Klickitat County
Regional Transportation Plan

May 2003
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Klickitat County Transportation Policy Committee

Policy/Mission Statement

The Committee supports the improvement of safety and efficiency of the regional transportation system in Klickitat County.

The Committee supports transportation planning and project development that addresses the improvement of public safety along the regional transportation system.

The Committee supports the identification of “corridor segments” throughout the Klickitat County region, which should be the focus of transportation improvement, enhancement, multimodal, and mobility funding.

The Committee supports the coordination between agencies in identifying and addressing, when practical, the needs of a multimodal transportation system.

Klickitat County Member Jurisdictions

Klickitat County       City of Bingen
City of Goldendale    City of White Salmon
Washington State Department of Transportation  Port of Klickitat County

Klickitat County Transportation Policy Committee Members

Committee Members:

Ray Thayer           Klickitat County Commissioner
Brian Prigel         Mayor City of Bingen
Larry Bellamy        Goldendale City Administrator
Roger Holen          Mayor City of White Salmon
Dianne Sherwood      Director Port of Klickitat
Don Wagner           Washington State Department of Transportation, SW Region Administrator

Staff:

Faye Jenkins-Edwards WSDOT, SW Region
Chuck Ruhsenberger   WSDOT, SW Region
Larry Nicholas       Klickitat County, Public Works
Roger Gadway         Klickitat Co. Senior Services
Dean Lookingbill    Regional Transportation Council
Dale Robins          Regional Transportation Council
CHAPTER ONE
INTRODUCTION: RTP Vision, Purpose, and Goals

The Regional Transportation Plan (RTP) for Klickitat County is the region’s principal transportation planning document. The Regional Transportation Plan is developed to meet the magnitude of transportation issues facing the Klickitat County region and the need for cooperation between jurisdictions in order to develop regional solutions. The first RTP for Klickitat County was adopted in April 1995. An RTP update was adopted in April 1998. This 2003 update to the Klickitat County RTP will use 2025 as the horizon year and incorporate the latest available data. The RTP is intended to be a plan to meet the transportation needs over the next 20 years by implementing a regional transportation planning process. This introductory chapter presents the vision, purpose, goals, scope, statutory requirements, and decision-making process involved in development of the RTP for Klickitat County.

Vision

The RTP is a collective effort to address the development of a safe regional transportation system that will support planned economic growth and maintain the region’s rural quality of life.

Purpose

The RTP identifies future regional transportation system needs and outlines transportation plans and improvements necessary to maintain adequate mobility within and throughout the Klickitat County region. The region must plan for a future regional transportation system that adequately serves the population, employment, and visitor growth projected for Klickitat County. The RTP’s goals, objectives, and policies will guide the various jurisdictions and agencies involved in planning and programming of transportation projects throughout Klickitat County.

Goals

The following goals were used to guide the development of the Klickitat County Regional Transportation Plan:

- Maintain, preserve, and improve the infrastructure of the existing transportation system.
- Provide a safe and secure transportation system that allows for the movement of people and freight.
- Provide a transportation system that fosters economic development.
- Provide for the development of a transportation system that efficiently uses financial resources.
- Provide an integrated and coordinated transportation system that includes a variety of mobility options.
- Provide a transportation system that is sensitive to the quality of the environment and natural resources.
- Provide for viable and livable local communities.
There is consistency between the general RTP goals outlined above and the policies established by local jurisdictions and agencies as part of their local comprehensive planning process. The Regional Transportation Plan (RTP) for Klickitat County, where applicable, will also consider the following goals established in the Management Plan for the Columbia River Gorge National Scenic Area, SR-14 Corridor Management Plan, and consider other long range plans.

**Management Plan for the Columbia River National Scenic Area**
- Provide transportation facilities that meet the needs of the traveling public and implement this plan’s recreation goals and objectives while protecting scenic, natural, cultural, and recreation resources.
- Promote alternative modes of transportation to improve safety and enjoyment of the traveling public and to help alleviate future traffic demand.

**SR-14 Corridor Management Plan**
- Improve safety along SR-14 with respect for the protection and enhancement of resources.
- Enhance the economy of communities along the highway.
- Design Highway 14 as a national attraction by protecting and enhancing scenic, natural, cultural, and recreation resources within the highway corridor, with respect to local residences, and business.
- Manage the SR-14 Corridor in the most efficient and effective manner possible.

**Transportation Strategy**
The Regional Transportation Plan for Klickitat County is the region’s transportation strategy.

**Guidelines and Principles**
In 1994, the State Legislature passed Substitute House Bill 1928. This legislation requires RTPO’s to establish Guidelines and Principles that provide direction for the development of the transportation elements of comprehensive plans. The following represent these guidelines and principles:
- Identify adequate areas for future commercial, retail, and industrial economic growth. Coordinate identified economic growth areas with an efficient transportation system.
- Identify adequate land for residential development and density within urban areas that is coordinated with the transportation system.
- Provide a transportation system that supports the economic vitality of the region, and provides for long-term freight mobility needs and port access.
- Provide a range of non-motorized opportunities within the regional transportation system.
- Work toward the development of a core system of all-weather roads for freight travel.
- Encourage reducing the reliance on the single occupant vehicle by providing other modes of transportation.
- Encourage present and future railroad right of way to be utilized for transportation purposes.
- Enhance intermodal freight connections.
Scope

The RTP for Klickitat County takes the year 2025 as its horizon year. Travel demand for the region is forecast for this future year and improvements to the transportation system are recommended based on the projected demand.

The area covered by the RTP is the whole of Klickitat County. Klickitat County is situated along the northern bank of the Columbia River in south-central Washington. The County lies on the southeast flank of Mount Adams. On the north, the county borders the Simcoe Hills and contains part of the Yakama Indian Reservation. (See Figure 1-1).

People and freight move throughout the regional transportation system without consideration for city, county, and state boundaries. Since transportation problems extend beyond jurisdictional boundaries, the RTP must analyze the future transportation needs for the entire region while creating a cooperative framework for coordinating the individual actions of various jurisdictions.

Transportation Issues Addressed in RTP

- Transportation system maintenance, preservation and safety.
- Development of corridors to improve economic development potential.
- Accessibility across the Columbia River in terms of capacity, economic development, corridor location, and connecting roadways.
- Federal, state, local, and private sources of revenue for transportation projects.
- Access to ports, airports, intermodal transportation facilities, major freight distribution routes, and recreation areas.
- The need to relieve and prevent congestion from occurring where it does not yet occur.
- The need to improve corridors with safety problems, including freight corridors.
• The need to provide a multimodal transportation system; including pedestrian, bicycle, bus, truck, rail, marine, and auto.
• The need to provide enhancements (signs, viewpoints, kiosk, etc.), to assist visitors.

Statutory Requirements

State
Regional Transportation Plans are expected to be consistent with the policy framework and objectives described in Washington’s Transportation Plan (WTP) 2003-2022 (WSDOT; February 2002). In the 1998 session, the Washington State Legislature directed WSDOT to focus the 2002 WTP update on five primary goals for the state transportation system:

• Congestion Relief
• Preservation
• Safety
• Freight Mobility
• Seamless Connections

The WTP provides an overview of the state and its transportation systems, presents transportation issues and trends, and describes transportation issues and needs from an RTPO, a tribal, and a statewide perspective. The WTP policy framework sets a course for the state’s transportation future and determines which transportation investments are needed. Statewide policy is established to achieve three key elements of a desirable future: vibrant communities, a vital economy, and a sustainable environment.

The WTP is a statewide multimodal transportation plan that addresses transportation facilities owned and operated by the state, including state highways, the Washington State Ferries, and state-owned airports. It also addresses facilities and services that the state does not own, but has an interest in. These include public transportation, freight rail, intercity passenger rail, marine ports and navigation, non-motorized transportation, and aviation. Specific state highway needs are identified in the State Highway System Plan (HSP), 2003-2022 (WSDOT; February, 2002). The HSP is a primary element of the WTP and is updated every two years to guide WSDOT in prioritizing and budgeting for highway projects. The Public Transportation and Intercity Rail Passenger Plan for Washington State, 1997-2016, (December 1996), is the twenty-year Plan for preserving public transportation systems while improving mobility for a growing population.

Washington State’s Regional Transportation Planning Program
Washington State’s Growth Management Act (ESHB 2929), enacted in 1990, approved the Regional Transportation Planning Program, which created a formal mechanism for the State and local governments to coordinate transportation planning for regional transportation facilities. The Growth Management Act (GMA) authorized the creation of Regional Transportation Planning Organizations (RTPOs) by units of local government. Southwest Washington Regional Transportation Council (RTC) is the designated RTPO for the three-county area of Clark, Skamania, and Klickitat. In 1994 further state legislation (SHB 1928) clarified the duties of the RTPO outlined in the GMA and further defined RTPO planning standards.

The duties of the RTPO, as outlined in the GMA and SHB 1928, include:
Designation of the regional transportation system.

Development of a six year regional Transportation Improvement Program (TIP), including regionally significant projects. The TIP must include a financial plan.

Development of a Regional Transportation Plan (RTP), to include a regional transportation strategy, identification of existing and planned facilities and programs, Level of Service standards, a financial plan, assessment of regional development patterns and capital investment using a regional transportation approach. The concept of least cost planning was introduced in SHB 1928 and it is required that it be employed in development of the RTP. The RTP must be reviewed at least every two years to ensure that it is current.

