements. The City is allowed to pledge its annual gas tax revenue to retire debt and borrow against it (see Revenue Bonds).

Advantages

- No grant application or request from any other entity is required.
- May be pledged as collateral for debt serve payments.

Disadvantages

- The City will need to develop a replacement revenue source for its gas tax receipts if it uses this money exclusively for capital projects.
- Construction projects will add to total future annual maintenance needs.

Local Gas Tax

The Oregon Constitution permits counties and incorporated cities to levy additional local gas taxes with the stipulation that the money generated from the taxes will be dedicated to street-related improvements and maintenance within the jurisdiction. At present, only a few local governments (including the cities of Woodburn and The Dalles and Multnomah and Washington Counties) levy a local gas tax. Mosier could consider establishing a local gas tax as a way to generate additional street improvement funds. However, with relatively few jurisdictions exercising this tax, an increase in the cost differential between gas purchased in Mosier and gas purchased in neighboring communities may encourage drivers to seek less expensive fuel elsewhere. Any action will need to be supported by careful analysis to minimize the unintended consequences of such an action. Local option gas taxes are often strongly opposed by area gasoline retailers who anticipate reduced sales. Voter approval is required to establish a local gas tax; historically few jurisdictions have approved local option gas taxes.

Local gas taxes typically range from $0.01 to $0.03 per gallon (compared to $0.183 per gallon Federal and $0.24 per gallon State). Revenues from a gas tax are typically

substantial and relatively stable. A $0.01 tax in the City of Woodburn generates over $97,000 per year. Non-residents passing through pay a portion of this funding.

Advantages

- No grant application or request from any other entity is required.
- Would not add to the city's permanent tax rate.
- Revenues could be dedicated directly to transportation projects.

Disadvantages

- City could face opposition from local residents and gas station owner.
- Tax could affect local gas sales revenues.
- Requires voter approval.

General Obligation Bonds (GO)

The City could issue general obligation bonds (GO) to finance construction projects. Issuing the bonds would require public approval (through a local ballot measure) and guarantee repayment through property taxes. GO bonds offer the best possible security to creditors. They are backed by the full faith and credit of the issuing entity. Repayment can be structured simply by a property tax assessment, or by a secondary pledge of special revenues (gas tax receipts, utility fees). There are state credit limits on how much GO debt a jurisdiction can pledge, but very few communities in the state are significantly constrained by the limit.

Advantages

- Proceeds from bonds would be dedicated solely to transportation improvements without competing with other funding needs.

Disadvantages

- Bonds would require voter approval.
- Bonds would result in added tax burdens to city residents.
- The amount of revenue available would be limited by the relatively low total assessed value of property within the City.

Special Revenue Bonds (SRB)

The City could issue revenue bonds backed by fees or other revenues it collects and use bond proceeds to purchase right of way and construct transportation system improvements. Revenue bonds do not require voter approval, because they are not backed by the full faith and credit of city tax payers. So they are easier to issue but

usually carry a higher interest rate than G.O. bonds. Sources for repayment could include gas tax receipts, system development charges, or utility fees. There are credit limits that bond rating agencies consider when evaluating a bond issue such as the overall debt level within the community and other obligations against the revenue source. That credit rating, combined with market conditions, determines the interest rate on the bond. The Oregon Economic and Community Development Department offers assistance to communities with this form of financing. These bonds also are sometimes referred to as Limited Tax Bonds.

Advantages

- Proceeds from bonds would be dedicated solely to transportation improvements without competing with other funding needs.
- Bond sale does not require voter approval.

Disadvantages

- Debt obligation burdens an existing source of revenue.
- The added debt obligation may result in higher fees and service charges to city residents.

System Development Charges

A System Development Charge (SDC) is a fee collected when property is developed. It is used to pay for public improvements that support future growth and development. An SDC is a very flexible financing tool. Oregon law allows SDCs to be collected for water, sanitary sewer, storm drainage, transportation, and park and recreation facilities, though not schools. Because the system improvements are often needed for growth to occur, SDC revenues customarily are collected at time of development approval or when a building permit is issued. They typically supplement other local government revenues and generally must be combined with other revenue sources, such as utility rates or bond proceeds.

SDC fees must be budgeted and accounted for in a separate fund and can be used only to pay for activities directly related to capital improvements that benefit future growth. Several preliminary actions are needed to utilize this technique, including:

- A master plan is prepared for the SDC area. The plan must include cost estimates for future public improvements to serve new proposed development. If a reimbursement fee is imposed, the plan also must estimate the amount of capacity left over to serve additional future growth.
- The SDC program cannot generate any more revenue than is needed to sustain the existing condition or level of service currently provided within the community for

the subject system (e.g. if park acreage is currently 5-acres per 1000 residents, the Park SDC program needs to be set at a level that will finance that same level of service and no more).

- A plan allocating benefits to new development is prepared and adopted by ordinance. It usually allocates benefit based on a measurable unit of service (e.g. - $1 for every 100 gallons of water needed to support the proposed use).

Advantages

- Fees can be used to help fund capital improvements that primarily benefit future growth and development.
- SDCs fairly allocate improvement fees among benefited property owners.

Disadvantages

- Fee programs are relatively complicated and expensive to establish and administer.
- Potential revenues depend on future development; annual revenues would be limited, given likely future annual levels of growth in Mosier

Franchise and Utility Fees

Franchise fees are annual fees paid by TV cable, electricity, and telephone utilities for the use of the City right-of-way. Ashland (population, 20,000) is an example of a city that imposes these fees; in Ashland, they total approximately $350,000 annually.

A street utility fee can be used to charge businesses and residents a fee for use of streets, based on the amount of use typically generated by each type of land use. This fee is similar to those charged for water and sewer utility service, and it would not be subject to the limits of Measure 5. Cities in Oregon that charge a street utility fee include Ashland and Medford, and a typical fee is $2/month for a single-family residence. Revenue from this source can only be used for maintenance of streets, but this would free up other funds to use for capital improvements.

Advantages

- Would not add to the city's permanent tax rate.
- Fees could be dedicated directly to transportation projects.
- Establishing fees would not require voter approval.

Disadvantages

- City would need to establish a fee structure, accounting and collection system, which would be complicated and likely require significant personnel time.

- City could face public opposition to fees.
- Potential revenues likely would be relatively limited given the size of the community.

PRIVATE FUNDING SOURCES

Developer or Property Owner Funding

Developer Dedications/Exactions

Typically, local governments require developers of new subdivisions or partitions to construct local streets that are part of these developments. Streets generally must be constructed to City standards. The City ultimately assumes ownership of these improvements and takes over the operation and maintenance of the street system in the new development when the final plat is accepted or requires the developer to form a local road district. The costs of the new roads are passed through by the developer in the purchase price of the lots and homes. Recent court cases have placed limits on the type and level of "exactions" that may be imposed on a developer, especially for "off-site impacts". An example is when a particular development results in traffic that causes problems at an intersection. The city may want the developer to put in a signal, but if a stop sign will work, then the city cannot require the signal improvement. The city could still put in the signal, but the developer would only need to pay his "fair share" and the extra cost would need to come from the city.

Advantages

- Costs of new infrastructure are borne by new residents who will benefit most, rather than by existing residents in other areas.
- No additional capital cost burden is placed on existing city revenues.

Disadvantages

- The added cost of public facilities affects housing prices and affordability.
- Case law has established limits on exactions. Cities must establish a rational basis and connection between a required dedication or improvement and the impacts of a proposed development.

Private Developer Agreements

In some instances, a City may be able to enter into an agreement with a developer whereby the developer agrees to pay at a later date for transportation or other public improvements constructed by the City. This could occur if improvements are not

contiguous to a property whose owner wishes to develop. In such a case, the developer may request an exception from a requirement to pay for a road that ultimately would serve both his/her development, as well as other benefiting properties. The City could allow the developer to defer extension of full services (e.g., a fully improved road) to the property until some time in the future. At that point, a condition specified in the agreement (e.g., a certain amount or level of development in the area occurs) will trigger the developer and/or third parties assigned under the agreement to finance the improvements. A surety bond may be required to assure performance. The agreement between the developer and City would run with the land and obligate current and future property owners to make the deferred improvements.

Another type of developer agreement is sometimes referred to as an advance financing district. With this arrangement, a developer pays for system improvements larger than needed to serve his/her specific development, so that the facilities will be adequate to serve intervening or adjacent developments as well. The developer then collects repayment from other properties when they develop, including those that are not directly adjacent to the improvement. This type of agreement can be useful for projects that have far-reaching benefits. Another term for this type of financing tool is a Zone of Influence Charge. These agreements usually sunset after 10 - 15-years.

Advantages

- Could allow for the City to reduce financing costs for some roads in the short term with the ability to require a developer or property owner to pay for remaining costs at a later date.

Disadvantages

- Given the size of Mosier, amount and location of future developable land there, it is unlikely that the City will have the opportunity to utilize this tool.
- This mechanism would be relatively complicated to implement and administer.

Local Improvement Districts (LIDs)

Within existing developed areas, the most common method to improve streets to a higher standard is the Local Improvement District (LID). In a Local Improvement District, the benefiting property owners agree to pay a fair share of the cost for improvements adjacent to their property based on a common formula (e.g. frontage foot or property area). The City in effect, acts as a general contractor, administering the construction, advertising for bids, inspection, and so forth and then collects money from benefiting properties to pay for the improvements. Local Improvement Districts are not very common in small communities because of the reluctance to incur additional cost

by the homeowner for such improvements. LIDs are most effective in addressing a retro-fit improvement need - such as building sidewalks, improving a street, or installing street lights - when property owners ask for the improvement.

Advantages

- Costs are borne by residents or property owners who benefit most directly.
- City costs would be limited to those to administer the LID and resulting construction project.

Disadvantages

- A majority of property owners within the local improvement district must approve the added assessment.
- Given approval requirements, LIDS are not a consistently reliable financing mechanism.

Dedication of Land or Easements

In some cases, property owners may be willing to dedicate a portion of their property for a street or trail. Alternatively, they may be willing to provide an easement to allow use of the road or trail by the public while retaining ownership of the entire property.

Advantages

- Eliminates acquisition costs by the City.
- Allows property owner to reduce his/her tax burden.

Disadvantages

- Relies on generosity of property owner.
- Easement limits City's control over resulting street or trail, in comparison to dedication of full ownership rights.

