



2017-2037

CHELAN COUNTY COMPREHENSIVE PLAN

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Appendices Available Separately:

- Appendix A: County-Wide Planning Policies
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Chapter 1 INTRODUCTION

I. History of Chelan County Comprehensive Planning

Chelan County has a long history of community planning efforts. The first Comprehensive Plans was completed in 1958¹ and included the following statement:

The Comprehensive Planning Outline is intended to serve as guiding policy for planning activity in Chelan County....The result of haphazard development are familiar to us all in the form of traffic congestion from string commercial uses along major streets, of dangerous heavy traffic within residential neighborhoods, of inadequate streets and roads, and of an incompatible mixture of residential, commercial, and industrial uses. Fortunately, Chelan County is early enough in its development process to gain much from a blueprint for orderly growth.

This plan was followed by a few regional plans, such as the 1979 Malaga Plan.

Then in 1990, the State Legislature responded to increased pressures from unprecedented population growth by passing the Growth Management Act (GMA). The GMA requires all cities and counties in the state to do planning. The GMA required fastest growing counties, including Chelan County, to adopt new comprehensive land use plans in compliance with the new law.

The GMA Act provides 14 goals which all comprehensive plans are required to address related to:

- | | |
|--------------------------|---|
| (1) Urban growth | (8) Natural resource industries |
| (2) Reduce sprawl | (9) Open space and recreations |
| (3) Transportation | (10) Environment |
| (4) Housing | (11) Citizen participation and coordination |
| (5) Economic development | (12) Public facilities and services |
| (6) Property rights | (13) Historic preservation |
| (7) Permits | (14) Shoreline Management |

County Wide Planning Policies

The first step taken towards the development of new comprehensive land use plans was the adoption of County-Wide Planning Policies to be used throughout the County, including the cities. A committee was formed with representation from the Board of County Commissioners, cities and community councils. The committee consulted a variety of people for input in the development of the policies.

The Board of County Commissioners adopted the County-Wide Planning Policies on May 26, 1992 (See Appendix A for complete text of this document.) addressing the following issues:

- The establishment of Urban Growth Areas
- Promotion of contiguous and orderly development and the provision of urban governmental services to such development

¹ Information on other plans is encouraged – contact Community Development.

- Siting of public capital facilities that are of a county-wide nature
- County-wide transportation facilities and strategies
- Need for affordable housing for all economic segments of the population and the adoption of parameters for the distribution of affordable housing
- Joint county and city planning within urban growth areas and provision of innovative land use management techniques that may include use of flexible zoning processes
- County-wide economic development and employment
- An analysis of fiscal impact
- Public education and citizen participation
- Monitoring, reviewing, and amendment of county-wide planning policies

Comprehensive Plan Development

At the inception of drafting the comprehensive plan, the County and the cities of Leavenworth, Cashmere, Wenatchee, Entiat, and Chelan, opted to divide the County into 8 study areas and prepare a plan for each area. The County took the lead role, in coordination with the cities in the development of 7 sub-area plans. The City of Wenatchee took the lead role in the development of a comprehensive plan for the Wenatchee Urban Area.

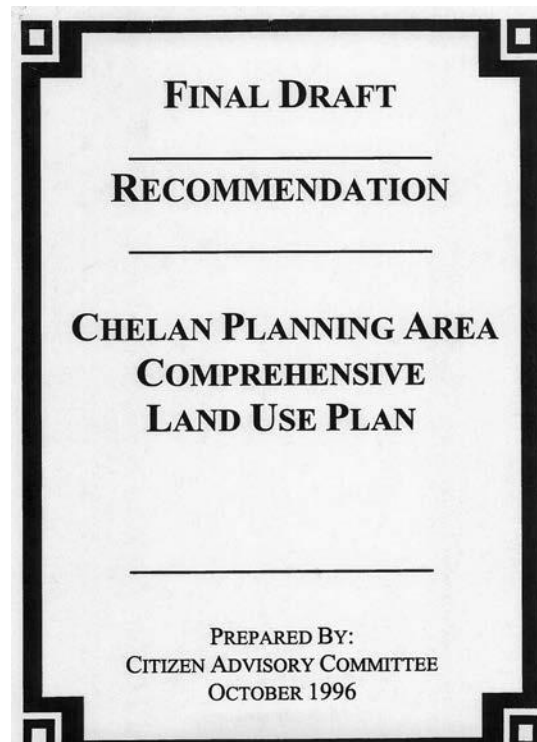
In August of 1993, Chelan County established Citizen Advisory Committees (CAC's) to develop new comprehensive plans for its 7 sub-areas. These community representatives were appointed by the Board of County Commissioners and the cities mayors. The committees were diverse groups representing a variety of viewpoints.

Due to time constraints, the cities of Leavenworth, Chelan, Cashmere, and Entiat, chose to pull out of the joint process with the County and revise and adopt their own versions of the County draft sub-area plans.

Due to the requirements of the Growth Management Act regarding coordination and consistency, implementation issues, and changes made to the Act, the decision was made to develop a single county-wide comprehensive plan utilizing the work done by the CAC's and the Rural Coordinating Committee.

The County-wide Comprehensive Plan covers the unincorporated areas outside of the City Urban Growth Areas. Within the county-wide plan, 7 study areas are identified. Specific goals are identified for these study areas where unique circumstances specific to the study areas exist. All other goals and policies apply county-wide.

The Rural Coordinating Committee was a 12 member body whose members were appointed by the Board of Commissioners to coordinate the Rural Element of the Plan. Some members of the Rural



Coordinating Committee were also members of the Citizen Advisory Committees. The Rural Coordinating Committee and the Planning Commission went through a process where they identified goals and policies applicable to specific study areas, and goals and policies applicable county-wide.

The remaining unincorporated areas of the County within the urban growth area boundaries are covered by the city comprehensive plans. Consistent with the County Wide Planning Policies, and a Memorandum of Understanding with the cities, the County has committed to coordinated planning to regulate the unincorporated areas of the cities urban growth areas.

It is recommended that the entire plan be reviewed every five years. It is also expected that continuing review and modification as appropriate should occur throughout this timeframe to assure that the plan remains a dynamic tool in planning for the needs of the County.

II. What is a Comprehensive Land Use Plan?

A comprehensive plan is a legal document adopted by local elected officials establishing policies that will guide the future physical development of the community. It will be used by local elected officials, planning commissions, private firms, and individuals when making decisions about land use development or changes, capital improvements programming, and the enactment of development regulations and related growth management legislation. Zoning and other development regulations must be consistent with the comprehensive plan.

The plan is divided into several chapters called "elements". This plan contains the following elements.

- Land Use
- Rural
- Resource
- Housing
- Capital Facilities Plan
- Utilities
- Economic Development
- Park and Recreation
- Shoreline
- Transportation

It is important to County residents and property owners to have an opportunity to express their concerns and goals for the future in order to maintain some local control over land use decisions that may affect them. This Plan is intended to be a vehicle to accomplish this. By clearly articulating a plan for the future of the area, the county is informed about the local implications of its policy decisions, and is able to address the concerns of the citizens. The Growth Management Act requires that state agencies comply with local comprehensive plans and development regulations. It is important to have a plan that identifies goals to help state agencies make informed decisions.

This plan seeks to provide this opportunity for growth, while preserving the positive attributes that make the County so desirable.

III. Citizen Participation

The GMA stresses the importance of ongoing citizen participation in the preparation of the comprehensive plan. In addition to the utilization of citizen advisory committees to develop the plan, Chelan County has used a variety of other methods to both distribute information and obtain citizen input regarding this planning process.