Establish guidelines and principles for development and evaluation of the transportation elements of local comprehensive plans.

It is intended that the Regional Transportation Planning Program be integrated with, and augment, the federally required Metropolitan Planning Organization (MPO) program. The regional transportation planning program extends transportation planning by the RTPO’s to rural areas not covered by the federal program. It is intended that the program tie in and be consistent with local comprehensive planning.

The regional transportation planning process should:

- Guide the improvement of the regional transportation system.
- Use regionally consistent technical methods and data.
- Consider environmental impacts.
- Ensure early and continuous public involvement.
- Be consistent with the local comprehensive planning process.
- Be an ongoing process.
- Incorporate multimodal planning activities.
- Address major capacity expansion and operational improvements to the regional transportation system.
- Be a partnership, including federal, state, and local governments, special districts, private sector, general public, and others during conception, technical analysis, policy development, and decision-making.

To comply with State standards the RTP shall include the following components:

- Description of the designated regional transportation system.
- Regional transportation goals, policies, and strategy.
- Regional land use strategy. Existing and proposed land uses defined on local and regional comprehensive land use plans determine the regional development strategy.
- Identification of regional transportation needs. An inventory of existing regional transportation facilities and services, identification of current deficiencies, and forecast of future travel demand will be carried out.
- Development of LOS standards consistent with House Bill 1487.
- Development of financial plan for necessary transportation system improvements.
• Regional transportation system improvement and strategy plan. Specific facility or service improvements will be identified and priorities determined.

• Establishment of a performance monitoring program. The performance of the transportation system will be monitored over time. The monitoring methodology, data collection, and analysis techniques to be used will be outlined.

• Plans for implementation of the RTP

**Intergovernmental Coordination - RTP Development Process**

In order to make the RTP not only a Plan to provide carefully thought-out solutions to transportation issues and problems but also a Plan that all jurisdictions can implement, a regional transportation planning committee structure has been established. Consistent with the 1990 GMA legislation, a three-county RTC Board of Directors has been established to serve the RTPO region. Individual County Committees and Boards also play a part in the regional transportation decision-making. The Klickitat County Transportation Policy Committee continues to guide Klickitat County regional transportation policy. The role of, and representation on, the RTC Board of Directors and individual County Policy Committees is described in the *Bylaws of Southwest Washington Regional Transportation Council* (July 7, 1992) and *Interlocal Agreement for Establishment of the Southwest Washington Regional Transportation Council*. The regional transportation committee structure is outlined in Figure 1-2.

*Klickitat County Transportation Policy Committee*

The Klickitat County Transportation Policy Committee was established to provide a focus for Klickitat County regional transportation issues and policies. It is composed of representatives of Washington State Department of Transportation (WSDOT), Klickitat County, City of Bingen, City of Goldendale, City of White Salmon, and the Port of Klickitat County.
The Klickitat County Transportation Policy Committee carries out regional transportation planning activities within Klickitat County. Other agencies and organizations are welcome to participate as non-voting members of the committee. Specifically, the Columbia River Gorge Commission, U.S. Forest Service, and Mt. Adams Transit are invited to participate on the Klickitat County Transportation Policy Committee.

**Klickitat County Regional Transportation Plan: Work Plan**

As a first step in preparation of the Klickitat County RTP, a work plan was developed. (See Figure 1-3). The work plan outlines major tasks to be covered in the development of the RTP. The RTP is designed as a benchmark plan which will meet RTPO elements required by the 1990 GMA legislation and SHB 1928 legislation of 1994.

![RTP Process Diagram](image)

**Figure 1-3**

An outline of the chapters of the Plan follows:

**Chapter 1:**  **Introduction: RTP Vision, Purpose, and Goals.** The RTP is introduced and its general goals, policies, statutory authority, and purpose are described. The RTP process is outlined as well as regional transportation committee structure and intergovernmental cooperation and coordination of the RTP.

**Chapter 2:**  **Regional Land Use and Growth.** Klickitat County’s demographic data, development trends, and regional development strategy are discussed. Existing and future land uses and development patterns are identified.
Chapter 3: **Identification of Regional Transportation Needs.** The regional transportation system is designated and defined. The characteristics and patterns of today’s and future regional travel demand, today’s transportation problem locations, and future regional needs are described. Needs criteria such as accessibility, levels of service, and safety are outlined.

Chapter 4: **Financial Plan.** Revenue sources are identified and described, and a plan for financing transportation system improvements is presented.

Chapter 5: **System Improvement and Strategy Plan.** Recommendations for development of the regional transportation system are made. Regional transportation goals and policies are reviewed.

Chapter 6: **Performance Monitoring.** Performance monitoring measures are described. Monitoring the RTP’s consistency with the state transportation plan, local transportation plans, land use regulations, and regional demographic projections are outlined.

Chapter 7: **Plan Development and Implementation.** Provisions for the implementation of the public in development of the RTP are described. Provisions for the implementation of regional transportation goals, policies, and actions established by the RTP are described. The RTP review and amendment process is outlined should changing policies, financial conditions, or growth patterns warrant amendment of the Plan. The required biennial update of the RTP is described.
Land Use and Transportation

In developing a regional transportation plan, the fundamental relationship between transportation and land use must be recognized, and the effect that land use and growth have on transportation must be taken into consideration. The Land Use/Transportation cycle is illustrated in Figure 2-1.

![Land Use / Transportation Cycle](image)

**Figure 2-1**

The linkage between land use and transportation is a complex issue, but on a simple level, the linkage can be thought of as working in two ways:

1) The spatial distribution and type of land use activity influence both the demand for travel and travel characteristics. Different types of land use generate and attract differing traffic rates; for example, retail land uses will generate more trips than residential land uses.

2) Improving access by expanding the transportation system allows for the development of land that was formerly inaccessible.

It can be shown that land use and transportation are inter-linked and that land use activities largely determine travel demand and desire. When different land uses are segmented or separated, length of trips tends to increase. These longer trips are usually served more conveniently by the automobile, thus reducing the use of transportation alternatives, such as walking, to meet mobility needs.
Growth and Development

Sustained economic development and growth within a region is desirable because of the economic benefits that increased employment and a larger tax base can bring. However, while growth can contribute to the health of a region’s economy, it can also have negative impacts. Unmanaged, fast rates of growth can have a severe impact on the ability of a community to provide services and infrastructure.

The need to maintain economic viability and at the same time, quality of life, is a challenge. Components that contribute to a desirable quality of life include job opportunities, affordable housing, a healthy environment with clean air, and recreational opportunities. An efficient, safe transportation system contributes to the quality of life for residents of a region and can act as an attractor for economic development. Conversely, a transportation system dependent on deteriorating and outmoded facilities can be an inhibitor to the efficient, safe movement of people and goods.

Growth in Klickitat County

Klickitat County has seen moderate growth in the last two decades. The U.S. Census Bureau, Washington State’s Office of Financial Management (OFM), and Bureau of Economic Analysis (BEA) provided the following data. BEA employment includes all wage and salaried jobs as well as proprietors jobs that includes sole proprietor, self-employed, and farm employment.

Between 1980 and 2000 the population of the county increased by 21% from 15,822 to 19,161, while the number of housing units increased by 33% from 6,498 to 8,633. The increase in BEA employment was 32% from 6,963 in 1980 to 9,163 in 2000 (see Figure 2-2). Much of the growth occurred between 1990 and 2000, while growth was slow between 1980 and 1990.
Klickitat County has seen a large increase in recreation activity due in part to the Columbia River Gorge National Scenic Area and a variety of other recreational opportunities. The growth in recreation activities seen in the county in the last two decades has increased demands on the regional transportation system.

Development of a transportation policy plan must consider how to plan for a transportation system that can support increases in travel demand caused by growth in population, employment, and recreational activity. At the same time, this system has to be affordable and minimize environmental impacts to maintain the quality of life. A safe, efficient transportation system can work to enhance economic development within a region.

**General Land Uses in Klickitat County**

The Klickitat County population centers are located in and near Goldendale in the central part of the county and Bingen/White Salmon at the southwest corner of the county. The county is 84 miles long and varies between 13 and 29 miles wide. The total area of the county is 1,908 square miles. The provision of public facilities and services, including transportation, is a principal determinant of land use patterns.

**Planned Land Use**

Comprehensive plans are the means by which local jurisdictions can plan for their future growth and development; they can provide a process for anticipating and influencing the orderly and coordinated development of land. Within Washington State, planning authority is delegated by the state to local governments in RCW 36.70A, 35.63 and 35A.63. Comprehensive plans are required to have a land use element showing the general distribution and location of land for various uses, as well as a circulation element showing the street system and transportation routes. Klickitat County and incorporated cities of Bingen, Goldendale, and White Salmon all have currently adopted comprehensive plans.

The Columbia River Gorge Commission has adopted and is administering a Columbia River Gorge Management Plan pursuant to the requirements of the National Scenic Area Act. Within the Columbia River Gorge National Scenic Area, future residential and commercial development is encouraged to occur in the Urban Areas, but there is allowance for some residential development outside the urban areas. In addition, there are two federally designated Wild and Scenic River segments that have adopted management plans that are administered by the Forest Service.

**2025 Population and Employment Forecast**

The Washington State Office of Financial Management (OFM) develops population forecast for all counties in the State of Washington. Their forecast contains a low, medium, and high estimate. The February 2002 forecast developed by OFM for 2025 population in Klickitat County ranges from a low of 21,912 to a high of 30,586. For the purpose of the Regional Transportation Plan, the medium forecast of 25,855 will be used. The 2025 forecast represents a 35% or 6,694 increase in population from 2000 to 2025.