Other Private Funding Sources

Some local projects also may be funded through public/private partnerships or private donations of money or time. These could include:

Private Donations Through Grants

The City may be able to apply for and secure private grants to construct all or a portion of future improvements, particularly those devoted to bicycle and pedestrian use, recreation, or that complement local economic development or open space objectives. In the past, the City has been successful in securing grants from public grant programs, as described previously, though it has not recently applied for any private foundation grants. Possible community grant foundations to consider include the Oregon Community Foundation, Meyer Memorial Trust and National Arbor Day Foundation (for assistance in planting street trees).

Advantages

- Non-local source of revenue; no competition with other local funding sources.
- Mosier has track record of receiving previous grants.

Disadvantages

- Requires preparation and submission of a grant application and accompanying materials.
- Some grants may require local matching funds.
- Grants not available to public agencies likely will require formation of a local non-profit organization if one does not currently exist.

Community Volunteer Efforts

Mosier has an outstanding tradition of community volunteerism. Residents of the city and surrounding area have committed many hours of their time to assist with a variety of volunteer efforts, including the Mosier 20/20 Vision planning effort; annual town cleanups attracting over 100 people each time; waterfront project planning and implementation; Pocket park development, including land acquisition; and most recently, the Mosier Charter School, which opens this month. In addition, the City has been highly successful in securing volunteers from programs such as Americorps, which has played a significant role in the waterfront project and overall cleanup and environmental restoration in town . The Oregon National Guard is another potential source of volunteer labor. The Guard's volunteer labor program has been utilized by a variety of local jurisdictions and non-profit groups to help construct community and public facilities. Given Mosier's tradition of volunteerism, this is expected to continue to be a source of assistance in completing some transportation or related projects.

Advantages

- Can significantly reduce the cost of public improvement projects.
- Contributes to a sense of community pride and ownership in city facilities.

Disadvantages

- Requires a commitment of time and effort to solicit, organize and supervise volunteer efforts.

Misc. Contracts & Agreements No.

June 5, 2003 Draft

PROGRAMMATIC AGREEMENT BY AND AMONG THE CITY OF MOSIER (City), WASCO COUNTY (County), THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT), THE OREGON STATE HISTORIC PRESERVATION OFFICER (SHPO), AND THE FEDERAL HIGHWAY ADMINISTRATION (FHWA), REGARDING THE HISTORIC COLUMBIA RIVER HIGHWAY (HCRH) AS IT PASSES THROUGH THE CITY OF MOSIER, WASCO COUNTY, OREGON

RECITALS

1. By the authority granted in ORS 190.110 and 283.110, state agencies may enter into agreements with units of local government or other state agencies for the performance of any or all functions and activities that a party to the agreement, its officers, or agents have the authority to perform.

2. By the authority granted in ORS 366.710, State may enter into cooperative agreements with the United States Federal Government for the performance of work on improvement projects with the allocation of costs on terms and conditions mutually agreeable to the contracting parties.

3. WHEREAS, the Federal Highway Administration (FHWA) administers Federal Aid Highway Program in the State of Oregon through ODOT.

4. WHEREAS, the ODOT proposes to administer and fund roadway improvement projects within the City and portion of the County within the urban growth boundary (UGB) of Mosier, utilizing funds from the programs administered by the FHWA and any other program for which environmental review responsibilities have been delegated to ODOT by statute and which are subject to regulation under 36 CFR Part 800; hereinafter referred to as "programs."

5. WHEREAS, ODOT has determined that the administration of these programs could potentially have effects on the HCRH, a property which has been included in the National Register of Historic Places, and ODOT has consulted with SHPO and the Advisory Council on Historic Preservation, hereinafter referred to as "Council" pursuant to 36 CFR Part 800 of the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. §470f).

6. WHEREAS, the HCRH is listed in the National Register of Historic Places as the Columbia River Highway Historic District, the HCRH is a State Highway known as Highway 100, and the HCRH is located on Rock Creek Road between the State Historic Highway Trailhead and US 30, and along Highway 30 between Rock Creek Road and the eastern city limits of Mosier and Mosier Urban Growth Area.

7. WHEREAS, ODOT has permitting authority over all requests for access on the HCRH.

8. WHEREAS, FHWA has authority to determine whether or not an action has an adverse effect on the HCRH; this determination is then sent to SHPO for concurrence.

9. WHEREAS, the parties agree that completion of the actions stipulated under section III, Design and Construction Provisions, of this Programmatic Agreement will, after application of the Section 106 Criteria of Effect and Adverse Effect, result in "No Adverse Effect" on the HCRH.

10. NOW, THEREFORE, the City, County, ODOT, SHPO and FHWA agree that all future programs, projects and access permits relating to the HCRH (including construction, alteration, or expansion of the Highway, and which are assisted entirely or in part by monies from FHWA) shall be administered in accordance with the following stipulations to satisfy the ODOT's Section 106 responsibilities.

STIPULATIONS

I. APPLICABILITY OF AGREEMENT

The City and County shall comply with the stipulations set forth in this Programmatic Agreement for all programs and projects along the HCRH, over which they have jurisdiction and which involve the construction, alteration or expansion of the Highway and which are assisted entirely or in part by monies from the programs of the Federal Highway Administration.

II. AREA OF POTENTIAL EFFECT

It is agreed for purposes of this Agreement, that the Area of Potential Effect (APE), as defined in 36 CFR 800, shall include the Columbia River Highway Historic District, as defined in the nomination of the Highway to the National Register of Historic Places.

A. The area of the HCRH where curbs exist along the highway in cities and communities, the width of the district is the distance from the present curb line to curb line. If no curbs exist along the highway in cities and communities, the width of the district is limited to the existing highway pavement, outside edge

to outside edge. In the City of Mosier, the latter definition applies, as no curbs exist on either side of the Highway.

B. This Programmatic Agreement includes the HCRH within the city and Urban Growth Area (i.e., between the city limits and UGB) of Mosier (as shown in the Columbia River Gorge National Scenic Area map). Copies of the map can be obtained through ODOT by contacting Jeanette Kloos (503-731-8234).

III. DESIGN AND CONSTRUCTION PROVISIONS

A. Roadway Configuration and Standardization of Design Features

1. The APE of the HCRH will remain in its current configuration along Rock Creek Road and US 30 in Mosier, with no curbs constructed or striping added.

2. Future construction on the HCRH in Mosier will include adjacent planting strips or vegetated areas and a separated bicycle/pedestrian or pedestrian path on one or both sides of the Highway. The width of the path may vary depending on whether its use is primarily for pedestrians or for a combination of bicycles and pedestrians. Construction of these improvements will be consistent with the City's Arterial Road Design Standard to be adopted into the City's Zoning Ordinance.

3. Crosswalks will require approval from ODOT based on its standard approval process and requirements. Crosswalks may be either painted or distinguished by a white, stamped pavement (volomlite). Bulbouts will not be used at crosswalks.

4. Future street lights will reflect a 1920's period architectural design. Selection and use of a specific style of street light by the City will require review and approval by ODOT and the HCRH Advisory Committee prior to use.

B. Interpretive Signage

1. ODOT shall supply semi-circular HCRH signage for City installation on designated street signs.

2. ODOT shall manage, design and construct a new sign site near the junction of the HCRH and Oregon Street. The City of Mosier will participate in the development of this sign. ODOT will administer Forest Highway Enhancement funds that have been secured to fund the sign at the HCRH and Oregon Street. Pursuant to community input, no changes in landscaping will be made at this site. This project will be on property owned partially by the City and partially by ODOT.

C. Transportation System Plan and Municipal Code Inclusions

City will incorporate the relevant design and construction configuration guidance from this Memorandum of Agreement into their Zoning Ordinance.

D. Compliance With Statewide Planning Goals

City, in conjunction with County, shall include in its comprehensive plan the HCRH as a Goal 5 (historic) resource as defined by the Statewide Planning Goals (OAR Chapter 660, Division 15) in its Comprehensive Plan no later than the next periodic review for Goal 5.

E. Affects of Future Projects

Any additional future projects proposed which involve other types of construction along route of the HCRH, which might affect the finding of no significant adverse effect on the HCRH, or may affect other historic resources along the route are not covered by this Programmatic Agreement, and will require independent review by the ODOT and the SHPO.

IV. SHPO RESPONSIBILITIES

A. Projects affecting only properties that are less than 50 years of age do not require SHPO review pursuant to the terms of this Programmatic Agreement.
B. Projects which are limited to maintenance activities, striping, and re-paving which do not affect the integrity or alignment of the HCRH, do not require SHPO review pursuant to the terms of this Programmatic Agreement.
C. The SHPO is permitted thirty (30) calendar days after the receipt of any submitted documentation to review and comment on proposed project effects. If the SHPO does not provide comments within this time period, the City, County, and the ODOT may assume that the SHPO concurs with its recommendations and/or findings.
D. The SHPO will provide technical assistance and training on the application of the Secretary of the Interior's Standards for Rehabilitation as set out in 36 CFR part 68, to the extent possible.

V. DISCOVERIES OF UNFORESEEN EFFECTS

If, during the implementation of this agreement, a previously unidentified property that may be eligible for inclusion in the National Register is encountered, or a known Historic Property may be affected in an unanticipated manner, the City, County, and the ODOT will assume its responsibilities pursuant to 36 CFR §800.12 and 800.13. (The 36 CFR 800.16(l) definition of historic property is: (l) *Historic property* means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such

properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria. The term *eligible for inclusion in the National Register* includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.)

VI. MONITORING

The SHPO and the Advisory Council on Historic Preservation may monitor any activities carried out pursuant to this Programmatic Agreement, and the Council will review such activity if so requested. The ODOT will cooperate with the SHPO and the Council in carrying out these monitoring and review responsibilities.

VII. DISPUTE RESOLUTION

If the City, County, ODOT and SHPO are unable to resolve any disagreement arising under the provisions of this Agreement, ODOT shall, unless the dispute relates to the National Register eligibility of any property, forward full documentation regarding the project, the basis for the dispute, and initiate consultation with the Advisory Council on Historic Preservation in accordance with 36 CFR §800.6, 800.2(b) (2) and/or 800.14 (b).