In September and October of 1993, the Chelan County Planning Department conducted a telephone survey of county residents. Over 1100 phone numbers were called. A total of 724 households were contacted and 400 surveys were completed. The survey was designed to be a county-wide sampling of opinions and concerns regarding a variety of issues including crime, property rights, traffic, housing, public facilities and services, and economics.

Starting in 1992 the county distributed periodic newsletters which provided an update on the Growth Management planning process underway. These newsletters were mailed to a list of over 700 residents, neighboring communities and counties. Copies were also available at the County Planning Department.

The Citizen Advisory Committees held public meetings to present their goals and policies developed for the Land Use Element of the comprehensive plan. The committees were seeking comment from local citizens regarding the work they had accomplished. Notices were mailed, and copies of the draft document were picked up by interested citizens.

Extensive citizen participation has and will continue to be a major goal in the formation, modification and implementation of the comprehensive plan and accompanying development regulations. Citizen Advisory Committees were utilized in the formation and drafting of this plan. Decisions made by local governmental decision making bodies that utilize maximum citizen participation are usually better received by the public and generate better decisions.

The Comprehensive Plan can be amended once a year. However, there may be times when a proposed change or revision to any part of the comprehensive plan arises from a situation that necessitates the immediate preservation of the public health, safety and welfare or as ordered by a legal judgment. Such “emergency amendments” will follow State regulations but may not follow an established Comprehensive Plan amendment timeline.

The Growth Management Act states that public participation shall have a wide range of input. The process shall have a “...broad dissemination of proposals and alternatives, opportunity for written comments, public meetings after effective notice, provision for open discussion, communication programs, information services, and consideration of and response to public comments.” Proposed actions should include early and continuous public input. Specific importance is attained to input from local individuals, businesses, and groups; regional, state, and national organizations can add distinctive and valuable input to the planning process.

Types of Public Participation Techniques

Depending on the type of action, the region of interest and/or administrative considerations, a variety of public participation techniques may be necessary. The following are a sample of what should be considered to encourage public participation.

NOTICE

- Newspaper legal notices and special advertisement
- Postings at post office or other areas known to attract people
- Newsletters and/or utility flyers
- Website / electronic mailings
- Invitations to specific groups or interested parties
- Direct mailing
- In appropriate regional, neighborhood, ethnic, or trade journals
- Provide press releases or interviews with area radio stations and newspapers

- Posting of property for development proposals

MEETINGS

- Commission and Planning Meetings
- Public Hearings
- Open Houses or workshops
- Attending local service club, trade organization, etc., meetings

WRITTEN COMMENT

- Surveys
- Written Comments

ADDITIONAL FORMATS

- Youth workshops, public service messages, advisory committee, school programs, visioning, etc.

Comments and ideas are used throughout the process to help shape the Comprehensive Plan changes. As comments are received additional meetings may be necessary to fully secure adequate public participation on new or refined proposals. The importance of early and continuous involvement in the development of processes and products is vital to the success of the planning process.

GOAL LU 1: Encourage the involvement of citizens in the planning process.

Goal Rationale: Citizen input is necessary in the planning process to ensure that community needs and concerns are addressed.

Policy LU 1.1: In addition to mandatory notification requirements, consider additional public participation measures where appropriate, including but not limited to the Public Participation Techniques listed above.

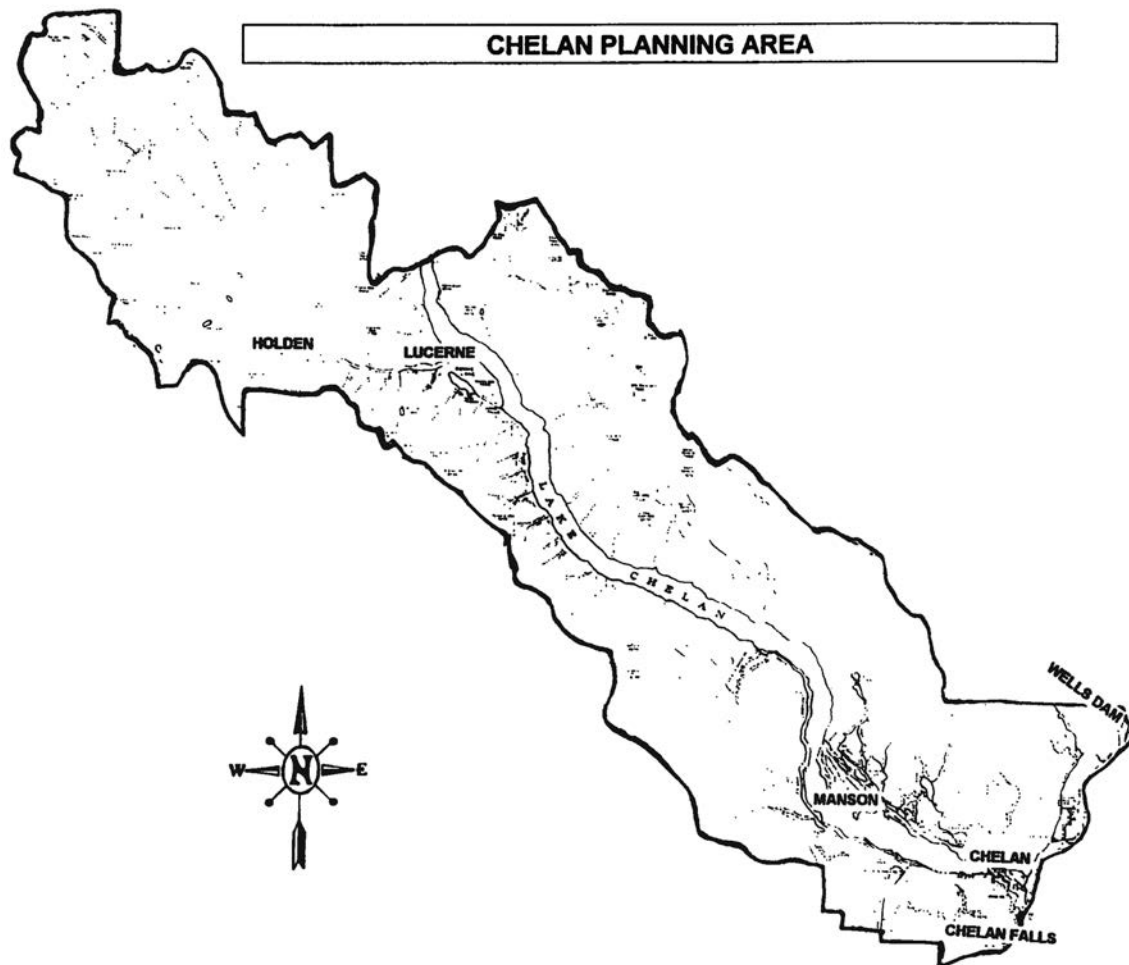
Rationale: Additional notification measures may be necessary to ensure adequate public participation.

Policy LU 1.2: Support the continued utilization of community councils as an effective source for community concerns regarding planning issues and development proposals.

Rationale: Community Councils provide valuable community input for land use decisions.

IV. Community Vision Statements

One of the first tasks completed by each of the Citizen Advisory Committees was the development of vision statements. The vision statement basically describes the image that the community sees for its future. The committees spent a lot of time listing characteristics of the community and what they would like to see happen in the future. The following vision statements were completed for the different study areas.