Housing and employment forecasts for Klickitat County were developed by RTC based on OFM population forecast and historical trends. Estimated 2025 housing is 11,752 units. The 2025
forecast represents a 36% or 3,119 increase in housing units from 2000 to 2025. Estimated 2025 employment is 11,597. This 2025 forecast represents a 27% or 2,434 increase in employment from 2000 to 2025 (see Figure 2-3).

![Population, Housing, & Employment In Klickitat County, 1980 to Forecast 2025](image)

**Figure 2-3**

**Demographic Trends**

Growth in population and employment, development, and resulting land use patterns together with its distribution all affect travel demand. However, other demographic factors also influence travel demand. These factors include household size, workforce participation, employment patterns, and vehicle ownership.

Household size is one of the most significant demographic factors that influences land use and demand for transportation services. Between 1970 and 1990 there was a trend toward smaller household size due to more single-person households and smaller family size. In 1970 the average number of persons per housing unit in Klickitat County was 2.60, but by 1990 it had fallen to 2.30. The decade of the 1990’s saw a small decrease in persons per housing unit in Klickitat County with the 2000 U.S. Census recording an average 2.22 persons per housing unit. The 2025 forecast is 2.22 persons per housing unit.

Another demographic trend that affects travel demand is the increase in two-worker households. Typically, the two workers in the household each use an auto to get to work, use the auto for work purposes while at work, use it to run errands at lunch time and before or after work, and if they have a family, to take their children to daycare facilities. All result in people’s increased reliance on the automobile that people consider their most convenient transportation mode.

Employment patterns have also been changing, with a relative decline seen in the traditional, industrial or timber jobs and an increase in service sector employment. With modern
technology, there has also been a rapid growth in workers who are able to work at home. In addition, there is a trend for a significant number of Klickitat County residents to be employed in other counties. The 2000 Census shows that 26.5% of the county residents worked outside of Klickitat County. Table 2-1 shows data of those living and/or working in Klickitat County (1990 & 2000 Census).

### Table 2-1

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**Klickitat Co. Employed Workforce**

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<td>Klickitat County</td>
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<td>Wasco Co., OR</td>
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<td>1.9%</td>
<td>65</td>
<td>1.0%</td>
<td>-48</td>
<td></td>
</tr>
<tr>
<td>Benton Co., WA</td>
<td>105</td>
<td>1.7%</td>
<td>92</td>
<td>1.4%</td>
<td>-13</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>0.1%</td>
<td>2</td>
<td>0.0%</td>
<td>-4</td>
<td></td>
</tr>
</tbody>
</table>

**Employment within Klickitat Co.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Klickitat County</td>
<td>Klickitat County</td>
<td>5,000</td>
<td>82.3%</td>
<td>5,632</td>
<td>84.8%</td>
<td>632</td>
</tr>
<tr>
<td>Hood River Co., OR</td>
<td>138</td>
<td>2.3%</td>
<td>167</td>
<td>2.5%</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Wasco Co., OR</td>
<td>405</td>
<td>6.7%</td>
<td>399</td>
<td>6.0%</td>
<td>-6</td>
<td></td>
</tr>
<tr>
<td>Skamania Co., WA</td>
<td>247</td>
<td>4.1%</td>
<td>205</td>
<td>3.1%</td>
<td>-42</td>
<td></td>
</tr>
<tr>
<td>Yakima Co., WA</td>
<td>58</td>
<td>1.0%</td>
<td>82</td>
<td>1.2%</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Sherman Co, OR</td>
<td>113</td>
<td>1.9%</td>
<td>65</td>
<td>1.0%</td>
<td>-48</td>
<td></td>
</tr>
<tr>
<td>Benton Co., WA</td>
<td>105</td>
<td>1.7%</td>
<td>92</td>
<td>1.4%</td>
<td>-13</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>0.1%</td>
<td>2</td>
<td>0.0%</td>
<td>-4</td>
<td></td>
</tr>
</tbody>
</table>

Travel demand has also grown as the number of registered vehicles and passenger cars in Klickitat County has increased in the past two decades (see Figure 2-4). From 1980 to 2000 there has been an increase in population of Klickitat County of 21%, but at the same time there has been a 82% increase in registered passenger cars. Table 2-2 shows the 1980 to 2000 increase in registered passenger cars and registered vehicles (includes all trucks, commercial and recreational vehicles, plus passenger cars) in Klickitat County. As population has increased, there has been a larger increase in the number of vehicles registered in Klickitat County adding to the demands put on the transportation system. The relationship between land use and transportation should be carefully considered when developing a vision for future growth and future growth patterns.
There are several trends that affect seasonal travel demand within Klickitat County. First, is the trend of additional retired residents who live in Klickitat County, but spend their winters in a warmer climate. These residents add to the local traffic from spring to fall. Second, is the increased popularity of the Columbia River Gorge area as a recreational attractor. Since its designation as a National Scenic Area, summer traffic volumes have rapidly increased.

Table 2-3 also provides information that compares 1990 and 2000 Census Journey to Work data. This data displays several trends impacting the commuter travel times. First, the data shows that commute times have increased by 4 minutes. Second, the use of carpools increased. Third, there has been an increase in the number of people working from home.
### Table 2-3

**JOURNEY TO WORK – Klickitat County**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuters</td>
<td>6,285</td>
<td>100.0%</td>
<td>7,666</td>
<td>100.0%</td>
<td>1,380</td>
<td>22.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Drive Alone</td>
<td>4,281</td>
<td>68.1%</td>
<td>5,505</td>
<td>71.8%</td>
<td>1,224</td>
<td>28.6%</td>
<td>73.3%</td>
</tr>
<tr>
<td>Carpool</td>
<td>864</td>
<td>13.7%</td>
<td>1,182</td>
<td>15.4%</td>
<td>318</td>
<td>36.8%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Transit</td>
<td>41</td>
<td>0.7%</td>
<td>51</td>
<td>0.7%</td>
<td>10</td>
<td>24.4%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Bicycle or Walked</td>
<td>676</td>
<td>10.8%</td>
<td>363</td>
<td>4.7%</td>
<td>-313</td>
<td>-46.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Motorcycle/Other</td>
<td>100</td>
<td>1.6%</td>
<td>90</td>
<td>1.2%</td>
<td>-10</td>
<td>-10.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>323</td>
<td>5.1%</td>
<td>473</td>
<td>6.2%</td>
<td>150</td>
<td>46.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Mean Travel Time to Work (minutes)</td>
<td>18.0</td>
<td>N/A</td>
<td>21.9</td>
<td>N/A</td>
<td>4.0</td>
<td>N/A</td>
<td>25.5</td>
</tr>
</tbody>
</table>
CHAPTER THREE
IDENTIFICATION OF REGIONAL TRANSPORTATION NEEDS

Current Functional Classification of the Regional Roadway System

Arterials are categorized into a functional classification system; the classifying of highways, roads, and streets into groups having similar characteristics of providing mobility and/or land access. Interstate freeways, classified as divided principal arterials, are designed to provide for the highest degree of mobility of large volumes of long-distance traffic. They are not designed to provide for access to land uses. Collector facilities generally provide equal emphasis upon mobility and land use accessibility. Local facilities emphasize access to land uses.

To meet the requirements of ISTEA, the Federal Functional Classification system for Klickitat County roads was reviewed in 1993. This review resulted in a county-wide uniform classification system. Generally, facilities classified as Major Collector or above in rural areas are eligible for federal funding. The appendices in the back of this document includes a map of the Federal Functional Classification system. ISTEA also required that roads be designated as National Highway System (NHS) facilities. Congress approved the NHS System with passage of the National Highway System Designation Act of 1995. In Klickitat County, SR-97 and SR-14 (between the Skamania County line and SR-97) are designated as NHS facilities.

In 1999, the state legislature adopted Highways of Statewide Significance, fulfilling a requirement of House Bill 1487 passed in 1998. In Klickitat, SR-97 and SR-14 (between the Skamania County line and SR-97) are designated as Highways of Statewide Significance.

A description of the rural functional classification categories follows:

**Rural Principal Arterials**

Rural principal arterials are sub-divided into two sets (1) interstate facilities and (2) other principal arterials. Rural principal arterials serve corridor movements having trip length and travel density characteristics of statewide or interstate travel. They consist of a connected rural network of continuous routes.

**Rural Minor Arterials**

In conjunction with the principal arterials, the rural minor arterials form a rural network which link cities and larger towns together with other major traffic generators. The principal arterials and rural minor arterials are spaced at such intervals that all developed areas of the state are within a reasonable distance of an arterial highway. Minor arterials should be expected to provide for relatively high overall travel speeds with minimum interference to through movement.

**Rural Major Collector Roads**

Rural major collectors provide service to larger towns not directly served by the higher systems and to other traffic generators of equivalent importance. Rural major collectors serve the more important travel corridors within the county.
Rural Minor Collector Roads
Rural minor collectors are spaced at intervals, consistent with population density, to collect traffic from local roads and provide developed areas with reasonable distance to a collector road. Rural minor collectors provide service to the remaining smaller communities and link the locally important traffic generators with surrounding rural areas.

Rural Local Roads
Local streets provide direct access to abutting land and access to the higher classification facilities. They offer the lowest level of mobility. They are not intended to carry through traffic; however, they do make up a large percentage of the total street mileage.