VIII. AMENDMENTS

Any party to this Programmatic Agreement may request that it be amended, whereupon the parties will consult in accordance with 36 CFR §800.14(b) to consider such amendment. No amendment to this agreement will become effective without the written concurrence of all the parties.

IX. TERMINATION

Any party to this Agreement may terminate the Programmatic Agreement by providing thirty (30) days notice to the other parties, provided that the parties will consult during the period prior to the termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, all parties will comply with 36 CFR §800.3-800.6 with respect to individual undertakings covered by this Programmatic Agreement.

X. FAILURE TO COMPLY WITH TERMS OF AGREEMENT

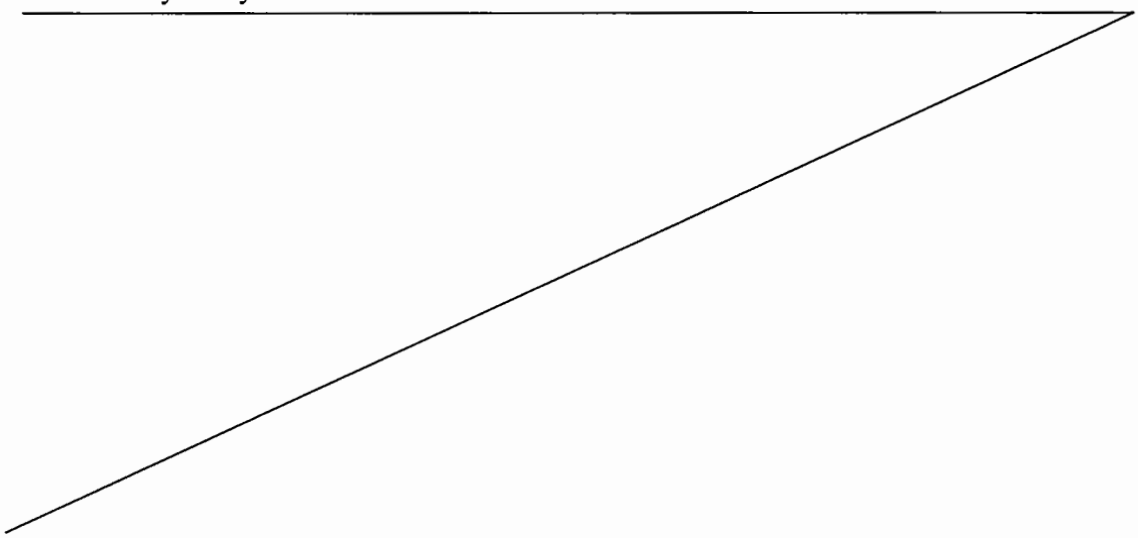
In the event the City, County, and ODOT cannot carry out the terms of this Programmatic Agreement, the party unable to do so shall not take or sanction any action or make any irreversible commitment that would result in an adverse effect to historic properties or would foreclose the Council's consideration of

modifications or alternatives to the undertaking, and ODOT will comply with 36 CFR §800.4-800.6 with regard to each individual undertaking covered by this Programmatic Agreement.

This Programmatic Agreement and attached exhibits constitute the entire agreement between the parties on the subject matter hereof. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Programmatic Agreement. No waiver, consent, modification or change of terms of this Programmatic Agreement shall bind either party unless in writing and signed by all parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of ODOT to enforce any provision of this Programmatic Agreement shall not constitute a waiver by ODOT of that or any other provision.

EXECUTION AND IMPLEMENTATION of this Programmatic Agreement evidences that the City, County, and ODOT have afforded the Council a reasonable opportunity to comment on these Programs and ODOT has taken into account the effects of the Programs on historic properties.

IN WITNESS WHEREOF, the parties hereto have set their hands and affixed their seals as of the day and year hereinafter written.



The Oregon Transportation Commission on January 16, 2002, approved Delegation Order No. 2, which authorizes the Director to approve and execute agreements for day-to-day operations when the work is related to a project included in the Statewide Transportation Improvement Program or a line item in the biennial budget approved by the Commission.

On January 31, 2002, the Director of the Oregon Department of Transportation approved Subdelegation Order No. 2, in which the Director grants authority to the, Branch and Region Managers for their respective Branch or Region, to approve and execute agreements up to $75,000 when the work is related to a project included in the Statewide Transportation Improvement Program, other system plans approved by the Commission such as the Traffic Safety Performance Plan, or in a line item in the approved biennial budget.

FEDERAL HIGHWAY ADMINISTRATION

By:_____ Date: _____

OREGON STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: _____
Deputy State Historic Preservation Officer

OREGON DEPARTMENT OF TRANSPORTATION

By: _____ Date: _____
Environmental Services Manager

OREGON DEPARTMENT OF TRANSPORTATION APPROVAL RECOMMENDED

By: _____ Date: _____
Region 1 Manager

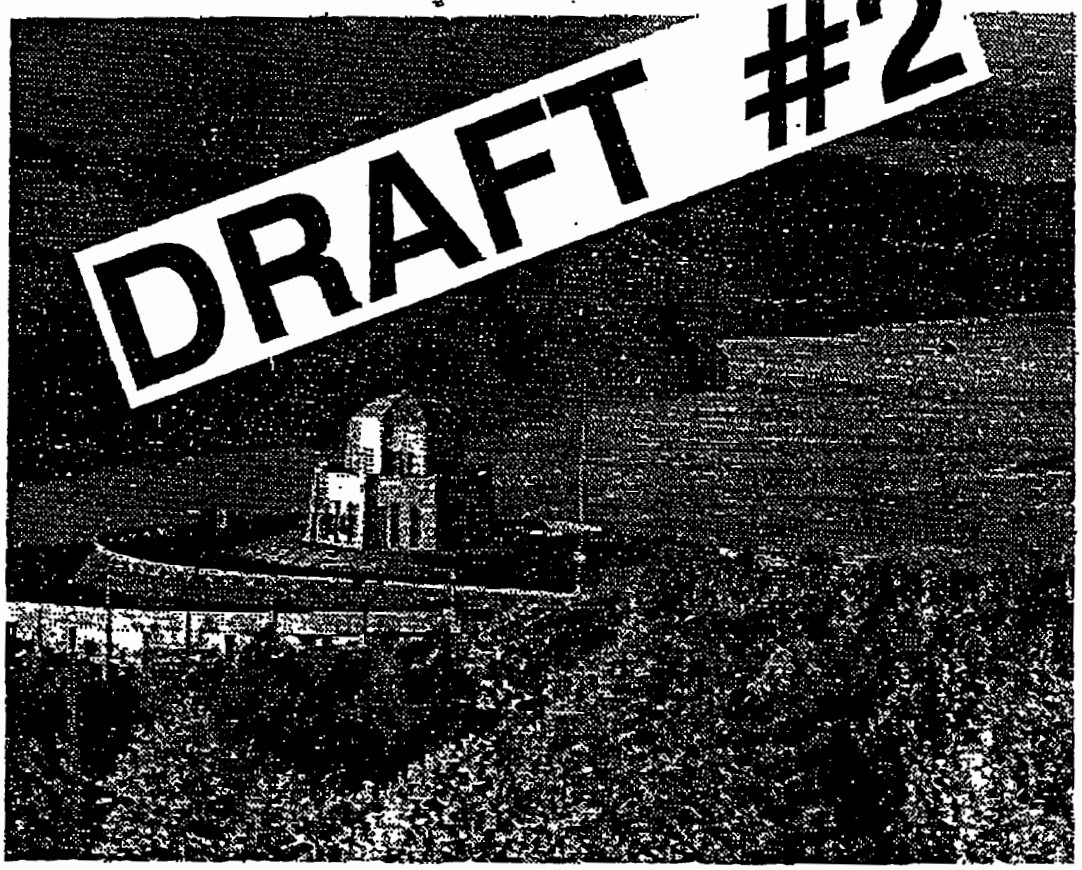
CITY OF MOSIER

By:_____ Date: _____

WASCO COUNTY

By:_____ Date: _____

COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY



OREGON DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVSION, PLANNING SECTION
SYSTEM STUDIES UNIT
JUNE 1989

TABLE OF CONTENTS

SECTION I
ORIGIN AND DESTINATION DATA

A copy of the actual survey form shows the questions asked at two locations in the Gorge area.

1. Mile Post 10.3 on the Crown Point Highway #125

2. Mile Post 13.5 on the Mosier-The Dalles Highway #292

At each of these locations, a weekday and weekend survey was held. Traffic was interviewed traveling both directions for a seven hour period, and traffic was also counted and classified manually for that same time period. Traffic hose counters were placed at critical locations on the highway for a seven day period.

The major emphasis of the questions was to determine access and exit routes, origins and destinations of trips, vehicle characteristics, trip purposes, and special interest questions relative to Historic Highway use.

A summary of several questions in graph form follows the survey questionnaire and is fairly self-explanatory. The percentages on some of the graphs will add up to more than 100 due to multiple answers on some questions. If summarized data on other questions is desired, this can be accomplished quite easily with the database format of this information.