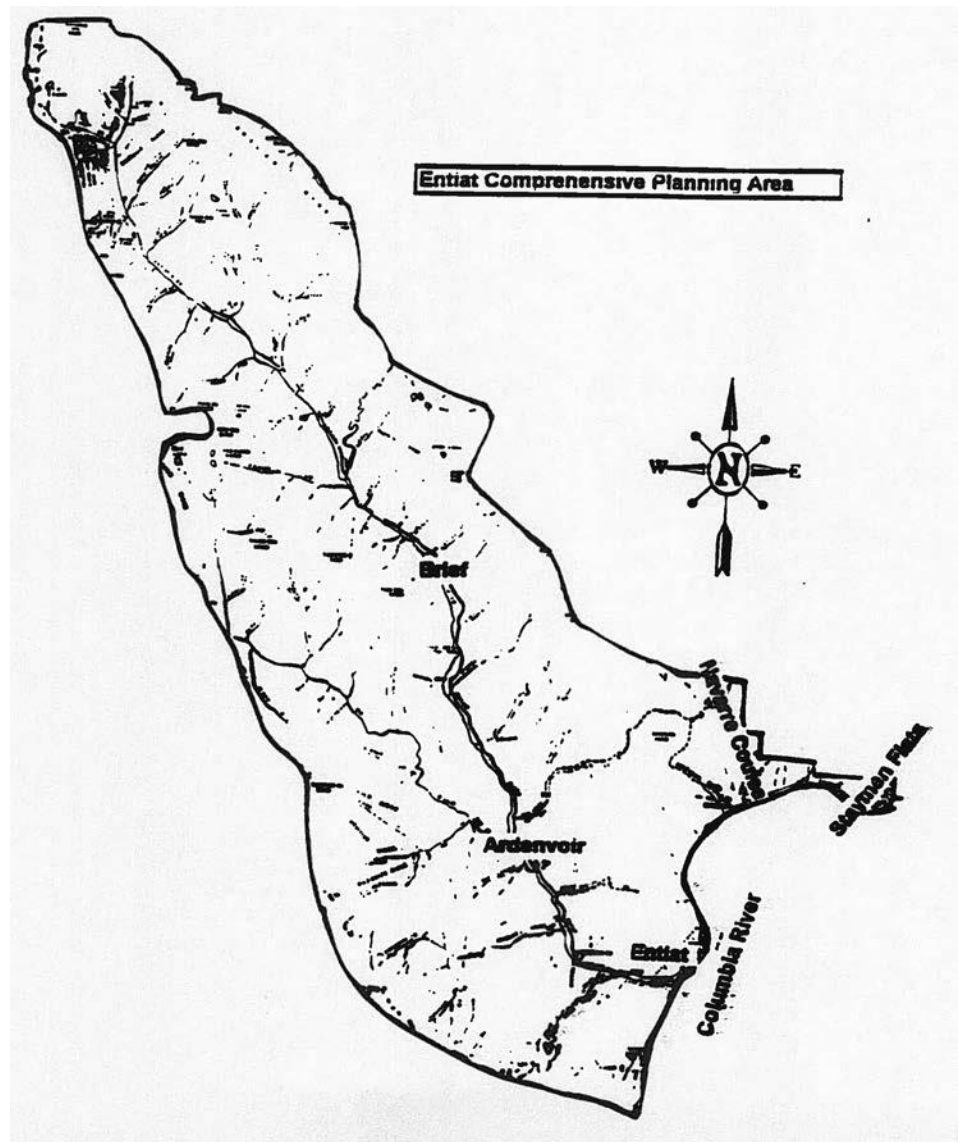
Chelan-Manson

The Chelan-Manson Study Area comprehensive plan is to provide a guide for the development of the Study Area. The plan strives to maintain and enhance the existing quality of life that includes: culture, customs, economy, agricultural economy, sense of community, water quality, and recreational opportunities. This is a plan to promote the development of a 12 month economy utilizing the abundant natural resources of the area. This plan should provide for expansion of these opportunities, while maintaining an adequate infrastructure to accommodate this growth. Continuous public participation is warranted, with decision making and implementation at the local level. This plan will ensure the

protection of individual property rights, and provide for the right to farm according to historic and recommended practices.

Entiat Valley

The Entiat Valley Study Area comprehensive plan is to provide recommendations for the citizens of the Study Area. The plan will strive to maintain the existing quality of life that includes: culture, customs, economy, agricultural opportunities, sense of community, water quality, and recreational opportunities. This plan should provide for expansion of these opportunities, while maintaining an adequate infrastructure to accommodate this growth. Continuous public participation is warranted, with decision making and implementation at the local level. This plan will ensure the protection of individual property rights, and provide for the right to farm according to historic and recommended practices.



Malaga-Stemilt-Squilchuck

The citizens of the Malaga-Stemilt-Squilchuck Study Area believe that their greatest asset is the rural character of the community. Rural character may be defined as that mixture of open space, housing, and agricultural land uses which are believed to express and preserve the quality of life desired by the residents.

The citizens of the Malaga-Stemilt-Squilchuck Study Area envision future development that will compliment and enhance, and not unreasonably impact, our rural character, our strong agricultural economy, and natural resource based industries.

We foresee maintaining the area's high quality of life while sustaining growth that can be served with the necessary public services and, facilities. Open spaces, wildlife conservation, and recreational opportunities will be encouraged.

We foresee expansion of transportation systems to allow efficient movement of goods, services and people within the planning area and connecting with the rest of Chelan County.

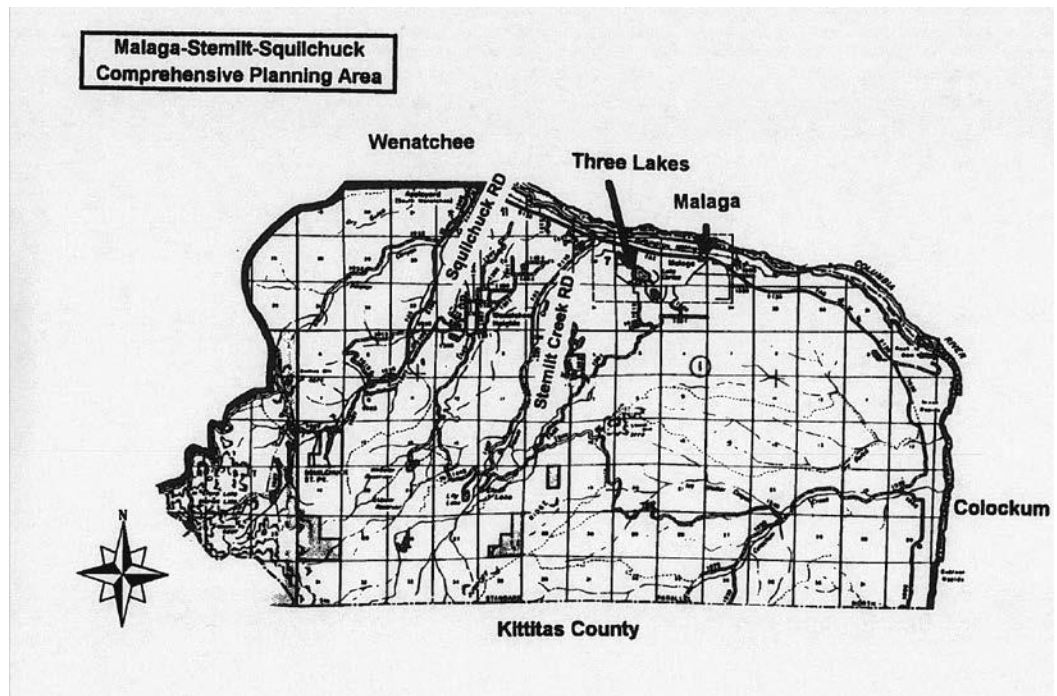
We foresee the establishment of quality educational facilities to meet the needs of community growth.