Designation of The RTP Regional Transportation System
Consistent with the state’s Regional Transportation Planning Program Planning Standards the RTP regional transportation system has been designated to include:

1. All state transportation facilities and services (including state highways)
2. All local principal arterials (the definition of rural principal arterials can be the same as used for federal classification or be regionally determined).
3. All other transportation facilities and services, including airports, transit services and facilities, roadways, bridges, rail facilities, marine transportation facilities etc. that the RTPO considers necessary to complete the regional plan.
4. Any transportation facility or service that is regionally needed or impacts places in the plan, as determined by the RTPO.

A detailed description of the designated RTP Regional Transportation System follows:

1. All state transportation facilities and services

In Klickitat County this category includes the following State Routes: SR-14, SR-97, SR-141, SR-141 Spur, SR-142, and SR-197.

SR-14 provides the main south-west access from the Skamania/Klickitat County line to south-east Benton/Klickitat County line along the north bank of the Columbia River. The facility has one lane in each direction and extends 88.76 miles through Klickitat County between Skamania County and Benton County lines.

SR-35 will provide a future link across the Columbia River to Oregon in the Bingen/White Salmon area.

SR-97 provides the main south-central access from the Columbia River (Oregon) to north-central Yakima/Klickitat County line, through Goldendale the county seat. The facility has one lane in each direction and extends 33.52 miles through Klickitat County between State of Oregon and Yakima County line.

SR-141 provides north and south access from Bingen to the Skamania/Klickitat County line near Trout Lake. The facility has one lane in each direction and extends 29.19 miles from SR-14 to its end at the Skamania/Klickitat County line.
**SR-141 Spur** provides north and south access from SR-14 near the Klickitat/Skamania County line to SR-141 northwest of White Salmon. The facility has one lane in each direction and extends 2.16 miles.

**SR-142** provides access from Lyle to Goldendale. The facility has one lane in each direction and extends 35.29 miles from SR-14 (Lyle) to SR-97 (Goldendale).

**SR-197** provides north and south access from The Dalles, Oregon across the Columbia River to SR-14. The facility has one lane in each direction and extends 3.18 miles from the Columbia River to SR-14 near Dallesport, Washington.

2. **All local principal arterials**
   The State Routes are the only local rural principal arterials in Klickitat County.

3. **All other transportation facilities and services considered necessary to complete the regional transportation plan.**
   These include transit services and facilities, roadways, rail facilities, airports, marine transportation facilities etc.

**Major Collectors**

All local major collectors are designated as part of the regional transportation system. Major collectors include such facilities as Alderdale Rd., McKinley Springs Rd., Roosevelt Grade/East Rd., Bickleton Hwy., BZ-Glenwood Hwy., Glenwood Hwy., Trout Lake Hwy./Sunnyside Rd./Warner Rd., Snowden Rd., Canyon Rd., Centerville Hwy., Dallesport Rd., Loop Rd., South Columbus, Horseshoe Bend Rd./Sunnyside Rd./Warner Rd., Snowden Rd., Canyon Rd., Centerville Hwy., Dallesport Rd., Loop Rd., South Columbus, Horseshoe Bend Rd./Simcoe Mtn. Rd, and Mt. Adams Rd. In addition, major collectors include important Port roads, such as Lake View Blvd., Shore Dr., Dock Rd., Dow Rd., Parallel Av., Bingen Point Way, and Columbia River Way.

**Port Facilities**

Klickitat County has one Port District, the Klickitat County Port District #1. This Port District is not a county-wide port district, but does include the majority of the County. The Port of Klickitat owns and operates two facilities. First, the port has 125 acres of commercial/recreational/light industrial zoned property, which fronts the Columbia River, located to the south of the City of Bingen. This facility includes approximately 57 acres of developable property, 30 acres of lake and wetland, a 22 acre boat basin, a boat launch and park area and a 16 acre sailbord park. Secondly, the port has a 660 acre industrial park east of Dallesport, which is served by all utilities, rail, and a barge dock facility. The property is adjacent to the Columbia River and SR-197, one mile from Interstate 84 in Oregon, and one mile from the Dallesport regional airport.

**Airport Facilities**

There are two public airfields currently operating in Klickitat County. The airfields are located in Goldendale and Dallesport. The airfield in Dallesport is co-owned and operated by the City of The Dalles (Oregon) and Klickitat County. In addition to public airfields, there are several private landing strips in Klickitat County. The nearest regional airport with domestic and international passenger and freight service is the Portland International Airport (PDX). PDX is located in Portland, Oregon approximately 70 miles west of the Bingen/White Salmon area.
**Bridges**

All public bridges including Columbia River bridges are designated as part of the regional transportation system. All bridges are important to the movement of people and goods within the region. Of great importance are those bridges that cross the Columbia River.

There are three bridges in Klickitat County crossing the Columbia River between Washington and Oregon, connecting SR-14 to Interstate 84. The Hood River Bridge is a two laned toll bridge owned by the Port of Hood River, connecting Hood River, Oregon to Bingen/White Salmon, Washington. The SR-197 Bridge is a two laned bridge connecting The Dalles, Oregon to Dallesport, Washington. The SR-197 Bridge is owned and maintained by ODOT. The SR-97 Bridge is a two laned bridge connecting Biggs Junction, Oregon and Maryhill, Washington. The SR-97 Bridge is owned and maintained by WSDOT.

In addition, the Washington State Legislature designated SR-35 in the 1997 legislative session. SR-35 will provide a future link across the Columbia River to Oregon in the Bingen/White Salmon area. A study is underway to select a preferred alternative and complete a Draft Environmental Impact Statement for a future river crossing in the SR-35 corridor.

**Rail Facilities**

There is one main rail line in use in Klickitat County which provides freight and passenger service. Burlington Northern Santa Fe Railroad (BNSF) owns the rail line. The BNSF Vancouver/Eastern Washington line has one track in good condition with approximately 60 trains operating on them daily. Within Klickitat County, there are vital transfer sites located at Dallesport and Roosevelt. AMTRAK also has an agreement with BNSF to operate passenger service on the freight carrier’s rail lines. Four days a week, one AMTRAK train serves Bingen and Wishram, traveling through Klickitat County between Vancouver and Spokane.

Along the main rail line, there are seven public and numerous private at-grade railroad crossings in Klickitat County. One of the public crossings is currently closed to the public. The public at-grade railroad crossings are listed in Table 3-1.

<table>
<thead>
<tr>
<th>Road</th>
<th>Warning System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walnut St. (Bingen)</td>
<td>Warning Lights</td>
</tr>
<tr>
<td>Maple St. (Bingen)</td>
<td>Warning Lights</td>
</tr>
<tr>
<td>Depot Rd. (Lyle)</td>
<td>Warning Lights</td>
</tr>
<tr>
<td>Old Ferry Rd. (Dallesport)</td>
<td>Warning Lights</td>
</tr>
<tr>
<td>Horsethief Park</td>
<td>(Closed to Public)</td>
</tr>
<tr>
<td>Avery Rd.</td>
<td>Warning Lights</td>
</tr>
<tr>
<td>Stonehenge Rd. (Maryhill)</td>
<td>Warning Light and Drawbars</td>
</tr>
</tbody>
</table>
Columbia River

Historically, the Columbia River has always been an important transportation corridor to Klickitat County. The Columbia River, as a transportation corridor, is used today to move goods by barge and people by boat. Tour boats frequent the Columbia River and dock in the region.

Enhancements

Transportation enhancements are designed as part of the regional transportation system. Enhancements include facilities for bicycles and pedestrians, scenic vistas, thematic signage, rest stops, tourist information, and roadside beautification along the regional road network.

Public Transportation

Mt. Adams Transit in conjunction with Klickitat County Senior Services, is presently operating a demand response and fixed route public transportation system in Klickitat County. Grants from the Washington State Department of Transportation are essential in maintaining the existing service. In 1997, a public transportation improvement conference was called, and through this process, boundaries were organized for a Public Transportation Benefit Area (PTBA). In 1998, the voters of Klickitat rejected, by a small margin, an increase in sales tax to fund a PTBA.

In addition to public transit, Greyhound provides transit service between Yakima and Portland, with stops in Klickitat County.

Growth in Traffic Volumes

As a result of socio-economic and demographic changes described in Chapter 2, Klickitat County has seen an increase in traffic volumes in recent years. Washington State Department of Transportation compiles traffic count data along State Routes. Examples of growth in traffic volumes at selected locations along State Routes in Klickitat County are listed in Table 3-2:

<table>
<thead>
<tr>
<th>Location</th>
<th>Leg</th>
<th>1989 Volumes</th>
<th>2002 Volumes</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-14 at SR-141 Spur</td>
<td>E</td>
<td>3,375</td>
<td>6,260</td>
<td>85%</td>
</tr>
<tr>
<td>SR-14 at Hood River Br.</td>
<td>E</td>
<td>3,700</td>
<td>10,800</td>
<td>192%</td>
</tr>
<tr>
<td>SR-14 at SR-97</td>
<td>E</td>
<td>1,300</td>
<td>1,850</td>
<td>42%</td>
</tr>
<tr>
<td>SR-14 at Benton Co. Ln.</td>
<td>W</td>
<td>740</td>
<td>800</td>
<td>8%</td>
</tr>
<tr>
<td>SR-197 at Columbia Rv.</td>
<td>N</td>
<td>3,350</td>
<td>4,700</td>
<td>40%</td>
</tr>
<tr>
<td>SR-97 at Columbia Rv.</td>
<td>N</td>
<td>2,650</td>
<td>5,000</td>
<td>89%</td>
</tr>
<tr>
<td>SR-97 at Goldendale</td>
<td>N</td>
<td>3,100</td>
<td>4,750</td>
<td>53%</td>
</tr>
</tbody>
</table>
Future Travel Demand

Future auto travel demand was forecasted for the Klickitat County region based on historic trends, net changes in land use and activity levels, applying appropriate traffic generation rates, and then using trip distribution information to determine the direction of travel.