COLUMBIA RIVER GORGE HISTORIC HIGHWAY
TRIP INTERVIEW
ORIGIN - DESTINATION SURVEY

LOCATION _____ DIRECTION _____ HOUR BEGIN _____ INTERVIEWER _____

A. VEHICLE TYPE: _____

1. Passenger Car
2. Light Truck
3. Heavy Truck
4. Motorcycle
5. Bicycle
6. Recreational Vehicle
7. Passenger Car w/Trailer
8. Light Truck w/Trailer

B. NUMBER OF PASSENGERS INCLUDING DRIVER _____

C. LICENSE PLATE REGISTRATION

Oregon _____ Other (enter state) _____

****

D. ARE YOU OR YOUR PASSENGERS VISITING FROM OUT OF STATE?

Yes _____ No _____

E. WHERE DID THIS TRIP BEGIN TODAY? _____

F. WHERE WILL THIS TRIP END TODAY? _____

G. WHERE DID YOU ACCESS THE HISTORIC HIGHWAY? EXIT NUMBER:

168 ____, 17 ____, 18 ____, 22 ____, 28 ____, 35 ____, 69 ____, 76 ____, 82 ____,
83 ____, 84 ____, OTHER _____

H. WHERE WILL YOU EXIT THE HISTORIC HIGHWAY? EXIT NUMBER:

168 ____, 17 ____, 18 ____, 22 ____, 28 ____, 35 ____, 69 ____, 76 ____, 82 ____,
83 ____, 84 ____, OTHER _____

I. PURPOSE OF TRIP:

1. Home
2. Work
3. School
4. Sightseeing
5. Personal Business/Shopping
6. Recreational

J. WHAT INTERESTS YOU MOST ABOUT THE HISTORIC HIGHWAY?

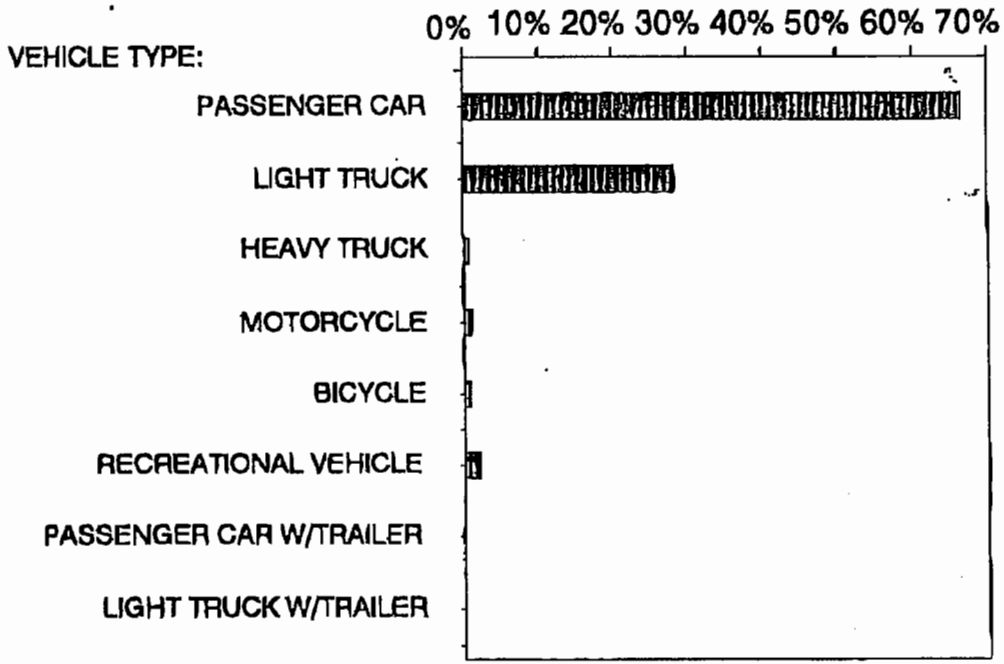
1. Historic Features
2. Scenery
3. Adjacent Parks
4. Adjacent Trails
5. Views, Vistas
6. Other _____

K. WHAT WOULD MAKE YOUR EXPERIENCE ON THE HISTORIC HIGHWAY MORE PLEASING?

1. Improved Informational Signing
2. More views or vistas
3. Interpretive Information
4. More Opportunities to Stop
5. More or Better Recreational Accesses
6. More or better Restroom Facilities
7. More or better Parking Facilities
8. Improved Lane Width
9. Other _____

COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY
OREGON STATE HIGHWAY DIVISION
PLANNING SECTION

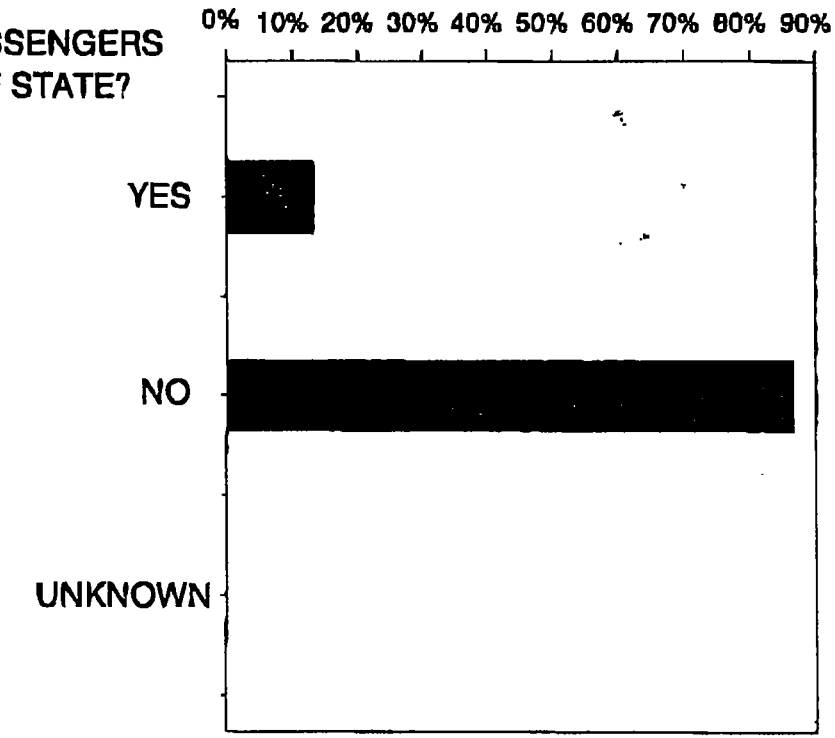
MOSIER - THE DALLES HIGHWAY NO.292



SUMMARY OF O&D INTERVIEWS
TAKEN AT M.P. 13.5 ON MOSIER - THE DALLES HIGHWAY
FRIDAY & SATURDAY 8/12/88 & 8/13/88

COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY
OREGON STATE HIGHWAY DIVISION
PLANNING SECTION
MOSIER - THE DALLES HIGHWAY NO.292

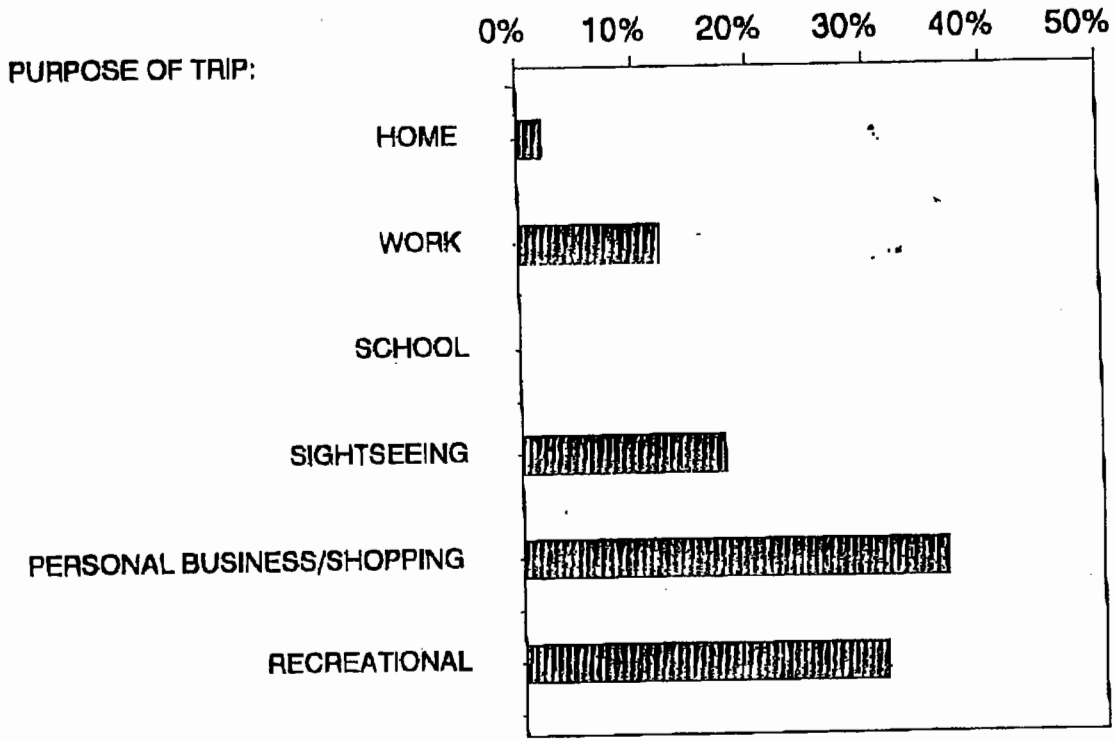
ARE YOU OR YOUR PASSENGERS
VISITING FROM OUT OF STATE?



SUMMARY OF O&D INTERVIEWS
TAKEN AT M.P. 13.5 ON MOSIER - THE DALLES HIGHWAY
FRIDAY & SATURDAY 8/12/88 & 8/13/88

COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY
OREGON STATE HIGHWAY DIVISION
PLANNING SECTION

MOSIER - THE DALLES HIGHWAY NO.292

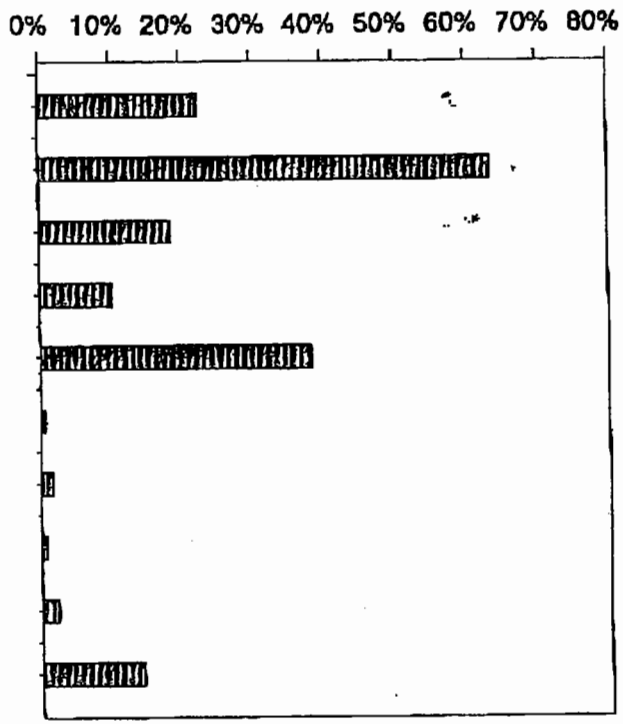


SUMMARY OF O&D INTERVIEWS
TAKEN AT M.P. 13.5 ON MOSIER - THE DALLES HIGHWAY
FRIDAY & SATURDAY 8/12/88 & 8/13/88

COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY
OREGON STATE HIGHWAY DIVISION
PLANNING SECTION

MOSIER - THE DALLES HIGHWAY NO.292

WHAT INTERESTS YOU MOST ABOUT THE HISTORIC HIGHWAY?