We foresee varied levels of development with suitable mitigation between different land uses. We envision that the expansion of our existing residential, commercial and industrial land uses will take place in those areas already characterized by that type of use.

We foresee the requirement to support sustainable hydroelectric power generation to maintain and meet our community growth.

In recognition of the importance of preservation of existing water rights and future need for water for our community and its agricultural base; we foresee the continued support, development and expansion, and maintenance of water supplies and their associated sources.

In conclusion we envision growth that will maintain the continuity of our rural character and quality of life while protecting the private property rights of the citizens of this area.



Lower Wenatchee River Valley

The citizens of the Lower Wenatchee River Valley Study Area envision:

Future development that will complement and enhance and not unreasonably impact our natural resource-based industries, including our strong agricultural industry, and the forest and mineral resources industries;

An economic and educational climate that enables our citizens to find suitable employment within the valley;

Sustainable growth that can be served effectively and efficiently with the necessary public services and facilities, while enhancing our community's quality of life;

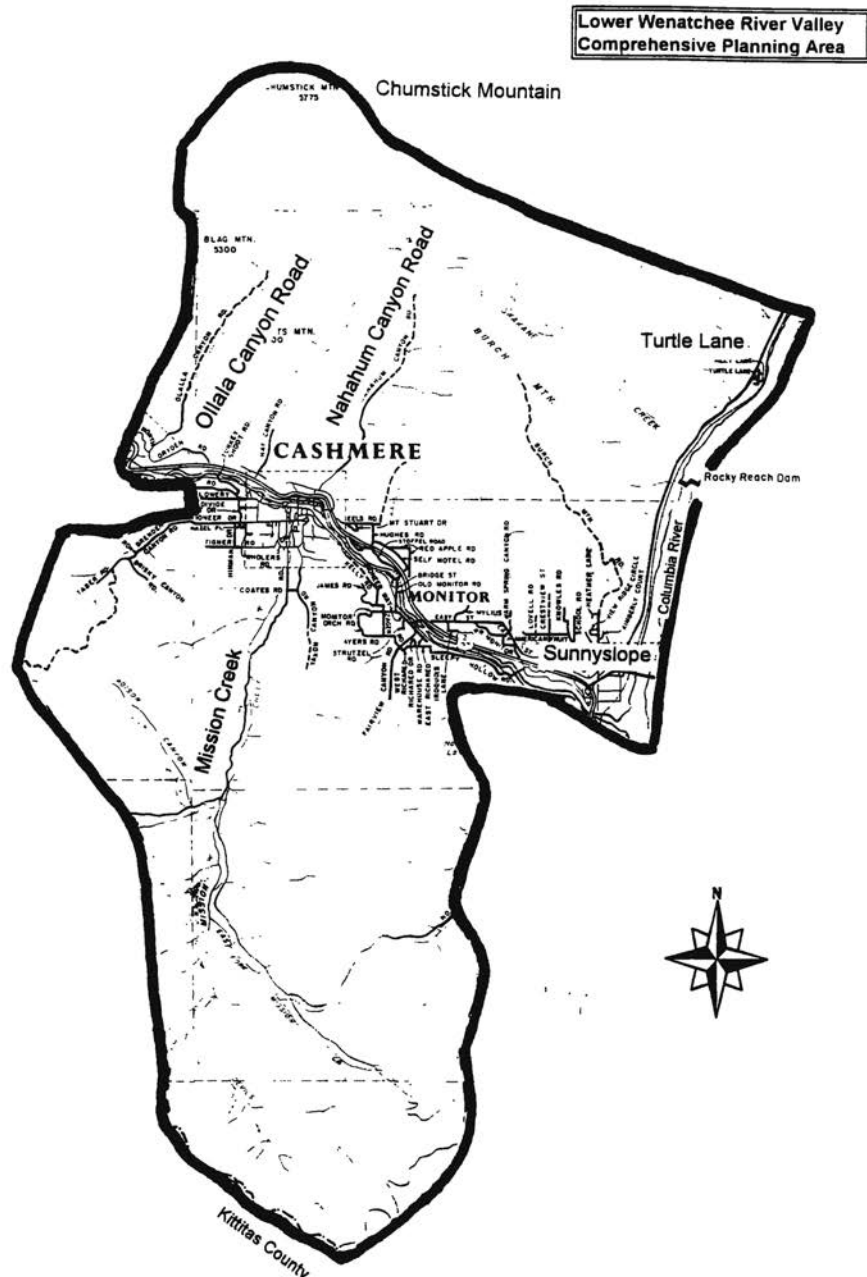
Open spaces and recreational opportunities, particularly along the rivers and streams, to preserve the community's rural character, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks;

Protection of the environment and maintenance of the community's high quality of life, including air and water quality, and the availability of water;

Protection of private property rights of landowners;

Adequate housing that fulfills the housing needs of all segments of the population;

Efficient transportation systems that allow the movement of goods, services and people within the community.



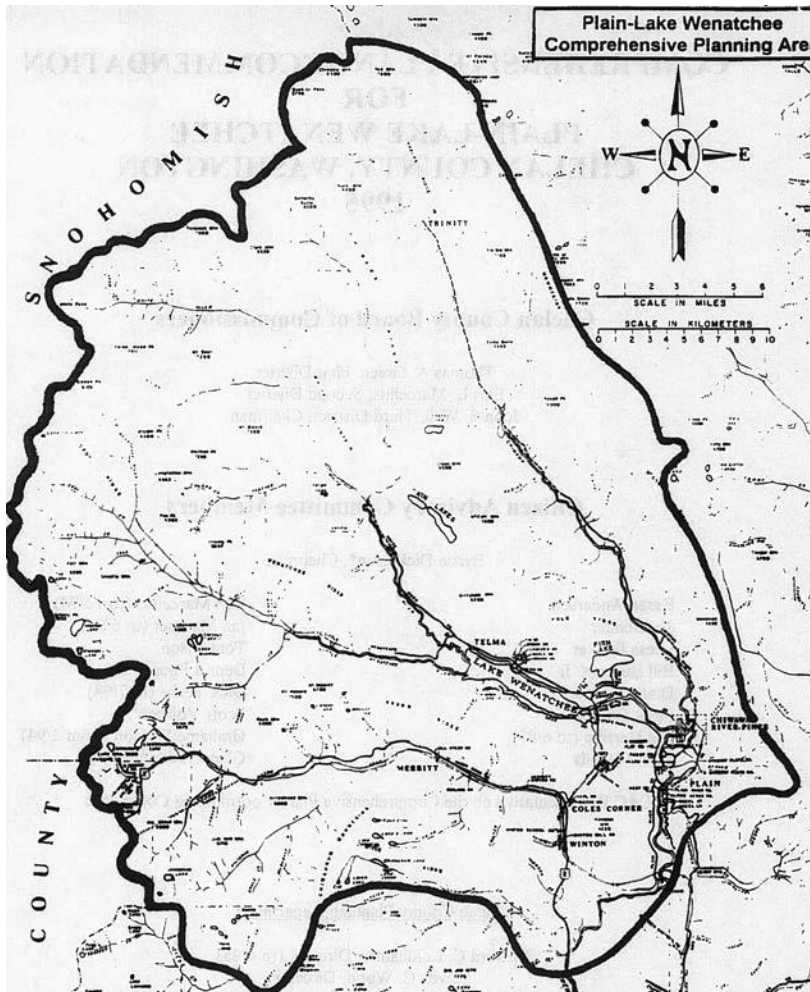
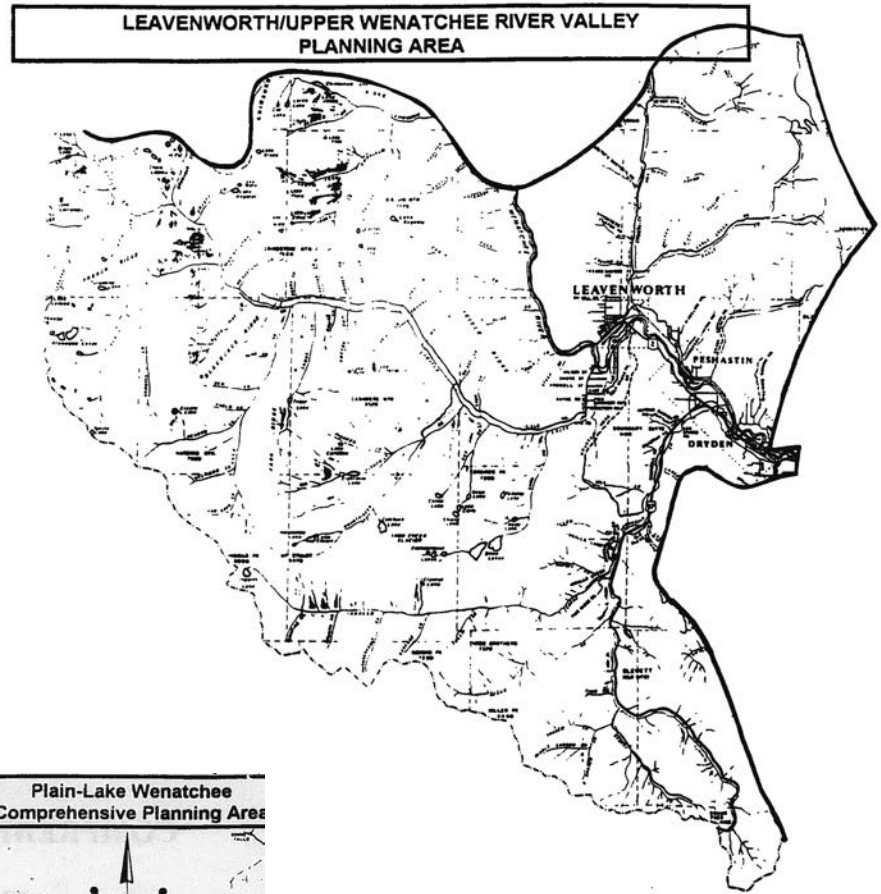
Upper Wenatchee River