The RTP network is considered to be the same transportation network as exists today. It is used only as a base case scenario for forecasting future travel demand and potential traffic volumes on road segments and does not constitute a recommended network. Traffic volumes could differ significantly from those that result from the future trip assignment onto the RTP network if significant and successful changes are made to the transportation system.

Burlington Northern Santa Fe operates the east-west railroad route along the Washington side of the Columbia River Gorge and through Klickitat County. This route is currently experiencing capacity constraints and will continue to in the future without some kind of expansion.

The Washington State Continuous Airport System Plan forecasts general aviation operations state-wide to increase by 17% between 1990 and 2005. The Airport System Plan notes a connection between population and number of aircraft. Thus, with a slow increase in population Klickitat County could anticipate a modest increase in demand for airport facilities.

The Columbia River system is an important transportation corridor for the movement of goods. In order to meet the travel demand associated with this corridor, it will be essential to preserve appropriate channel depths and widths for shipping and to maintain current lock handling capacity.

Walking and bicycling are integral parts of the transportation system. People walk and bike for various trips. Walking and bicycling trips are usually short and demand is greater in urban areas. However, there is a demand for bicycling facilities along major corridors and routes.

Public transit is an important aspect of the transportation system, especially for those with limited income, elderly, and disabled. With an aging population and per capita income lower than the state average, the demand for public transit will increase in Klickitat County.

Levels of Service

Levels of service standards represent the minimum performance level desired for transportation facilities and services within the region. They are used as a gauge for evaluating the quality of service on the transportation system and can be described by travel times, travel speed, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Levels of service are defined as “qualitative measures describing operational conditions within a traffic stream, and their perception by motorists and/or passengers”. These levels of service are designated A through F, from best to worst. Level of service E describes conditions approaching and at capacity. For uninterrupted flow conditions, the following definitions1 apply:

- **Level of Service A** describes free flow conditions, with low volumes and high speeds. The general level of comfort and convenience provided to the motorists, passengers, or pedestrian is excellent.

---

1 From *Highway Capacity Manual*, Transportation Research Board, 1985
• **Level of Service B** is in the range of stable flow but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver with the traffic stream from Level of Service A.

• **Level of Service C** is still in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level.

• **Level of Service D** represents high-density, but stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience.

• **Level of Service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Comfort and convenience levels are extremely poor and driver or pedestrian frustration is generally high.

• **Level of Service F** describes forced or breakdown flow. These conditions usually result from queues of vehicles backing up from a restriction downstream. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable.

### Level of Service Standards

In 1998 the Washington State Legislature passed House Bill 1487, otherwise known as the Level of Service (LOS) Bill. The Bill set new requirements relating to transportation and growth management planning. The intent of the legislation was to enhance the coordination of planning efforts and plan consistency at the local, regional, and state level. The key applicable elements include:

**Highways of Statewide Significance**: The State must give higher priority to correcting identified deficiencies on transportation facilities of statewide significance. Designation of Highways of Statewide Significance (HSS) was completed in 1999. In Klickitat County, the HSS system includes SR-97 and SR-14, between the Skamania County line and SR-97. WSDOT has established an LOS ‘C’ for rural HSS facilities like SR-14.

**Non-Highways of Statewide Significance**: Non-HSS state highways, otherwise known as Highways of Regional Significance, in Klickitat County include the remaining portion of SR-14, SR-141, SR-142, and SR-197. The RTPO has established an LOS ‘C’ for rural non-HSS.

### Capacity Analysis

The Highway Capacity Software was used to analyze roadway level of service within the Klickitat County Region based on P.M. peak hour traffic. In addition, there are several locations with capacity deficiencies associated with substandard curves and steep grades, which create a particular problem on some facilities due to the mix of trucks, recreational vehicles, and autos. Deficient segments associated with capacity are included in Table 3-3.

<table>
<thead>
<tr>
<th>Road</th>
<th>Mile Post</th>
<th>Deficient Capacity Segment</th>
<th>LOS</th>
</tr>
</thead>
</table>

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Safety Analysis

High Accident Segments

Accident rates were studied based on a three-year accident history (1999-2001) for segments, using accidents per million vehicle miles of travel. However, this methodology does have a tendency to inflate the problem along roads with relatively low traffic volumes. For the purpose of the plan, accident rates along roads with fewer than 2,500 Average Daily Traffic were not considered. Deficient segments associated with safety are found in Table 3-4.

<table>
<thead>
<tr>
<th>Road</th>
<th>Mile Post</th>
<th>Deficient Safety Segments</th>
<th>Accident Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-14</td>
<td>65.95-66.96</td>
<td>Bingen</td>
<td></td>
</tr>
<tr>
<td>SR-14</td>
<td>100.2-101.44</td>
<td>SR-14 Maryhill Spur to SR-97</td>
<td></td>
</tr>
<tr>
<td>Hood River Br.</td>
<td>Columbia River</td>
<td>Hood River Bridge: between SR-14 and I-84</td>
<td></td>
</tr>
<tr>
<td>SR-97</td>
<td>0.00-12.67</td>
<td>Biggs Rapid Bridge to End Climbing Lane</td>
<td></td>
</tr>
<tr>
<td>SR-97</td>
<td>20.29-27.16</td>
<td>Allen Creek Road to Ski Lodge Road</td>
<td></td>
</tr>
<tr>
<td>SR-97</td>
<td>30.80-31.44</td>
<td>Satus Creek Bridge Vicinity</td>
<td></td>
</tr>
</tbody>
</table>

The highest accident corridors are located near city centers of Bingen, Lyle, and White Salmon and SR-97, between the Columbia River and the top of the hill near Goldendale. The intersections with the highest number of accidents are located along SR-14 in the Bingen/White Salmon Area (SR-14/SR-141 with 9 accidents, SR-14/Hood River Bridge with 8 accidents, SR-14/Dock Grade with 10 accidents, and SR-14/SR-141 Alt. with 6 accidents). Poor sight distance and high speed seem to contribute to accidents at these intersections.

Washington State Department Unstable Slopes

Washington State Department of Transportation (WSDOT) began their Unstable Slope Management System in 1993. This management system incorporated a numerical slope hazard rating system. The rating system utilizes a matrix evaluating eleven categories. In 1999, WSDOT completed a Geotechnical Report of Unstable slopes along SR-14. Of the sites investigated, 7 priority projects were identified in Klickitat County. Priority projects had an Unstable Slope Management System rating greater than 200. Those with ratings above 300 total points represent a relatively high hazard slope. A Benefit to Cost (B/C) Ratio is then used to determine project priority. Table 3-5 lists the priority projects along SR-14 in Klickitat County.
Table 3-5

<table>
<thead>
<tr>
<th>Road</th>
<th>Mile Post</th>
<th>Rating</th>
<th>B/C Ratio</th>
<th>Rockfall Hazard Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-14</td>
<td>63.20-63.55</td>
<td>381</td>
<td></td>
<td>East of SR-141 Alt.</td>
</tr>
<tr>
<td>SR-14</td>
<td>68.75-69.10</td>
<td>429</td>
<td></td>
<td>East of Bingen</td>
</tr>
<tr>
<td>SR-14</td>
<td>73.18-73.87</td>
<td>303</td>
<td>3.61</td>
<td>West of Chamberlin Lk. Rest Area</td>
</tr>
<tr>
<td>SR-14</td>
<td>76.94-77.24</td>
<td>579</td>
<td>1.73</td>
<td>East of Lyle Tunnels</td>
</tr>
<tr>
<td>SR-14</td>
<td>77.31-77.67</td>
<td>525</td>
<td>2.03</td>
<td>East of Lyle Tunnels</td>
</tr>
<tr>
<td>SR-14</td>
<td>85.8-86.10</td>
<td>303</td>
<td></td>
<td>Horsethief Lake State Park</td>
</tr>
</tbody>
</table>

Tunnels

There are two tunnels along SR-14 in Klickitat County, near Lyle. The accident rate is above average in the vicinity of these tunnels. These tunnels have a 24 foot pavement width and no lighting. The tunnels are arched with a center clearance several feet higher than the 13.5 foot clearance at the outer edge of the pavement. Due to this low clearance at the outer edge, large vehicles will cross over the centerline when traveling through the tunnels. This creates a potentially dangerous situation, which is magnified by the lack of lighting in the tunnels.

Preservation and Maintenance Need

Of overwhelming importance in the planning for the regional transportation system is the need to maintain and preserve the existing system in order to protect the heavy investments already made in the system. The RTP supports projects programmed in the Transportation Improvement Program to maintain and preserve the regional transportation system.

Washington State has developed a Bridge Management System, a procedure to visually survey bridge conditions. This system is intended to assist with the prioritization of bridge replacement and maintenance. Projects with immediate needs are programmed into the State or local Six-Year Transportation Improvement Program. There are several bridges in deteriorating condition, or of substandard width that need to be replaced within the next 20 years.