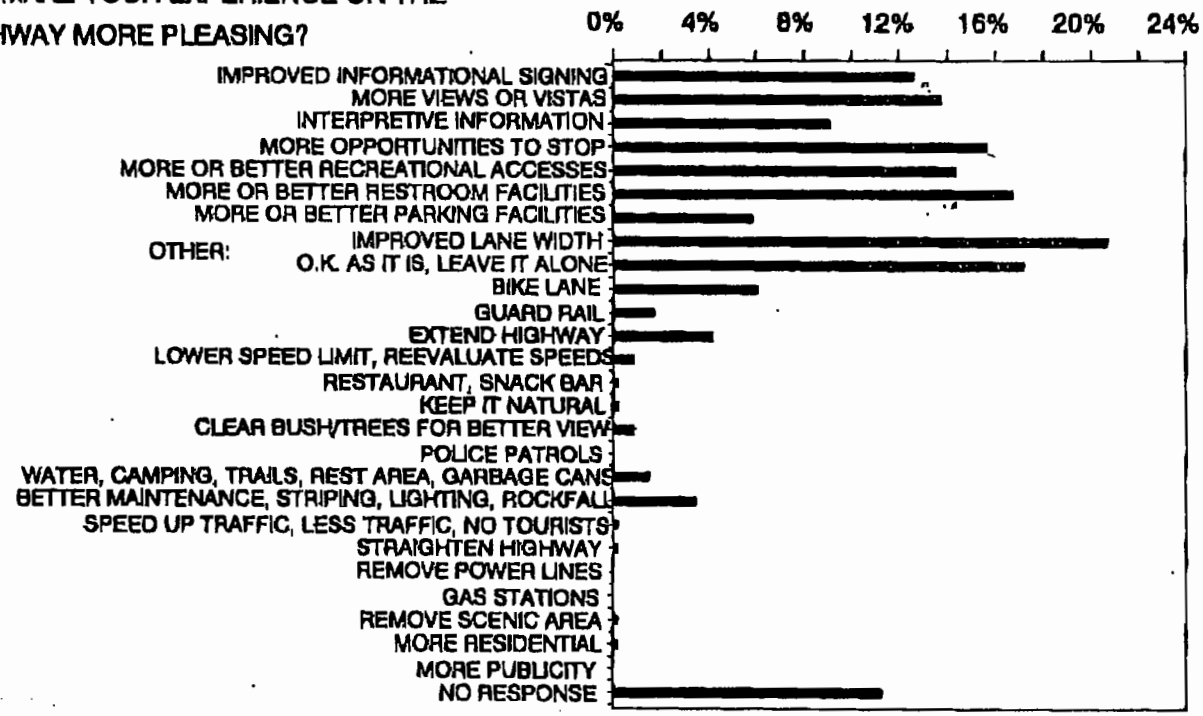


SUMMARY OF O&D INTERVIEWS
TAKEN AT M.P. 13.5 ON MOSIER - THE DALLES HIGHWAY
FRIDAY & SATURDAY 8/12/88 & 8/13/88

COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY
OREGON STATE HIGHWAY DIVISION
PLANNING SECTION

MOSIER - THE DALLES HIGHWAY NO.292

WHAT WOULD MAKE YOUR EXPERIENCE ON THE HISTORIC HIGHWAY MORE PLEASING?



SUMMARY OF O&D INTERVIEWS
TAKEN AT M.P. 13.5 ON MOSIER - THE DALLES HIGHWAY
FRIDAY & SATURDAY 6/12/68 & 6/13/68

HIGHWAY NO. 292
BASE YEAR CONDITIONS

	1988 BASE YEAR CONDITIONS							WIDTH				
	BEG MP	END MP	SECTION LENGTH	AADT	PK SUMMER MONTH ADT	TRUCKS PER DAY	TOTAL LANES	TRAVEL WAY	SHLDR	TOTAL	PERCENT GRADE (>4%)	LEVEL OF SERVICE
	0.00	0.16	0.16	900	1170	72	1	12	10	26	4%	A
B	0.00 B	0.23	0.23	900	1170	72	1	12	10	26	0%	A
	0.16	0.26	0.10	900	1170	72	2	22	0	22	0%	A
	0.26	0.31	0.05	900	1170	72	2	20	0	30	0%	A
	0.31	0.51	0.20	900	1170	72	2	20	8	28	0%	A
	0.51	0.59	0.08	900	1170	72	2	20	0	23	0%	A
	0.59	0.64	0.05	900	1170	72	2	20	0	20	0%	A
	0.64	0.68	0.04	900	1170	72	2	20	0	20	0%	A
	0.68	0.87	0.19	900	1170	72	2	20	0	20	0%	A
	0.87	1.09	0.22	900	1170	72	2	16	0	16	0%	A
	1.09	1.50	0.41	300	390	27	2	16	4	20	0%	A
	1.50	2.03	0.53	300	390	27	2	16	4	20	5%	B
	2.03	3.00	0.97	300	390	27	2	20	0	20	5%	B
	3.00	3.19	0.19	300	390	27	2	20	0	20	0%	A
	3.19	5.70	2.51	300	390	27	2	20	0	20	0%	A
	5.70	6.00	0.30	300	390	27	2	20	0	20	5%	B
	6.00	6.75	0.75	300	390	27	2	16	0	16	5%	B
	75	6.83	0.08	300	390	27	2	20	0	20	0%	A
	83	7.05	0.22	300	390	27	2	20	0	20	5%	B
	7.05	7.33	0.28	300	390	27	2	20	0	20	5%	B
	7.33	7.42	0.09	300	390	27	2	20	0	20	5%	B
	7.42	8.00	0.58	300	390	27	2	20	0	20	5%	B
	8.00	8.82	0.82	300	390	27	2	20	0	20	5%	B
	8.82	9.03	0.21	300	390	27	2	24	0	24	5%	B
	9.03	9.09	0.06	300	390	27	2	24	0	24	0%	A
	9.09	9.40	0.31	300	390	27	2	20	0	20	0%	A
	9.40	10.56	1.16	400	520	32	2	20	0	20	0%	A
	10.56	11.29	0.73	400	520	32	2	20	0	20	0%	A
	11.29	12.00	0.71	500	650	40	2	20	0	20	0%	A
	12.00	12.51	0.51	500	650	40	2	20	0	20	0%	A
	12.51	13.20	0.69	500	650	40	2	20	0	20	0%	A
	13.20	13.56	0.36	500	650	40	2	20	0	20	0%	A
	13.56	13.95	0.39	1100	1430	77	2	20	0	20	0%	A
	13.95	14.50	0.55	1100	1430	77	2	20	0	20	0%	A
	14.50	14.99	0.49	1100	1430	77	2	20	0	20	0%	A
	14.99	15.18	0.19	1400	1820	98	2	20	0	20	0%	A
	15.18	15.26	0.08	1400	1820	98	2	20	0	30	0%	A

HIGHWAY NO. 292
FUTURE YEAR CONDITIONS

	BEG MP		END MP	ADT 1998	ADT 2008	TRUCKS PER DAY 1998	TRUCKS PER DAY 2008	2008 LOS
	0.00		0.16	1277	1654	102	132	A
B	0.00	B	0.23	1277	1654	102	132	A
	0.16		0.26	1277	1654	102	132	A
	0.26		0.31	1277	1654	102	132	A
	0.31		0.51	1277	1654	102	132	A
	0.51		0.59	1277	1654	102	132	A
	0.59		0.64	1277	1654	102	132	A
	0.64		0.68	1277	1654	102	132	A
	0.68		0.87	1277	1654	102	132	A
	0.87		1.09	1277	1654	102	132	A
	1.09		1.50	410	519	37	47	A
	1.50		2.03	410	519	37	47	B
	2.03		3.00	410	519	37	47	B
	3.00		3.19	410	519	37	47	A
	3.19		5.70	410	519	37	47	A
	5.70		6.00	410	519	37	47	B
	6.00		6.75	410	519	37	47	B
	6.75		6.83	410	519	37	47	A
	6.83		7.05	410	519	37	47	B
	7.05		7.33	410	519	37	47	B
	7.33		7.42	410	519	37	47	B
	7.42		8.00	410	519	37	47	B
	8.00		8.82	410	519	37	47	B
	8.82		9.03	410	519	37	47	B
	9.03		9.09	410	519	37	47	A
	9.09		9.40	410	519	37	47	A
	9.40		10.56	429	458	34	37	A
	10.56		11.29	429	458	34	37	A
	11.29		12.00	537	573	43	46	A
	12.00		12.51	537	573	43	46	A
	12.51		13.20	537	573	43	46	A
	13.20		13.56	537	573	43	46	A
	13.56		13.95	1180	1261	83	88	A
	13.95		14.50	1153	1206	81	84	A
	14.50		14.99	1153	1206	81	84	A
	14.99		15.18	1467	1534	103	107	A
	15.18		15.26	1467	1534	103	107	A

REPORT 7

CONDITION AND TREATMENT HISTORY OF STATE HIGHWAYS
IN THE COLUMBIA RIVER GORGE AREA
CONDITION CODES: 1=VERY GOOD 2=GOOD 3=FAIR 4=POOR 5=VERY POOR
FD (FUND) CODES: M=MAINTENANCE P=STATE PRESERVATION