The citizens of the Study Area envision: maintaining the uniqueness of the area which combines a quality “rural/small community” lifestyle with a diversified economic base that allows orderly growth and development while preserving the beauty of the area with open spaces and enhancing the proper management of the natural environment.

This vision can be accomplished with the goals and policies in this plan and by preparing development regulations with this vision in mind. The goals and policies identified in this plan are deemed to be essential in maintaining a satisfactory quality of life for the Study Area.

Plain-Lake Wenatchee

The intent of the Comprehensive Plan is



to provide guidance for future development and land use within the Plain-Lake Wenatchee Study Area. The Comprehensive Plan is an integral part of a county-wide planning effort to upgrade land use plans in accordance with the Washington State Growth Management Act of 1990 (GMA). The Plan seeks to maintain a balance of private property rights within a scenic rural community. The Plan maintains an established quality of life, including cultural and economic opportunities, and insures a rural environment.

The Study Area is in a rural setting, within the Eastern foothills of the Cascade Mountains. It includes those private and state lands in the area surrounding Plain, Lake Wenatchee, and the Steven Pass

Corridor. Much of the land in this area is owned and managed by the United States Forest Service, and although these federal lands are not part of this plan, they are closely associated with the private and state lands within the Study area. A strong attraction to the people who live and visit the Study Area is its pervasive natural beauty. Wildlife, clear air and water, a rural atmosphere and sense of community, open space, relatively sparse population density, and local availability of basic services all contribute to the appeal of the area.

Preceding this Comprehensive Plan were the West Central Chelan County Comprehensive Plan of 1973, which included the Chumstick Valley, and the Upper Wenatchee River Valley Plan of 1988, which only included those areas surrounding Plain. The recent 1988 Plan involved extensive research with the community and implemented a new zone in the Plain Area.

This Plan reviews background information within the Study Area, discusses current land use and future projections, discusses elements relative to GMA, and finally, establishes goals and policies for the study area. The Plan allows for continuous public participation in the planning process decision making and implementation occurring at the local level. The adoption of the Comprehensive Plan is the first step toward achieving orderly and harmonious community action in the development of an optimum living environment.

Stehekin

The intent of this Comprehensive Plan is to provide a guide for citizens of Stehekin residing in Chelan County by addressing the “conservation and wise” use of lands in the Stehekin Valley. The plan will strive to maintain and enhance the existing quality of life: i.e. sense of community-cultural, economic, recreational, agricultural and conservation opportunities. It is also the intent to promote the exercise of individual property rights.

This comprehensive plan deals with a valley which has been recognized on a national scale for its remote, isolated setting, its rich pioneer heritage, its scenic grandeur, the subtle details of its beauty and its scope of recreational opportunities. For its people, the valley is an access to rugged back-country, it is a place to fish and hunt, it is a stopping point on a boat excursion, it is a place for a summer home, it is a place to visit on a two week vacation, it is a place to work, and more.

V. PLAN IMPLEMENTATION AND MONITORING

This section outlines the plan implementation and monitoring procedures developed to measure progress in implementing the goals, policies and rationale in the Comprehensive Plan. This process also prepares County for updates in the future. These procedures address:

- Involve citizen participation in the process, as addressed above; and
- Updating appropriate base-line data and measurable objectives; and
- Review the degree to which the goals and policies have been successfully reached; and
- Identify obstacles or problems which resulted in the under-achievement of goals and policies; and
- Provide new or modified goals, policies and rationale needed to address and correct discovered problems; and
- Develop an implementation plan to ensure a continuous monitoring and evaluation of the plan.

A comprehensive plan has traditionally been a policy document with implementation through land development regulations and other ordinances. However, the Growth Management Act encourages a variety of implementation methods, regulatory and non-regulatory, which should be considered. The County will continue its public education program following plan adoption in order to provide information about the rationale and goals of the plan, as well as the changes that will take place in the County because of the plan's implementation. The county believes that broad support for the plan is crucial for effective implementation.

Pursuant to RCW 36.70A.100, Chelan County strives to develop a Comprehensive Plan that is consistent with neighboring jurisdictions. To ensure coordination the County will utilize the review process, including public participation and coordination with neighboring jurisdictions and other agencies to accomplish this goal.

Amendments to the Comprehensive Plan

Planning is an ongoing process, and improved data or changing circumstances will require amendment to the comprehensive plan. In particular, that plan will be reviewed once a year and updated as necessary to reflect revisions to the Office of Financial Management population estimate and revisions to the Capital Facilities Plan. The update will also address any specific concerns, clarify inconsistencies that were identified during the year and review the adequacy of the adopted level of service standards.

The community's visions provide long-range guidance for the county. To maintain consistency and allow sufficient time for decisions to take effect, these general guidelines should not be changed more than every five years. However, as specific objectives or policy are achieved, revision of the plan in each element may be required to continue progress toward the overall goals.

Amendments to the comprehensive plan can be requested by the Planning Commission or by any affected citizen or property owner. However, the plan may not be amended more than once a year, and therefore, requests for amendment are to be deferred to the time of the Plan adoption. The Planning Commission will review the comprehensive plan and propose any needed amendment. A public hearing will then be held to solicit comment. After further review, a formal recommendation will be made to the Board of County Commissioners.