A Pavement Management System has been developed for pavement condition on all state road facilities. This system is intended to assist with the prioritization of pavement preservation and to respond to recently observed conditions and predict probable future conditions. WSDOT and local jurisdictions visually inspect pavement conditions of facilities to determine needed maintenance and preservation. Projects that have reached a condition that warrants rehabilitation are programmed into the State and local Transportation Improvement Programs.

Washington State has developed a Bridge Management System that includes a procedure to visually survey bridge conditions. This system is intended to assist with the prioritization of bridge replacement and maintenance. Projects with immediate needs are programmed into the State or local Six-Year Transportation Improvement Program. There are many bridges in deteriorating condition that are of substandard width, and cannot accommodate bicyclist and pedestrian traffic. These bridges will need to be replaced within the next 20 years.

Burlington Northern Santa Fe Railroad maintains the BNSF main rail line through Klickitat County. The Port of Hood River maintains the Hood River Bridge. The Goldendale and The Dalles municipal airports are operated and maintained by the City of Goldendale and Klickitat County/City of The Dalles, respectively. Under the direction of the U.S. Army Corps of
Engineers, the Columbia River is maintained. Local jurisdictions and WSDOT maintain bicycle and pedestrian facilities.

**Enhancement Need**

There is a need to develop and improve facilities for bicycles, pedestrians, scenic vistas, rest areas, thematic signage, roadside beautification, and other enhancements within Klickitat County. The Regional Transportation Plan supports cost effective enhancements to the transportation system.

**Economic Development Need**

The prosperity of a region is dependent on the provision of transportation infrastructure to support economic development. The movement of goods by highway, rail, water, and air are essential to the economy of Klickitat County.

The RTP supports the development of an all weather road network for the movement of people and goods within the region. This all weather road network should include all facilities functionally classified as major collectors and above. This all weather road network will provide the transportation infrastructure necessary for the movement of goods to market, and will strengthen the local economy.

The RTP supports the replacement of the Hood River Bridge. The Hood River Bridge is a major transportation corridor providing access between southwest Klickitat County and Hood River, Oregon. The Hood River Bridge provides the principle access for southwest Klickitat County to employment, services, and goods. This facility is important for the movement of local goods (fruit and timber) to market. This facility is essential to the regions diversification by providing access and employment opportunities related to the tourism/recreational sector. The existing facility is narrow and inadequate to handle the demands of the region. The facility is aging and will likely need to be replaced within the next 15-20 years. The local economy depends heavily on the Hood River Bridge, ensuring an adequate replacement facility is a high priority for the region.

The RTP supports improvements to the transportation system that will give prime consideration to economic development and the safe, efficient movement of people and freight. Specifically, freight produced by or material necessary for the operation of businesses and industries in the Klickitat County region.
CHAPTER FOUR
FINANCIAL PLAN

Overview
Potential transportation improvement projects proposed in this Plan are intended to meet the RTP goals and policy objective as outlined in Chapter One. These goals and policies include making the most efficient use of, and enhancing, the existing transportation system.

The availability of federal, state, and local moneys will have a significant impact on the ability to fund proposed projects. This chapter describes revenue sources and discusses changes to revenue sources as a result of federal and state legislation. The projection of funding ability is based on historical funding levels. The ability of the projected funding to meet RTP costs is determined.

Transportation has traditionally been funded by “user fees”. Today, the major tax sources to fund transportation are the gas tax, vehicle licenses, permits, and fees. The Motor Vehicle Excise Tax (MVET) was eliminated after passage of Initiative 695 in 1999. Gas tax is imposed at the federal level ($0.184 per gallon) and at the State level ($0.23 per gallon) and is devoted to roadway purposes.

Accomplishments Since Last RTP
The RTP was last adopted in 1998, since that time, significant progress has been completed or is nearing completion on regional improvements in the Klickitat County region. First, SR-14 between the Hood River Bridge and Bingen East City limits is under construction. The project will enhance the State Highway through Bingen. Second, a Draft Environmental Impact Statement is being prepared for a new SR-35 Columbia River Crossing; this work will be completed in year 2003.

Revenue Sources
Federal Funding
The federal funding picture changed significantly with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and its successor, the Transportation Equity Act for the 21st Century (TEA-21), passed in 1998. Funding programs in ISTEA and TEA-21 allow much greater flexibility in the way money may be used. ISTEA was considered landmark legislation because it allowed much greater flexibility in the way money may be used, and because it enhanced the role of regions in the programming and prioritization of federal transportation dollars. The most significant change is the multimodal emphasis of the programs, especially the Surface Transportation Program, that gives regions greater independence to invest in alternate modes of travel, including bike and pedestrian facilities and park and ride facilities. A new federal funding Act should be approved by 2004. This new act, is anticipated to be similar to TEA-21. A brief description of the existing funding programs available through the federal transportation funding Act follows.
1. **National Highway System (NHS)**

National Highway System was a new funding category in ISTEA. It established a National Highway System, which consists of major roads in the U.S. including the interstate system; other routes identified for their strategic defense characteristics; routes providing access to major ports, airports, public transportation and intermodal transportation facilities; and principal arterials that provide regional services. Funding in this category may be used for a wide variety of projects. In addition, states have the option to shift 50% of the money to the STP category, which has greater project flexibility. The State selects and prioritizes projects for NHS funding. The funding level for the NHS program is $26.8 billion nationwide and $565 million statewide from 1998 through 2003.

2. **Surface Transportation Program**

This program is similar to a block grant program and combines the old Federal Primary, Federal Aid Urban, and Federal Aid Secondary categories into a single, flexible, intermodal program. Generally, it can be used for any road or bridge except for local roads or rural minor collectors, although a small portion of the funds reserved for rural areas may be spent on rural minor collectors. In addition to eligibility for operational and capacity improvements to roadways, it allows for the programming of transit capital projects, corridor parking, transportation enhancements, and transportation planning. The funding level for the STP program is $33.3 billion nationwide and $890 million statewide from 1998 through 2003. In Washington State, the costs are shared approximately 86.5% federal, and 13.5% local match.

Of the money received by the state, 10% must set aside for safety projects and 10% for transportation enhancements. The following outlines the subprograms that are available.

**Regional Allocation:** Available to cities, counties, and other public agencies on a county basis. Generally, projects must be on a federal functionally classified route of a rural major collector or above, except for planning studies and enhancement projects. Klickitat County selects and prioritizes projects for funding in cooperation with local agencies.

**Statewide Competitive:** Available to all public agencies. Criteria for selection include Multimodal, Innovation, Mobility, Economic Development, Environmental, Financial, Preservation, and Customer Sensitivity/Safety. The State selects and prioritizes projects for funding.

**Enhancements:** Available to all public agencies. For non-motorized transportation, beautification, scenic highways, pedestrian, and bike facilities. Projects are submitted and prioritized by the Regional Transportation Planning Organization. The State selects and prioritizes projects for funding.

**Safety:** Available for cities and counties, to improve safety. There are three programs under safety. First, Railway/Highway Crossings funds are available to reduce fatalities, injuries, and damages through improved railway crossings. Second, Hazard Elimination funds are available to improve specific locations which constitute a danger to vehicles or pedestrians as shown by frequency of accidents. Third, High Accident Potential funds are to reduce a potentially unsafe situation. The costs are shared approximately 90% federal and 10% local match. The State selects and prioritizes projects for funding.
Rural Economic Vitality Program (REV): Washington State Department of Transportation and the Community Economic Revitalization Board partner to implement the Rural Economic Vitality program. The program provides funds for traditional transportation improvements that benefit economic development in rural areas.

3. **Bridge Replacement and Rehabilitation Program**
   This program is continued from the earlier transportation authorization bill and is basically unchanged from previous years in its formula and requirements. This program provides funds to assist states in replacement and rehabilitation of deficient highway bridges and to seismic retrofit bridges on any public road. The funding level for the Bridge Program is $20.4 billion nationwide and $643 million statewide from 1998 through 2003. The state selects and prioritizes projects for funding, through the Bridge Replacement Advisory Committee (BRAC). The costs are shared approximately 80% federal and 20% local match.

4. **High Priority (Demonstration) Projects**
   ISTEA and TEA-21 provided funding for High Priority/Demonstration Projects throughout the nation as identified by Congress. TEA-21 includes 1,850 such projects costing a total of $9.4 billion. The state of Washington will receive approximately $199 million in High Priority funds during the life of TEA-21. High Priority/Demonstration funds have been used to make improvements along SR-14 in White Salmon/Bingen area. The costs are shared approximately 80% federal and 20% local match.

5. **Intelligent Transportation System (ITS)**
   ISTEA funds are available to accelerate the implementation of Intelligent Transportation System (ITS) projects in metropolitan and rural areas. The program includes ITS Integration, ITS Commercial Vehicle Operations Deployment, and Overall ITS Deployment. ITS funds are for improvement of transportation efficiency, promotion of safety, traffic flow increase, reduction of air pollutant emissions, improvement of traveler information, enhancement of alternative transportation modes, further development of existing Intelligent Transportation System projects, and promotion of tourism. The ITS Integration Program was authorized for $482 million nationwide in funding from 1998 through 2003, and the ITS Commercial Program was authorized for $184.1 million nationwide. Federal ITS funding must not exceed 50% of the total project cost.