HWY	BEG MILE	END MILE	TC 1987	76	78	IMP 78-80	80	IMP 80-82	82	IMP 83-84	84	FD 84	IMP 84	FALL 84	IMP 85	FALL 85	86	FD 86	IMP 86	FALL 86	87	FD 87	IMP 87	FALL 87	88
125	18.44	19.00	5.6	4	4		4	PATCH	3		3	M	PATCH	3			3	M	PATCH	2	2	M	PATCH	3	3
125	19.00	22.00	5.6	4	4		4	PATCH	3		3	M	PATCH	3			3	M	PATCH	2	2				3
125	22.00	23.44	5.6	4	4		4	PATCH	3		3	M	PATCH	3			3				3				3
283	.00	.43	7.3	3	4	PATCH	3		3		3	P	PATCH	3			3	M	PATCH	2	2	M	PATCH	3	3
283	.43	1.08	7.4	3	4	PATCH	3		3		3	P	PATCH	3			3	M	PATCH	2	2	M	PATCH	3	3
283	1.08	1.24	7.4	3	4	PATCH	3		3		3	M	PATCH	3			3	M	PATCH	2	2	M	PATCH	3	3
284	.00	.86	5.1														4				4				4
284	.86	1.46	4.5														4				4				4
292	.00	.45	5.5	3	4		4		4		4						3				3				3
292	.45	.60	4.8	3	4		4		4		4						3				3				3
292	.60	8.00	4.8	3	4		4		4		4	M	OLAY	2			3				3				3
292	8.00	8.95	4.8	3	4		4		4	OLAY	2	M	OLAY	2			3				3				3
292	8.95	9.00	4.8	3	4		4		4	OLAY	2	M	OLAY	2			2				2				3
292	9.00	9.40	4.8	3	4		4		4	OLAY	2						2				2				3
292	9.40	10.41	5.1	3	4		4		4	OLAY	2						2				2				3
292	10.41	13.20	5.1	3	4		4		4	OLAY	2						3				3				3
292	13.20	14.99	4.6	3	4		4		4	OLAY	2						3				3				3

42 RECORDS PRINTED

REPORT 3

PAVEMENT MANAGEMENT UNIT REPORT - SPRING 1988
CENTERLINE MILEAGE SUMMARY - STATE HIGHWAYS
COLUMBIA RIVER GORGE AREA - BY FUNCTIONAL CLASS

HWY	BEGIN MP	END MP	MINOR ARTERIAL MILEAGE	COLLECTORS MILEAGE	TOTAL MILES	MILES FAIR OR BETTER	% FAIR OR BETTER
26	102.70	104.84	2.14	.00	2.14	2.14	100
125	1.85	23.44	1.12	20.47	21.59	13.52	63
283	.00	1.24	1.24	.00	1.24	1.24	100
284	.00	1.46	.00	1.46	1.46	.00	
292	.00	14.99	1.39	13.60	14.99	14.99	100
FINAL	104.55	145.97	5.89	35.53	41.42	31.89	77

5 RECORDS TOTALED

MANUAL CLASSIFICATION SUMMARY
ORIGIN & DESTINATION SURVEY SITES

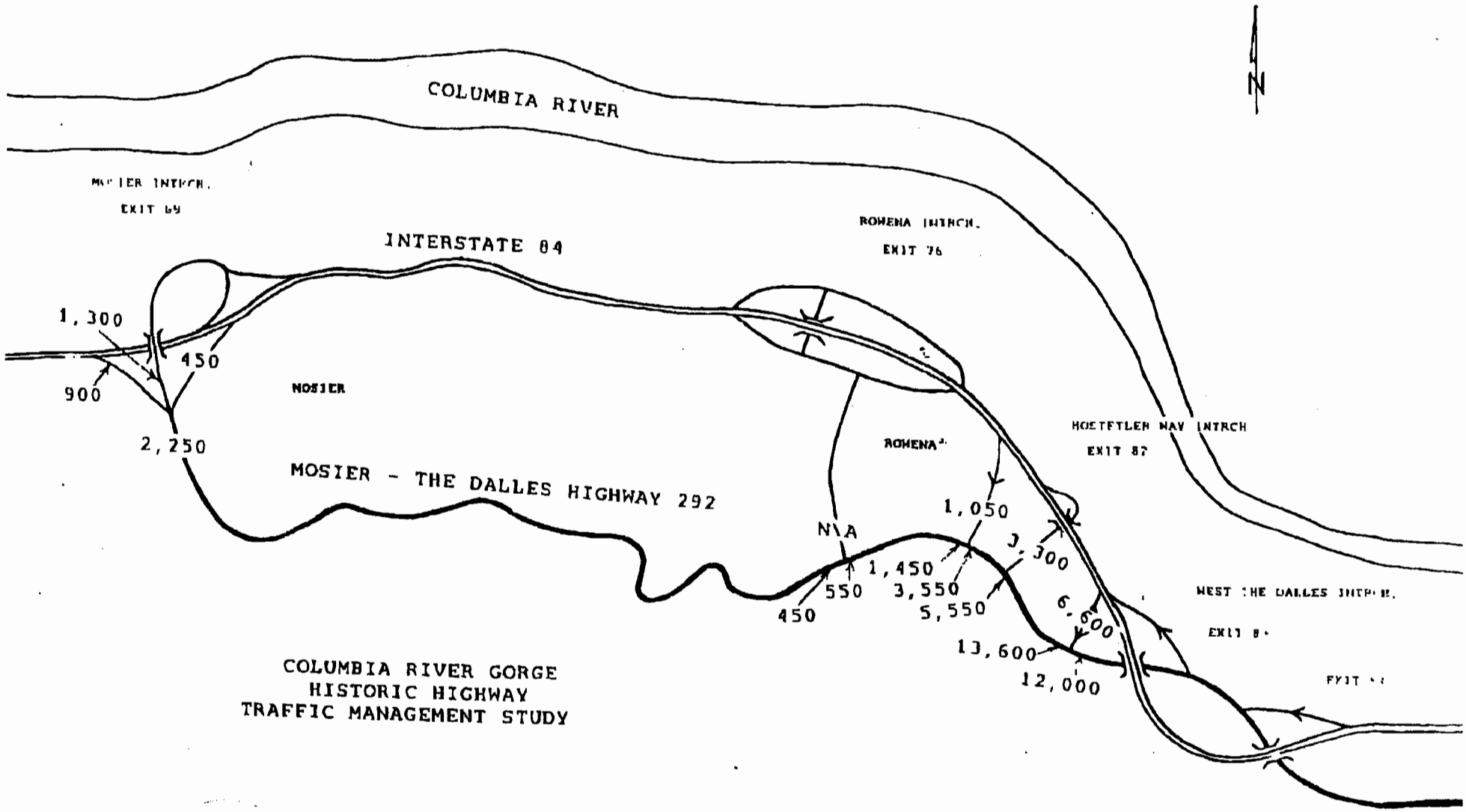
HWY 125 CROWN POINT HIGHWAY
WOMENS' FORUM MP 10.4

	FRIDAY JULY 29 1988 9:20am 6:00pm	SATURDAY AUG 29 1988 9:00am 6:00pm
CLASSIFICATION BREAKDOWN		
TOTAL ALL VEHICLES	1,370	1,938
	% OF TOTAL	% OF TOTAL
OREGON PASSENGER CARS	54.2	52.5
OUT-OF-STATE PASSENGER CARS	18.2	18.3
PICKUPS & PANELS	18.8	23.9
HEAVY TRUCKS	1.2	0.6
BUSES	0.7	0.1
CYCLES AND SCOOTERS	2.6	2.9
ESTIMATED 24 HR VOLUME	1,900	2,500
1988 AVERAGE DAILY TRAFFIC (ADT)	1,450	1,450
DIRECTION HEADING, EAST/WEST SPLIT	62/38	64/36

HWY 292 MOSIER-THE DALLES HIGHWAY
THE DALLES COUNTRY CLUB MP 13.5

	FRIDAY AUG 12 1988 9:00am 3:00pm	SATURDAY AUG 13 1988 9:00am 5:00pm
CLASSIFICATION BREAKDOWN		
TOTAL ALL VEHICLES	351	566
	% OF TOTAL	% OF TOTAL
OREGON PASSENGER CARS	55.3	65.6
OUT-OF-STATE PASSENGER CARS	7.7	6.4
PICKUPS & PANELS	29.9	25.6
HEAVY TRUCKS	2.0	0.0
BUSES	0.0	0.0
CYCLES AND SCOOTERS	0.6	0.2
ESTIMATED 24 HR VOLUME	1,000	900
1988 AVERAGE DAILY TRAFFIC (ADT)	930	930
DIRECTION HEADING, EAST/WEST SPLIT	55/45	53/47

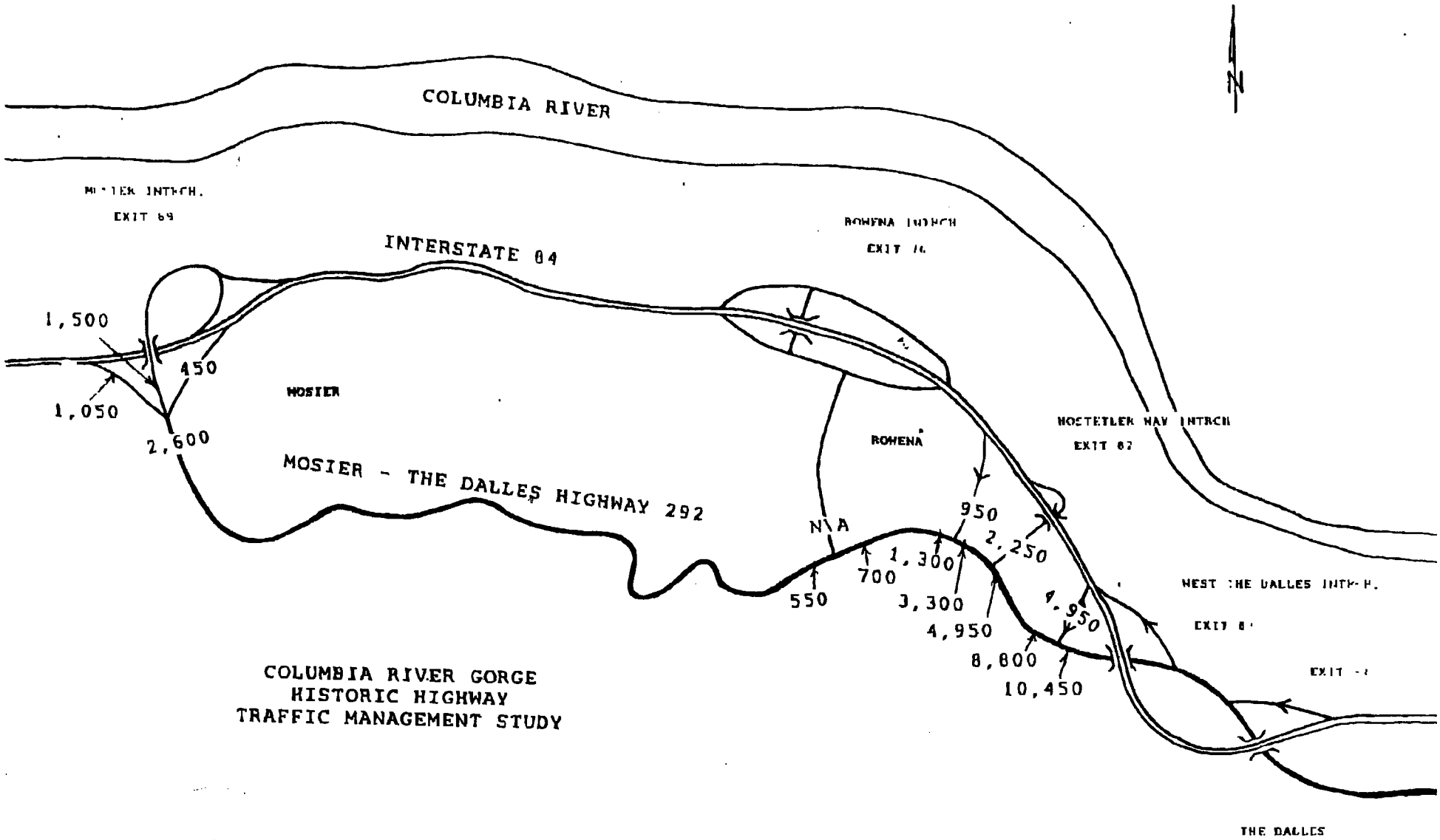
PEAK SUMMER AVERAGE WEEKDAY HOSE
COUNT [illegible]UMES JULY, 1988



COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY

X,XXX 1988 PEAK SUMMER AVERAGE
WEEKDAY HOSE COUNT VOLUMES

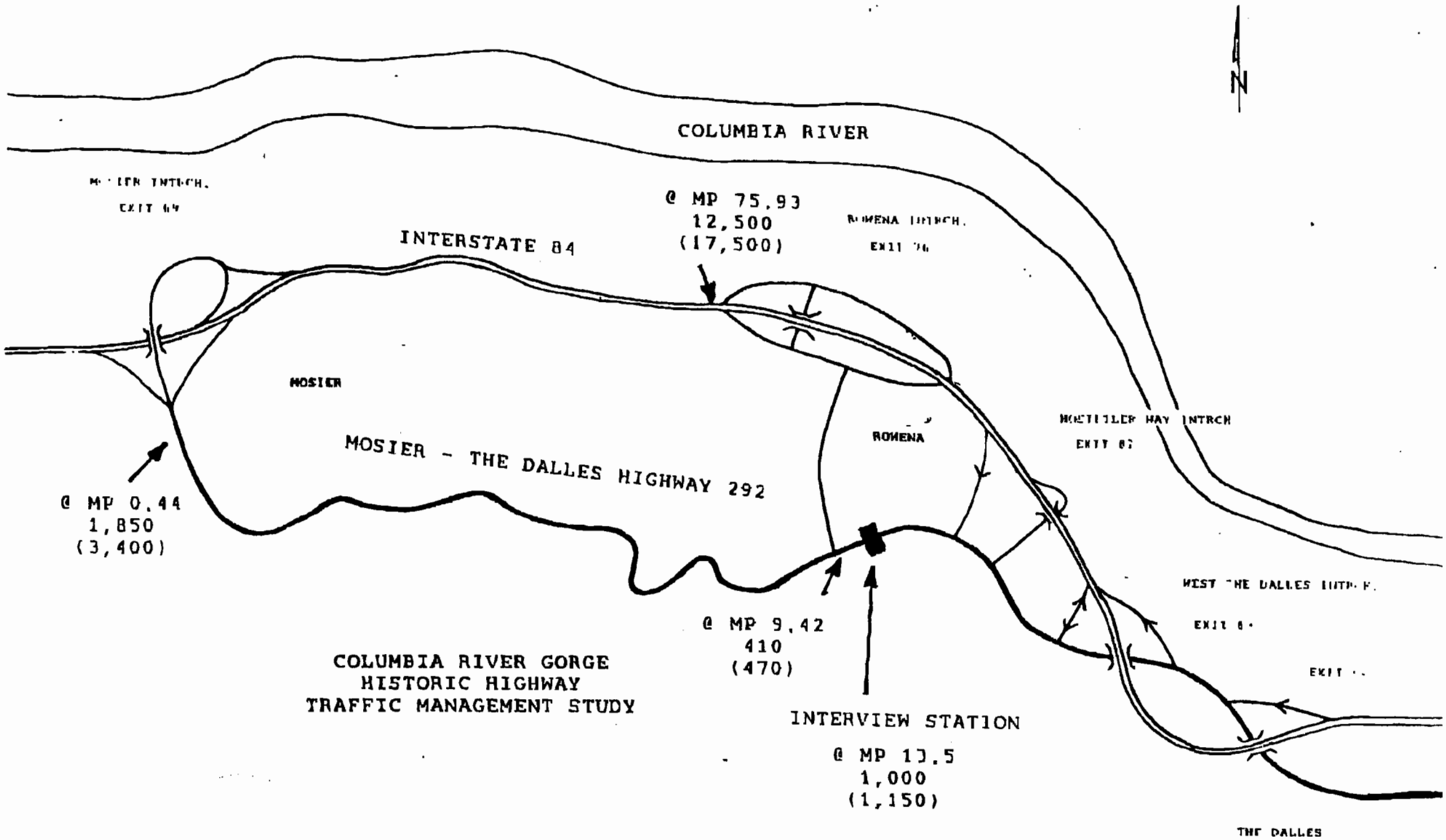
MOSIER - THE DALLES HIGHWAY
PEAK SUMMER AVERAGE WEEKEND DAY
HOSE COUNT VOLUMES JULY, 1988



COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY

X,XXX 1988 PEAK SUMMER AVERAGE WEEKEND DAY HOSE COUNT VOLUMES

MOSIER - THE DALLES HIGHWAY 292
PRESENT 1988 AND FUTURE 2008
AVERAGE DAILY TRAFFIC

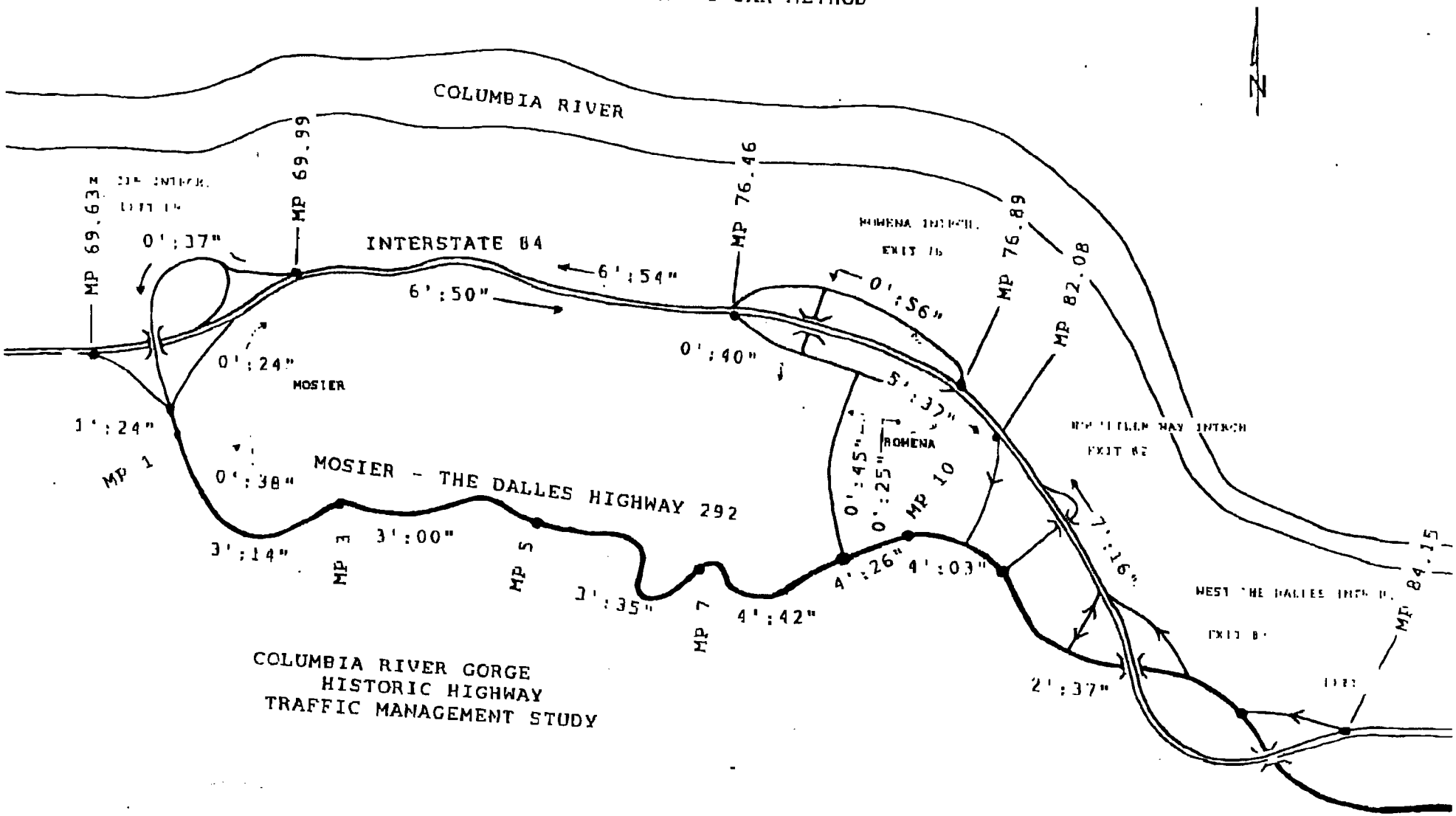


INTERVIEW STATION

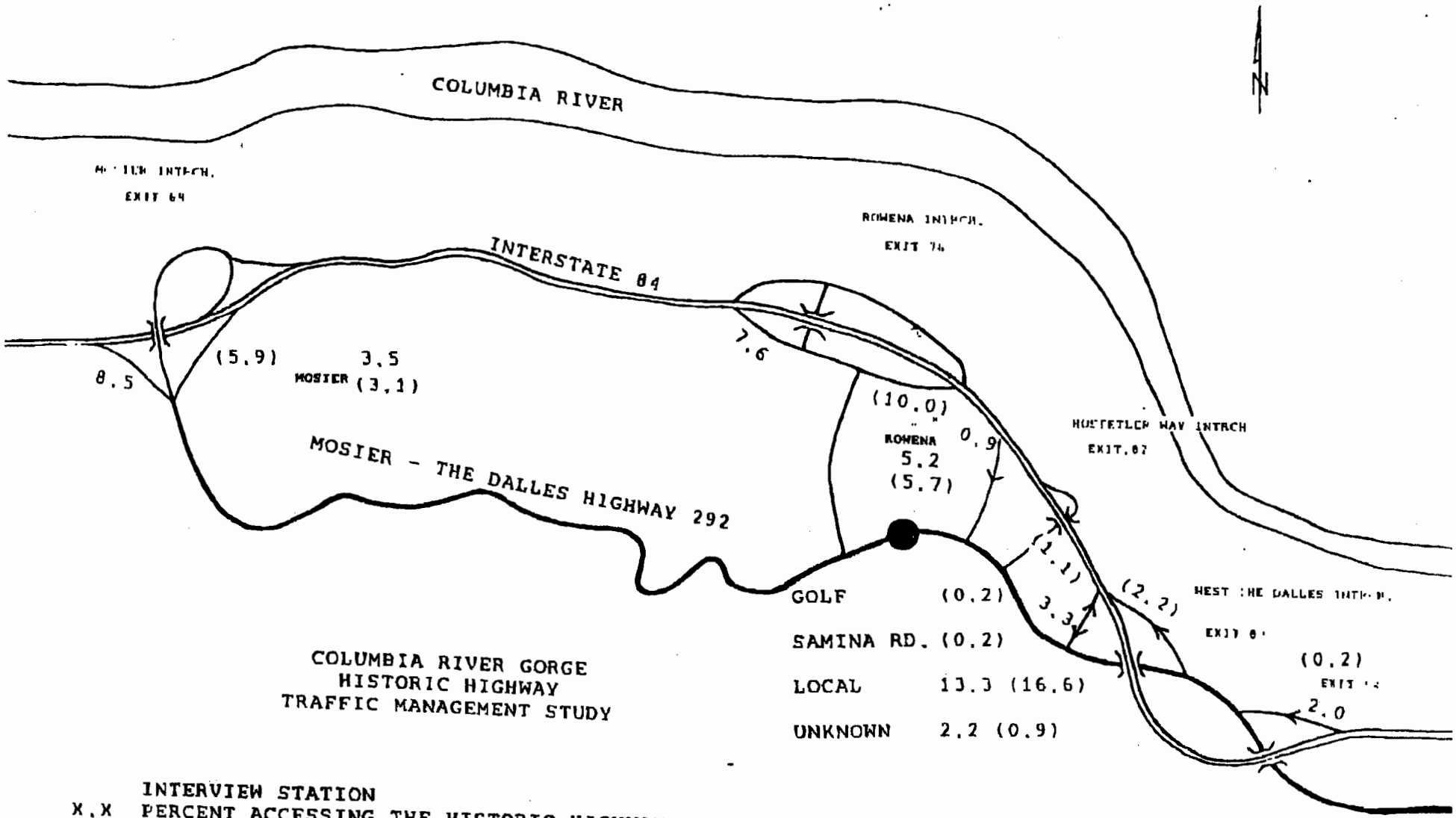
X,XXX 1988 AVERAGE DAILY TRAFFIC (ADT)

(X,XXX) 2008 AVERAGE DAILY TRAFFIC (ADT)

MOSIER - THE DALLES HIGHWAY 292
AVERA[illegible] TRAVEL TIMES
FLOA[illegible] CAR METHOD



ORIGIN & DESTINATION SURVEY TRIP
DISTRIBUTION PERCENTAGES FOR TRIPS
TRAVELING TH[illegible]GH INTERVIEW STATION



COLUMBIA RIVER GORGE
HISTORIC HIGHWAY
TRAFFIC MANAGEMENT STUDY

INTERVIEW STATION
X.X PERCENT ACCESSING THE HISTORIC HIGHWAY
(X.X) PERCENT EXITING THE HISTORIC HIGHWAY

NOTE: These percentages are based on response to trip related questions asked during the Origin and Destination study conducted during the month of August, 1988.

SECTION VII

TRAFFIC ACCIDENT SUMMARY

Traffic accident data was collected for the Crown Point Highway 125, Cascade Locks Highway 283 and Mosier-The Dalles Highway 292. At the top of the page the section is identified by highway route number, highway name and the beginning and ending mile points for the section. The data in this section is a summary of all the reported accidents along the mentioned highways from January, 1982 to August, 1988.

A summary by year is given for each of the following: collision type, driving conditions when the accident occurred, accident location and injury or damages resulting from the accident. At the bottom of each column a total for the time period is included.

To show a comparison of accidents on the Historic Highways to the statewide average of similar highways, the following table is included.

CROWN POINT HIGHWAY 125

	1987 * Accident Rate	Statewide Average * Accident Rate
Total Rural	2.27	1.80
Total Urban	3.72	3.94
Total Highway	2.69	2.42

MOSIER-THE DALLES HIGHWAY 292

	1987 * Accident Rate	Statewide Average * Accident Rate
Total Rural	3.40	1.80
Total Urban	2.90	3.94
Total Highway	2.97	2.42

* Note: The accident rate is in accidents per million vehicle miles.

If accident information is needed for specific locations along the highways listed, it can be provided upon request.

ACCIDENT SUMMARIES BY YEAR
HIGHWAY 292, MOSIER-THE DALLES

WASCO MP 0.00 TO 15.26 PERIOD 01/01/82 TO 12/31/86

YEAR	COLLISION TYPE	FATAL ACC	NON-FATAL ACC	PROPERTY DAMAGE ONLY	TOTAL ACC	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	OFF ROAD
1982	REAR-END		1		1		1		1			1		
1982	TURNING MOVEMENTS			2	2				2		1	1		
1982	FIXED / OTHER OBJECT		2		2		2	1	2		1	1		1
YEAR TOTAL			3	2	5		3	1	5		2	3		1
1983	REAR-END		1		1		1		1		1			
1983	SIDESWIPE-MEETING		1		1		1		1		1			
1983	TURNING MOVEMENTS		1		1		1		1		1			
1983	NON-COLLISION		3		3		9		2	1	1	2		2
1983	FIXED / OTHER OBJECT		5	1	6		6		5	1	2	4	2	6
YEAR TOTAL			11	1	12		18		10	2	6	6	2	8
1984	TURNING MOVEMENTS		1		1		1		1		1		1	
1984	NON-COLLISION		2		2		3		2		1	1		1
1984	FIXED / OTHER OBJECT		5		5		6		5		4	1		5
1984	MISCELLANEOUS			1	1				1		1			
YEAR TOTAL			8	1	9		10		9		7	2	1	6
1985	ANGLE			1	1				1		1		1	
1985	TURNING MOVEMENTS		1	2	3		1		3		3		2	
1985	NON-COLLISION	1	2		3	1	3		2	1	2	1		2
1985	FIXED / OTHER OBJECT		2	2	4		3		4		4			3
YEAR TOTAL		1	5	5	11	1	7		10	1	10	1	3	5
1986	SIDESWIPE-OVERTAKING		1		1		2		1		1			
1986	PEDESTRIAN		1		1		1		1		1			1
YEAR TOTAL			2		2		3		2		2			1
FINAL TOTALS		1	29	9	39	1	41	1	36	3	27	12	6	21

39 RECORDS TOTALED

ACCIDENT SUMMARIES BY YEAR

WASCO THE DALLES HIGH 292, MOSIER-THE DALLES
MP 0.00 TO 15.26 PERIOD 01/01/87 TO 08/31/88

YEAR	COLLISION TYPE	FATAL ACC	NON-FATAL ACC	PROPERTY DAMAGE ONLY	TOTAL ACC	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	OFF ROAD
1985	ANGLE			1	1				1		1		1	
1985	TURNING MOVEMENTS		1	2	3		1		3		3		2	
1985	NON-COLLISION	1	2		3	1	3		2	1	2	1		2
1985	FIXED / OTHER OBJECT		2	2	4		3		4		4			3
YEAR TOTAL		1	5	5	11	1	7		10	1	10	1	3	5
1986	SIDESWIPE-OVERTAKING		1		1		2		1		1			
1986	PEDESTRIAN		1		1		1		1		1			1
YEAR TOTAL			2		2		3		2		2			1
1987	ANGLE		1		1		2		1		1		1	
1987	TURNING MOVEMENTS		3	1	4		7		3	1	4		1	
1987	FIXED / OTHER OBJECT		1	2	3		2		1	2	1	2		2
YEAR TOTAL			5	3	8		11		5	3	6	2	2	2
1988	TURNING MOVEMENTS		1	1	2		4		2		2			
1988	FIXED / OTHER OBJECT		1		1		1		1		1			1
YEAR TOTAL			2	1	3		5		3		3			1
FINAL TOTALS		1	14	9	24	1	26		20	4	21	3	5	9

24 RECORDS TOTALED

COLUMBIA RIVER GORGE HISTRIC HIGHWAY
TRAFFIC MANAGEMENT STUDY
MOSIER – THE DALLES HIGHWAY 292 ROADSIDE PARKING INVENTORY DATA

MILE POINT	SITE DESCRIPTION	STRIPED SPACES	PARKING CAPACITY	SCENIC VIEW	USE	COMMENTS
1.54	North side of Hwy.	NO	2	Gorge	Viewpoint	Gravel
3.39	North side of Hwy.	NO	10	Gorge	Viewpoint	Rock barrier along cliff
6.88	Mayer State Park viewpoint	NO	30	Gorge	Viewpoint	Paved curbed parking not striped
7.52	South side of Hwy.	NO	6	Gorge	Viewpoint	Gravel
9.10	Mayer State Park	NO	60	N/A	Fish, Boating Picnicking. Restrooms	Both paved and gravel parking
11.(	South side of Hwy.	NO	2	Gorge	Viewpoint	Gravel
11.51	North side of Hwy.	NO	4	Gorge	Viewpoint	Gravel plus turn out for mail box