The Board of County Commissioners will hold a public hearing and consider the proposed amendment to the comprehensive plan. By reviewing and updating the plan on a regular basis, the County can rely on this document in decision making and can maintain public interest and support of the planning process.

Chapter 2 LAND USE ELEMENT

I. Introduction

This Land Use Element has been developed in accordance with Section 36.70A.070 of the Growth Management Act. It represents the County's policy plan for growth over the next 20 years. The Land Use Element describes how the goals in the other plan elements will be implemented through land use policies and regulations; and thus, it is a key element in implementing the comprehensive plan.

The Land Use Element has also been developed in accordance with the County-Wide Planning Policies, and has been integrated with all other planning elements to ensure consistency throughout the comprehensive plan. The Land Use Element, along with other elements and appendices, considers the general distribution and location of land uses; the appropriate intensity and density of land uses given current development trends; the protection of the quality and quantity of water supply; the provision of public services, stormwater runoff; and the measurement of the costs and benefits of growth.

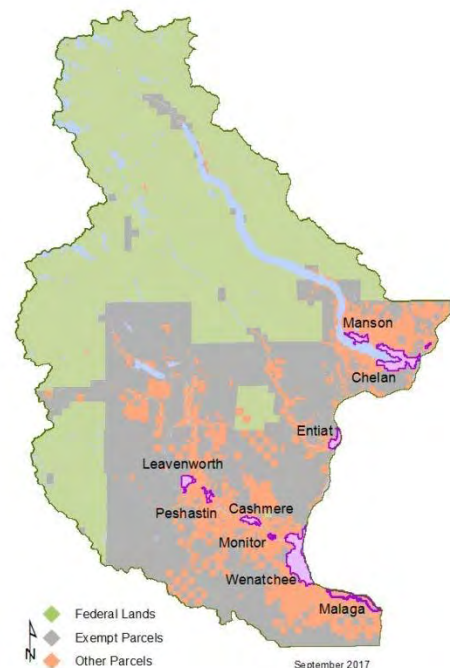
The goals and policies contained in the Land Use Element form the basis of the land use strategy for development within the County and address the following general planning goals:

- provide for a supply and distribution of land use types to accommodate the population and employment growth projected for the planning area;
- reduce development pressures and patterns of sprawl within rural areas;
- conserve agricultural, forest and mineral resource lands of long-term commercial significance; and
- Preserve and protect critical areas, open space, and the areas of rural character.

The Land Use Element is divided into sub-elements to address the issues relating to residential, commercial, industrial, and resource based land uses; open space and recreation; urban growth areas; and natural systems/critical areas. Each of these sub-elements contains goals and policies.

MAJOR LAND USE CONSIDERATIONS

While Chelan County appears to be a large county, with approximately 1.9 million acres or 2,920 square miles, the majority of land, approximately 1.5 million acres, is in federal and state ownership. The major geographic features include: Cascade Mountains, Chiwaukum mountains, Stuart Range, The Enchantments, Bonanza Peak, and the Chelan, Wenatchee and Columbia rivers. Most of the County is nationally protected lands: Lake Chelan National Recreation Area, North Cascades National Park (part) and the Wenatchee National Forest (part). Most of these lands are not expected to be



developed within the 20 year planning horizon. Should any development occur it is expected to be only on leased land providing small scale residential or recreation uses. Any large scale development should occur concurrent with a Comprehensive Plan review or amendment to analysis potential Countywide impacts.

Land available for development, approximately 279,000 acres or 436 square miles, is generally found along the valleys and rolling hills associated with Chelan Lake, the Entiat River, the Wenatchee River and the Columbia River, as shown in orange below. The largest populated area is located at the southeast corner of the County, in the City of Wenatchee and the Malaga LAMIRD¹ (see the Malaga Visioning document).

Due to the geographic limitations, it is common for rural areas to have isolated commercial or tourist activities. These areas, addressed below and in the Rural Element as LAMIRDS, provide residents and tourist with necessary services, reduce travel demands on limited road ways, and provide local areas with employment opportunities.

Rural Character

The remaining County land is able to meet current and projected population needs; however, due to constrained transportation facilities and funding resources for rural utilities, it is common to find development occurring adjacent to built infrastructure, such as roads and power lines, and where travel to services (such as grocery stores, churches or schools) is easily accessible. This type of development is not sprawl but rather follows the pattern of rural living in Chelan County with larger lot sizes used for residential living and often agricultural activities or clustered lots with large areas of protected open space. The County will continue to experience growth pressures on developable land.

Resource Lands

Agricultural uses continue to dominate as a rural economic benefit to the County. It should be noted that some historical agricultural activities, primarily orchards, are changing to vineyards, wineries and other nontraditional agricultural activities. It is the County's tradition to provide agricultural opportunities at a variety of scales, including various parcels sizes. Many of the new agricultural activities can and are occurring on smaller parcels of land near tourist communities. Other agricultural operations include organic farms, dairy production, row-crops, and where appropriate fish farms. The long-term changes in agricultural operations will be determined, in large part, by the economic and market demands.

Open Space Lands

As noted above, much of Chelan County is open space established and maintained by Federal and State government. Additionally, the County encourages open space cluster subdivision; open space tax credits; countywide park and recreation planning; habitat and environment protection regulations; and, through planning and restoration plans and projects. Open space provides an important function, protecting habitat areas, reducing development on steep slopes (geologically hazardous areas) and preserving the scenic rural character of Chelan County.

¹ Limited Area of More Intense Rural Development; the Malaga LAMIRD is the largest rural development area within the County

Population Growth

As the population increases, conflicts between resources and more intense land uses will continue to arise. Chelan, Manson, Stehekin, Leavenworth, Plain, Lake Wenatchee and properties located along the shorelines are becoming increasingly popular as recreational and retirement property. As addressed in appendix B, the 20 year population growth can be accommodated within the existing residential land use designations. The County will continue to experience growth pressures on developable land.

Industrial and Commercial Development

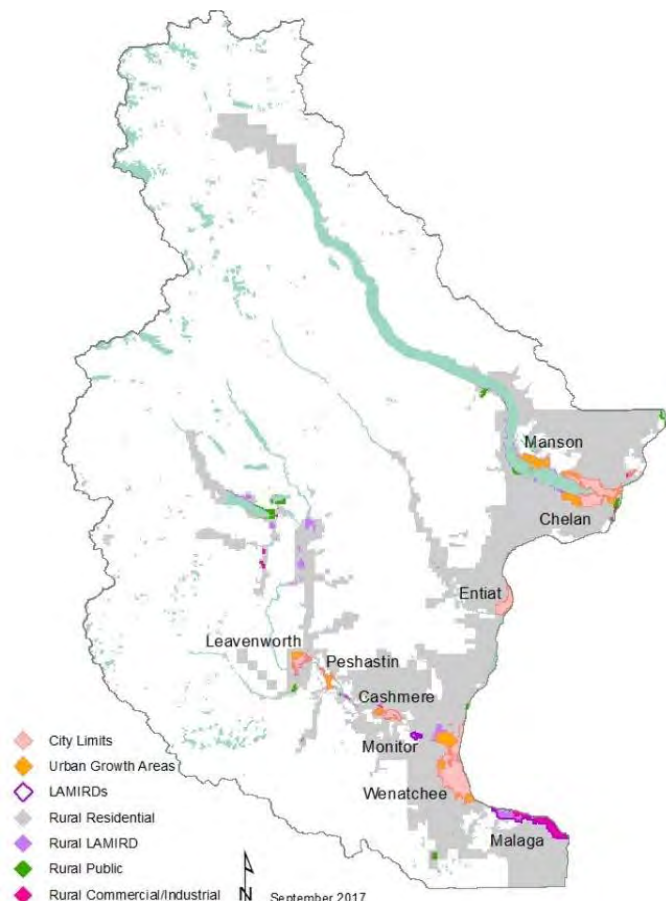
Rural industrial land uses are common throughout the County, including orchard processing and packaging facilities and mining. Rural commercial areas provide areas for necessary services and/or recreational support in isolated regions of the County. Both rural commercial and industrial are appropriate for Chelan County's unique land uses and provide rural employment opportunities. When appropriate with the area these types of uses are vital to residents and visitors.