6. **Job Access and Reverse Commute (JARC)**
   A new federal program is Job Access and Reverse Commute (JARC) grants. The program is funded for FY's 1999-2003 with $400 million from the Mass Transit Account. An additional $350 million from the General Fund must be appropriated before it becomes available. The twofold purpose of the program is (1) to develop transportation services designed to transport welfare recipients and low-income individuals to and from jobs, and (2) to develop transportation services to suburban employment opportunities. Emphasis is placed on projects that use mass transportation services. Federal JARC funding must not exceed 50% of the total project cost.
7. **Community Development Block Grant**

   This program is through the Federal Department of Housing and Urban Development. Block grants are targeted for low and moderate-income areas. Transportation improvements usually consist of sidewalk and small capital improvements.

8. **Public Lands Highway Program**

   The intent of the Public Lands Highways Program is to improve access to and within the Federal lands of the nation. This program can be used for road improvements, transportation planning, parking, interpretive signage, acquisition of scenic easements and sites, pedestrian and bicycle facilities, rest areas, and other public road facilities. Roads need to be within, adjacent to, or provide access to Federal lands.

9. **Scenic Byways Program**

   This program can be used along designated scenic byways for safety improvements, enhancement projects, access to recreational areas, protection of adjacent highway resources, and providing tourist information. SR-14 and SR-97 in Klickitat County has been designated as a scenic byway. This is a national competitive fund. In Washington State, the program is administered by WSDOT under the Heritage Corridors Program. The costs are shared approximately 80% federal and 20% local.

10. **National Scenic Area**

    Congress has the ability to appropriate additional funds to assist the National Scenic Area. Additional funds could potentially be used for transportation improvements.

**State Funding**

The State Gas Tax is the primary State source of highway maintenance and arterial construction funds:

1. **Transportation Improvement Board (TIB)**

   The Transportation Improvement Board (TIB) administers several state funded grant programs. The mission the TIB is to assist local agencies to preserve and improve transportation systems. The following outlines the programs that TIB administers.

   **Small City Program**: This program provides funding for street improvements in small cities (< 5,000 Population). The TIB small cities program requires a minimum 5% local match, except no match for cities with population under 500.

   **Pedestrian, Safety & Mobility Program**: This program provides funding for pedestrian projects that enhance and promote pedestrian mobility and safety.

   **Federal Funding Match**: TIB provides matching funds to projects awarded federal TEA-21 funds for eligible projects. TIB will typically provide funds from the Small City Program for the required 13.5% local match. In addition, TIB will provide matching funds for Bridge and FEMA/ER programs. The TIB funds are made available following approval of the federal funds.
2. County Road Administration Board (CRAB)

The County Road Administration Board was created by the Legislature in 1965 to provide statutory oversight of Washington’s thirty-nine county road departments. The agency and the two grant programs they administer are funded from a portion of the counties’ share of the State fuel tax.

Rural Arterial Program (RAP): This program provides funding for reconstruction of rural arterial roads. Proposed projects for this program are rated by a specific set of criteria including (1) structural ability to carry loads, (2) capacity to move traffic at reasonable speeds, (3) adequacy of alignment and related geometrics, (4) accident rates, and (5) fatal accident rates.

County Arterial Preservation Program (CAPP): This program provides funding to assist counties in preserving their existing paved arterial road networks. Funding is provided to counties as direct allocation based on paved arterial lane miles.

3. Washington State Public Works Board

The Public Works Board was created by the 1985 legislature. The mission of this board is “to assist Washington’s local governments and private water systems in meeting their public works needs to sustain livable communities.” They loan money for public facilities, including roads and bridges.

Public Works Trust Fund (PWTF): The Public Works Trust Fund has a pre-construction and a construction loan program. These loan programs provide funds for design work, engineering, permit acquisition, environmental review, right-of-way acquisition, and construction. These loans have a 5-year term for pre-construction and a 20-year term for construction with an interest rate of only one-half percent.

4. Community Economic Revitalization Board (CERB)

This fund was established by the legislature to make loans and/or grants for public facilities, including roads, which will stimulate investment and job opportunities, reduce unemployment, and foster economic development. The Department of Community Trade and Economic Development administer this program.

5. Washington State Department of Transportation (WSDOT)

WSDOT administers many transportation related grants that are available to agencies. However, many of these programs are dependent on the legislature allocating funding. The following is a brief list of these programs.

Airport Aid Grant Program: The purpose of this program is to assist airports in funding capital improvement projects. Revenue for this program is collected through a 7-cent per gallon tax on general aviation fuel.

Freight Rail Assistance Program: The purpose of this program is to acquire, rehabilitate, or improve rail lines throughout the state, in order to preserve them for future use.

Main Street Pavement Program: The purpose of this program is to establish and promote an on-going pavement maintenance system in cities with a population under 10,000.
Rural & Special Needs Public Transportation Program: The purpose of this program is to fund capital and operating assistance for rural public transportation. This program combines both state and federal funds.

School Safety Enhancements: The purpose of this program is to fund capital projects for traffic and pedestrian safety improvements near schools.

Local Funding
Local revenue comes from a variety of sources such as gas tax, property tax, permits, fees, and private development.

1. Local Gas Tax Revenue
This is the distribution of the state gasoline tax to the cities and counties based on each jurisdiction’s population.

Revenue Allocations
SHB 1928 requires the RTP be ‘fiscally constrained’ or “include a financial plan demonstrating how the regional transportation plan can be implemented, indicating resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommending any innovative financing techniques to finance needed facilities, services, and programs.” There must be a balance between forecast revenues and costs of identified transportation system improvements. With limited revenues available for funding transportation improvements, the most cost-effective transportation solutions must be identified and selected.

Between 1990-1999, federal revenues comprise 34% of the anticipated transportation funds for the Klickitat County region. State and local sources make up 62% and 4%, respectively, of total transportation revenues received in the Klickitat County region. The percentage breakdown is somewhat different when jurisdictional authority of the projects receiving funding further delineates revenues.

The local dollars available for transportation improvements within Klickitat County have largely diminished since the early 1980’s. As timber sales within the National Forest have been reduced, the sales revenue received by Klickitat County and the Forest Service have decreased. This affects Klickitat County and the Forest Service’s ability to fund maintenance, preservation, and improvements to the regional transportation system. At the same time, the public use of the regional transportation system is increasing.

The financial analysis presented in the RTP assumes revenues and costs in 2002 dollars. This method has advantages in that the methodology is straightforward, but has drawbacks in that inflation is not considered in the analysis. However, the inflation factor has an impact on both the revenue and cost sides of the equation. On the revenues side, gas taxes do not keep pace with inflation. On the project cost side, the longer a project is deferred the more expensive it will be. Another problem that the transportation sector faces is that although the federal government authorizes transportation dollars at a certain level, the actual appropriation for their use is at a lower level.
Projected Transportation Revenue

Projected revenues for the regional transportation system were calculated in order to determine the level of funding available to meet RTP project needs. Revenue projections were calculated using current funding levels under federal, state, and local revenues. 1990-99 transportation revenues were then extrapolated, based on the current trend, and factored by the number of years out to the RTP forecast year of 2025. Table 4-1 contains projected transportation revenues for the regional transportation system, by federal, state, and local funding sources.

<table>
<thead>
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<th>TIP Projected Revenue</th>
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<tr>
<td>Federal</td>
<td>$2,950,000</td>
</tr>
<tr>
<td>State</td>
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<tr>
<td>Local</td>
<td>$350,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$8,650,000</td>
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Table 4-1
Overview
This chapter summarizes the solutions and strategies needed to provide an adequate level of regional mobility over the next 20 years. A wide range of solutions and strategies are needed to meet the regional travel demand. There are strategies to address the travel demand side as well as transportation system supply side, and strategies to increase the efficiency of the existing regional transportation system as well as strategies to provide for a safer transportation system. The solutions and strategies outlined in this chapter will provide Klickitat County residents with a well-maintained, structurally sound, safe regional transportation system. In developing a balanced regional transportation system, it is not only capacity and safety deficiencies that must be addressed but also preservation and maintenance of the existing regional transportation system. This chapter concludes with a prioritized list of transportation system improvements.

The solutions and strategies for the Klickitat County regional transportation system have been divided into subheadings. Maintenance is the daily operations that keep the transportation system safe, clean, and efficient. Preservation is an investment that prolongs the life of the transportation system. Improvements are modifications that increase the safety, mobility, and effectiveness of the transportation system. Miscellaneous includes specific improvements which may be included under one of the other subheadings or is tied to a specific funding source, thus no cost estimate is provided for these strategies.

Maintenance
Of prime importance in the planning for the regional transportation system is the need to maintain the existing system. Maintenance will address the day-to-day activities needed to keep the transportation system in good working order; daily operations that keep the system safe, clean, reliable and efficient. Such activities include filling potholes, repairing bridges, repairing drainage ditches, repairing guardrails, replacing damaged signs, plowing snow, removing rocks, and efficiently operating traffic signals. The Washington State Department of Transportation (WSDOT) and local jurisdictions monitor the condition and operation of the existing system and program projects to maintain the system. The RTP supports the routine, regularly-scheduled, and necessary maintenance work identified by local jurisdictions. The RTP supports maintenance being given high priority in the programming of transportation funds. The estimated 20 year public maintenance cost for the regional transportation system is $64.7 million.

Preservation
Preservation of the existing regional transportation system is also important to protect the heavy investments already made in the system. Preservation can prolong the life of the existing transportation system through such projects as repaving roads, rehabilitating bridges, and rock fall protection. Preservation needs are identified through a Pavement Management System (PMS), Bridge Management System, and local needs analysis. The RTP is supportive of giving
prime consideration to such project needs. The estimated 20 year public preservation cost for the regional transportation system is $71.6 million.