Residential Development Patterns

The numerous water bodies of Chelan County provide opportunity for a mix of recreational and residential living adjacent to the water. It is common to find small lot development, primarily residential uses, along the shoreline. These areas were commonly platted prior to the Growth Management Act and reflect the County's character of rural recreational lifestyle. It is appropriate that newer developments provide for smaller lots and public access when consistent with the Shoreline Master Program.

Development among the hills and hilltops is relatively new but is consistent with the rural area, especially when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides agriculture and/or recreational opportunities and protects critical areas.

Sprawl is defined, by Webster's Dictionary, as "to spread or develop irregularly or without restraint" and "to cause to spread out carelessly or awkwardly". The negative effects associated with sprawl are a reduction in environmental and human health. Chelan County does not support sprawl rather development of rural land is consistent with the historic density patterns; provide for the protection of the natural and critical environment and habitat; supports



the Federal and State natural wilderness and park lands; protects the small rural communities; allows for recreation throughout the County; and, encourages orderly growth of populated areas through adoption of subarea plans, LAMIRD designations, and city urban growth areas in a manner consistent with the State population forecasting and Chelan County's rural character.

Coordination between the Land Use Element and the Capital Facilities Element will be essential in producing a plan with accurate projections for residential and economic development. The Land Use Plan in this element will guide decision making to achieve community.

Planning Techniques to Promote Physical Activity

The Comprehensive Plan sets the framework for all regulations, therefore, bicyclists, pedestrians and other non-motorized forms of transportation should be considered in setting land use goals and policies (see the Transportation Element, Non Motorized Transportation).

Incorporating Goals and Policies that promote land uses that support physical activity goes beyond an individual's enjoyment and health benefits. Promoting pedestrian and bicycle facilities reduces vehicular use, resulting in saving resources and improving the environment by reduction in pollutants. There may be positive economic impacts seen in increased property values and marketability for property located near trails and open space. Beyond property values, businesses located in pedestrian friendly areas are benefited as visitors are encouraged to stop and shop, especially within the County these communities include Peshastin, Manson, Monitor and Malaga. Countywide the promotion of recreational activities, such as cycling or marathons, provides for residents and visitors to be physically active, support local business and enjoy the rural landscape of Chelan County. Additionally, the County benefits from the lower cost and maintenance of bicycle and pedestrian facilities compared to other facilities.

II. Inventory

The inventory presented in this element provides information useful to the planning process by listing the various existing land uses within the County. Additional data and support documentation is located in the appendices. This inventory includes the general physical description and characteristics of key locations around the county and current land uses.

Land Uses

The purpose of land use inventory is to describe existing land use conditions within the County.

Parcels have been grouped, as identified below, into eleven land use categories, based on the Assessor's primary land use classification code, per WAC 458-53-030. City and Urban Growth Area land uses have been addressed in more detail within Appendix C. As resources permit, future physical inventories may provide more accurate information of existing land use.

- **Agriculture** includes parcels that are primarily devoted to agricultural activities, although residential uses may occur, land use codes 81-83.
 - Countywide: 1,578 parcels covering 45,384 acres
 - County (excluding Cities and UGAs): 1,375 parcels covering 44,142 acres
- **Undeveloped/Vacant** includes heavily timbered areas and rangeland type areas, both public and private. Some residential uses may occur in these areas. Under developed may be expanded based on actual land sizes and uses, see Appendix B., land use codes 91 and 99.

- Countywide: 1,891 parcels covering 93,526 acres
- County (excluding Cities and UGAs): 1,624 parcels covering 90,946 acres
- **Mineral Resource Land** includes areas either used for extraction or storage of rock, gravel or sand resources, land use code 85.
 - Countywide: 23 parcels covering 888 acres
 - County (excluding Cities and UGAs): 22 parcels covering 886 acres
- **Forest Resource Lands** includes areas designated forest, timberland, resource production or noncommercial forest, land use codes 88, 89, 92 and 95.
 - Countywide: 1,513 parcels covering 116,534 acres
 - County (excluding Cities and UGAs): 1,458 parcels covering 116,145 acres
- **Single Family Residential** includes a single home (including manufactured homes) on a lot as the primary activity, land use codes 11 and 19.
 - Countywide: 30,077 parcels covering 71,097 acres
 - County (excluding Cities and UGAs): 12,250 parcels covering 61,396 acres
- **Multi-Family Residential** includes condominiums, duplexes, multi-plexes, apartments and mobile home parks, land use codes 12-18.
 - Countywide: 5,885 parcels covering 8,520 acres
 - County (excluding Cities and UGAs): 2,931 parcels covering 7,473 acres
- **Commercial** includes any retail and/or service activity and may include secondary residential uses, land use codes 50-66.
 - Countywide: 1,367 parcels covering 942 acres
 - County (excluding Cities and UGAs): 76 parcels covering 278 acres
- **Industry** encompasses industrial activities, including uses related to agriculture, land use codes 21-39, 46 and 86.
 - Countywide: 309 parcels covering 1,501 acres
 - County (excluding Cities and UGAs): 20 parcels covering 1,054 acres
- **Transportation/Utilities** include transportation, utility and/or irrigation facilities, excluding any facilities within right-of-ways, land use codes 41-45. However, most of the roads are not identified within the County parcel data information, See the Transportation Element.
 - Countywide: 117 parcels covering 284 acres
 - County (excluding Cities and UGAs): 57 parcels covering 205 acres
- **Public/Quasi-Public** includes facilities such as fire stations, libraries, parks, schools, churches, and federal, state or local government owned lands, land use codes 47-49 and 67-79. This excludes roads and public lands not identified with a parcel number.
 - Countywide: 3,065 parcels covering 586,765 acres (note, the 'government' classification, land use code 67, makes up 2,043 parcels covering 543,167 acres)

- County (excluding Cities and UGAs): 2,163 parcels covering 584,221 acres (note, the 'government' classification, land use code 67, makes up 1,694 parcels covering 542,071 acres)
- **Open Space** includes areas of open space designated under RCW 84.34, land use codes 93 and 94.
 - Countywide: 148 parcels covering 9,718 acres
 - County (excluding Cities and UGAs): 141 parcels covering 9,680 acres

III. Regions/Community Overviews

CHELAN-MANSON

Location and Geology

The Chelan-Manson area is situated between the Sawtooth and Chelan Mountains and is bounded by the Columbia River on the southeast. The Basin is dominated by Lake Chelan, a glacially formed lake approximately 55 miles long with an average width of 1.5 miles and a maximum depth of 1,500 feet. Three major tributaries: the Stehekin River, Railroad Creek and Twenty Five Mile Creek, along with numerous lesser streams feed the lake. The outfall is controlled through a hydroelectric dam and a penstock system to the Columbia River. Lake Chelan and the Columbia River are important water bodies; providing the main source of drinking water for the area, they are also important for irrigation and recreation. The water quality of Lake Chelan is a major concern to many area residents.