**Improvements**

In addition, the Regional Transportation Plan recommends transportation improvements needed to provide an adequate level of safety and regional mobility for the anticipated growth in travel demand. Improvements should be related to an identified deficiency, as identified in Chapter 3 (safety, capacity, economic development, non-motorized mode, and bridge). Improvements would include adding lanes, removing a dangerous curve, adding rest areas, adding scenic vistas, improving sight distance, adding a climbing lane, realignment of a roadway, and adding alternative modes of transportation. The estimated 20 year improvement cost is $105.7 million.

**Miscellaneous Strategies and Solutions**

The RTP supports strategies for bridges, safety, economic development, non-motorized modes, and transit which will support the mobility of people and goods within Klickitat County.

**Bridge Deficiencies**

Maintenance, preservation, and replacement projects required on bridges are identified through the Bridge Management System (BMS) administered by WSDOT.

**Safety Deficiencies**

Accidents and their number, location, and type are monitored by WSDOT and local jurisdictions. If there is deemed to be a safety deficiency, then remedial measures are considered and corrective action taken.

**Economic Development and Freight Transportation Deficiencies**

The prosperity of a region is dependent on the provision of transportation infrastructure to support economic development. Economic development emerged as a prime evaluation criteria for prioritizing projects for the Regional Transportation Plan.

WSDOT has adopted a Statewide Freight and Goods Transportation System, which categorizes highways and local roads according to the tonnage of freight they carry. Washington State also created the Freight Mobility Strategic Investment Board (FMSIB) with a mission to create a comprehensive and coordinated state program to facilitate freight movement between and among local, national, and international markets which enhances trade opportunities.

The Washington State Legislature has defined the purpose of the state’s freight rail program and planning activities and established a comprehensive freight rail policy. This policy directs WSDOT to maintain and improve the state freight rail system through better freight rail planning, better cooperation to preserve rail lines, and increased financial assistance from the state.

Washington and Oregon have identified the deepening of the lower Columbia River channel to 43 feet as essential for the movement of freight. This improvement will help keep the region economically competitive in the future.
Non-Motorized Transportation Deficiencies

The development of non-motorized transportation modes is a strategy that will maximize the capacity of the existing transportation system in urban areas. Reduced reliance on automobiles is largely dependent on the development of adequate sidewalks and bikeways. Pedestrian and bicycle needs are most appropriately identified at the local level.

Transportation demand management (TDM) strategies to reduce vehicle trips on the regional transportation system can include use of transit, carpooling, vanpooling, working of flex-hours and/or compressed work week, and working from home with use of communications technology.

Transportation system management (TSM) is also a strategy to maximize the efficiency of the existing transportation system. TSM measures include a wide range of strategies, most of which are related to the use of intelligent transportation systems. These include incident response programs, programs to monitor travel conditions (weather/congestion), variable message signage to alert motorist of travel conditions, improved communication means, and Intelligent Vehicle/Highway Systems. Other TSM elements include minor capital upgrades such as channelization at traffic intersections.

Transit Deficiencies

Transit is important in meeting the mobility needs of the transit dependent; those unable to drive automobiles because of age, infirmity, disability, or low income. Transit can also meet the mobility needs for commute trips to and from employment centers.

Conclusion

The RTP provides for strategies and solutions to meet regional travel demand and to develop a balanced regional transportation system over the 20-year planning period. Projects are identified in the RTP and then programmed in the local Transportation Improvement Program. Table 5-1 provides a listing of needed improvements for the regional transportation system. This table includes a list of projects for which regional need has been identified and for which there is strong regional commitment. The list focuses on safety improvements since these are the projects that are most readily needed. The list also identifies a wide range of transportation system improvements that will contribute to the development of a balanced regional transportation system.

A prioritization process helps the region to make most effective use of limited transportation funding to meet transportation system improvement needs. The projects listed in Table 5-1 were prioritized based on the regional prioritization process. The following key issues were considered in the prioritization process: 1) Safety, 2) Economic Development, 3) Congestion, 4) Connectivity, 5) Support, and 6) Cost/Funding.
There are insufficient resources within the region to meet the maintenance, preservation, and improvement needs of the regional transportation system. If additional resources are not obtained, there will be inadequate funds for transportation improvements. The revenue shortfall is illustrated in Figure 5-1.

![Revenue Shortfall Chart](image)

**Figure 5-1**
CHAPTER SIX
PERFORMANCE MONITORING

Overview
The transportation planning process requires that monitoring of system performance takes place. Monitoring of the regional transportation system’s performance is an ongoing activity, which at a minimum, will occur as part of the review of the Regional Transportation Plan (RTP). The RTP must be reviewed at least every two years. Several elements of system monitoring activities are described below.

Safety
Monitoring of accident rates and rockfall is an ongoing activity of the regional transportation system. Accident data will be collected and studied based on a three year accident rate as part of each RTP review. The accident rates will be used to identify the performance of the transportation system by identifying deficient road segments. High accident locations will be used as a tool for identifying improvement strategies to alleviate a safety problem.

In addition, WSDOT will monitor rockfall. Future updates of the RTP will contain the most recent rockfall information. Rockfall locations will be used as a tool for prioritizing rockfall improvements.

Capacity Analysis
Traffic volumes will be used as a tool for monitoring traffic congestion and for identifying improvement strategies to alleviate the congestion. The Highway Capacity Software will be used to analyze the level of service along the regional transportation network. Deficient segments will be analyzed to identify improvement strategies to alleviate congestion.

Preservation and Maintenance
Local, regional, and state tools are being used to monitor preservation and maintenance needs. Washington State has developed a Bridge Management System and Pavement Management System to identify deficient conditions along roadways and bridges. These tools along with other tools are ongoing activities which monitor preservation and maintenance needs of the regional transportation system.

Special Studies
Local and state studies and plans are occasionally undertaken which monitor the performance of the transportation system. As these special studies or plans are completed, the associated information will be included in the next update of the Regional Transportation Plan.
CHAPTER SEVEN

PLAN DEVELOPMENT AND IMPLEMENTATION

Public Involvement in Regional Transportation Planning Process
Southwest Washington Regional Transportation Council (RTC) has an adopted public involvement program outlining the public involvement efforts in the development of regional transportation plans and programs. Copies of the public involvement program are available from RTC’s Web site or office. All RTC Board meetings and the Klickitat County Transportation Policy Committee meetings are open to the public. Public involvement efforts build from those carried out at the local level in development of local plans and programming of transportation projects.

A public meeting is held before the adoption of the Klickitat County Regional Transportation Plan. Amendments to the RTP are presented to both the Klickitat County Transportation Policy Committee and the RTC Board of Directors for their consideration and adoption. Transportation issues, studies, plans, and programs are outlined and reported on RTC’s web site at http://www.rtc.wa.gov.

RTP Implementation
Implementation of regional transportation goals, policies, and actions established by the Klickitat County Regional Transportation Plan (RTP) are carried forward through a local and regional decision-making process. Through the local development of a Transportation Improvement Program (TIP), transportation needs identified in the RTP are programmed for receipt of funds. In addition, projects along SR-14 inside the Columbia River Gorge National Scenic Area will be consistent with the SR-14 Corridor Management Plan.

RTP Update Process
The RTP is to be reviewed at least every two years. Should changing policies, financial conditions, or growth patterns warrant, an RTP amendment can take place.

The first RTP for Klickitat County was adopted in April 1995. An RTP update was adopted in April 1998. The 2003 RTP update provides a new base year of 2000, incorporates newly-available 2000 U.S. Census data, extends the horizon year of the RTP to 2025, and incorporates changes to the regional transportation system.

Results and recommendations from transportation studies underway will be incorporated into future RTP updates. The next major update to the RTP is anticipated in 2005.
APPENDICES
## Glossary

<table>
<thead>
<tr>
<th>ABBREVIATION</th>
<th>DESCRIPTION</th>
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<tr>
<td>ADT</td>
<td>Average Daily Traffic</td>
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<tr>
<td>BNSF</td>
<td>Burlington Northern Santa Fe Railroad</td>
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<td>BMS</td>
<td>Bridge Management System</td>
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<td>BRAC</td>
<td>Bridge Replacement Advisory Committee</td>
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<tr>
<td>CAPP</td>
<td>County Arterial Preservation Program</td>
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<td>CERB</td>
<td>Community Economic Revitalization Board</td>
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<td>Congestion Management System</td>
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<td>County Road Administration Board</td>
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<td>Freight Mobility Strategic Investment Board</td>
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<td>Highway Capacity Manual</td>
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<td>State Highway System Plan</td>
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<td>HSS</td>
<td>Highways of Statewide Significance</td>
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<td>Intermodal Surface Transportation Efficiency Act (1991)</td>
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<td>ITS</td>
<td>Intelligent Transportation System</td>
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<td>JARC</td>
<td>Job Access and Reverse Commute Grant</td>
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<td>LOS</td>
<td>Level of Service</td>
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<td>Management Plan</td>
<td>Management Plan for the Columbia River National Scenic Area</td>
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<td>MPO</td>
<td>Metropolitan Planning Organization</td>
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<td>Manual on Uniform Traffic Control Devices</td>
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<tr>
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<td>Transportation Equity Act for the 21st Century</td>
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