Elevations in the Chelan/Manson area range from just over 700 feet above sea level along the Columbia River to 9,511 feet at the summit of Bonanza Peak, the highest point in the County. Many of the soils within the area become unstable or susceptible to erosive as slopes increase. An analysis of existing land use patterns indicates that virtually all existing structural and orchard development has occurred on those lands below 2,000 feet in elevation and on less than a 20% slope. The geology is characterized by underlying rock formations covered by a shallow mantle of soils in the valleys.

There is a wide variety of soil conditions in the planning area. Throughout much of the area, the soil is underlain with alluvial deposits and glacial drift. Volcanic pumice and ash from the Glacier Peak region have added substantially to the depth and character of the soil in many areas. The mountainous terrain, with characteristically steep slopes and high elevations, consist largely of rock outcroppings and shallow soils. The Soil Conservation Service has classified 84% of the Lake Chelan Basin area as being forest. Lands below the forest level consist of grasses, sagebrush and shrubs, with the more level areas developed as crop land.

The climate is characterized as "marine west coast", with hot, dry summers and mild to severe winters. Temperature and precipitation vary widely depending on the elevation and proximity to the Cascade Crest. Lake Chelan exercises a local moderating influence on temperatures which adds to the suitability of the area for orchard production.

The thermal winds around Chelan Butte provide national and international hang gliding and parasailing opportunities. With development of access to the top of the Butte, parking, launches and other facilities, the Sky Park is now renown as one of the best hang gliding areas and facilities in the world.

Vegetation

Fauna is found in three specific habitats: the wetlands along the Columbia River and the Lake Chelan shorelines, the canyon/steppe habitat of the steep drainage's and the urban areas of Manson, Chelan and Chelan Falls. The Chelan Butte Wildlife Refuge is a 12,000 acre game refuge. The property was purchased by the Chelan County PUD #1 in 1967 as a mitigating measure for the construction of the Rocky Reach Hydroelectric Dam. The refuge is primarily inhabited by game birds and occasionally migrating big game animals. The area is presently managed by the Washington State Department of Fish and Wildlife.

Land Uses

As stated above, most development has occurred below the 2,000 elevation on slope of less than 20%. The area enjoys a variety of recreational uses with two urban growth areas: City of Chelan and unincorporated Manson, the incorporated City of Chelan, and a developed community of Chelan Falls.

Most development is concentrated around the lower end of Lake Chelan, where private land dominates. The upper portion of the basin lies within the North Cascades National Park and the Lake Chelan National Recreation Area, while the area between is in the Wenatchee National Forest, a portion of which is in the Glacier Peak Wilderness Area.

Rural Character

Chelan and Manson communities provide urban services within defined boundaries. The remaining portion of the region is characterized by a variety of parcel sizes containing a mix of orchards and vineyards, wineries, large estate homes, golf courses, ranchettes, open space, and pasture land. To the west access roads become primitive, private or forest service which greatly reduces the number and types of land uses. Higher levels of development, primarily residential uses, are common along the lakes. These homes provide for the rural recreational lifestyle and character of the area. Development among the hills and hilltops is relatively new but is consistent with the rural area, especially when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides agriculture and/or recreational opportunities and protects critical areas.

ENTIAT VALLEY

Location and Geology

The Entiat Valley area encompasses the Entiat River Basin. The Basin is shaped like a triangle with the Columbia River forming the base and the valley lying between the Chelan and Entiat Mountains. The Entiat River begins at the terminus of the Entiat Glacier on Mt. Maude and flows approximately 50 miles into the Columbia River at the south end of the City of Entiat. The drainage is generally long and narrow, with numerous small tributaries flowing into the main river. The north fork of the Entiat River and the Mad River are the largest tributaries. Not only do these bodies of water and their tributaries provide the main source of drinking water for the area, but they are also important for irrigation and recreation.

The climate is also characterized as “marine west coast”, with hot, dry summers and mild to severe winters.

Elevations in the area range from just over 700 feet above sea level along the Columbia River to 9,249 feet at the summit of Mt. Fernow. Many of the soils within the area become unstable or susceptible to erosive as slopes increase. Consistent with development patterns in

Chelan/Manson, virtually all existing structural and orchard development has occurred on those lands below 2,000 feet in elevation and on less than a 20% slope. Throughout much of the area, the soil is underlain with alluvial deposits and glacial drift. The geology of the Entiat area is igneous bedrock with granite and diorite predominating.

Vegetation

Vegetation in the valley depends to a great extent on the elevation, with most of the land above 1,500 feet being forested. Lands below the forest level consist of grasses, sagebrush and shrubs. The more level sites have, for the most part been developed as crop land, with orchards generally occurring where irrigation has been possible.

Land Uses

The Entiat basin is primarily natural habitat area with rural residential primarily along the Entiat River. Development is limited by single public access up the valley. The City of Entiat and associated urban growth area are located at the base of the Entiat River along the Columbia.

Rural Character

As noted above, the Entiat Valley is a long narrow valley along the Entiat River, over forty miles long. The area provides for several pockets of residential development and rural commercial or businesses necessary to support the isolated lifestyle. Parcel sizes vary greatly due to ownership and buildable area. Along the river, smaller parcels of land are generally flat while hills and steep slopes primarily contain larger parcels of land which help protect critical areas. Residential structures are mixed in among the natural environment. Mining, timber activities and ranchettes are common. Higher levels of development are common along the eastern portion of the river, closer to the main highway and the City of Entiat. Several branch roads provide access to residential and recreational land uses among the mountains adjacent to the river. Future development and clustering would be compatible when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides agriculture and/or recreational opportunities and protects critical areas.

MALAGA-STEMILT-SQUILCHUCK

Location and Geology

The Malaga-Stemilt-Squilchuck area covers the southeast corner of the County. It includes Pitcher Canyon, Halverson Canyon, Mission Peak, Wenatchee Heights, Jumpoff Ridge, the Malaga and Three Lakes Communities, Rock Island Dam and vicinity, and the drainage basins of Squilchuck Creek, Stemilt Creek, and Colockum Creek. The area is bordered by the Columbia River to the north and east, and by the Kittitas County boundary to the south.

Land Uses

Chelan County's first irrigation ditch was built in Malaga to serve the orchards and vineyards planted by early settlers. Malaga was named for the grapes which were grown there for many years. The town site of Malaga was originally platted in 1903. Development of the Alcoa plant in the early 1950's stimulated residential development in the area. Most of the recent development has occurred southwest of the original town site especially around Cortez Lake which is part of the Three Lakes residential area. In 2006, Malaga completed a visioning planning document which defined the LAMIRD boundary and set appropriate land use designations (see Appendix E).

The Stemilt-Squilchuck Community Vision (see Appendix J) addresses the area's primary land uses and goals. The area includes the Wenatchee Heights area, a large plateau overlooking the Wenatchee Valley. The Heights contains several large orchard tracts. Primary crops include apples, cherries and pears. Residences are scattered throughout the area. The Stemilt Hill is another large agricultural area. The area is well known for its high quality cherry crop. Most residential development is scattered throughout the orchards. Colockum Creek, Jumpoff Ridge, Stemilt Basin, Mission Ridge comprise mainly undeveloped open spaces varying from grassland to forest. Primary land uses in those areas include rangeland, timber production and recreation. Recreation, industrial development, and agriculture are the most significant contributors to the economic base of the planning area. Mission Ridge ski area is located in the upper most portion of the planning area and is accessed by way of Squilchuck Road.

Rural Character

Malaga's unique rural character is addressed in large part by the Malaga Plan (Appendix E); however, the region outside the plan provides a rural character unlike any other in the County. This area is known for widening roadways that hug the hill sides. Rural farm life is most common with early morning tractors, spraying, farm worker housing, ranches are common where water rights are available. Larger parcels of land with dry farms or natural landscape are common as the roads turn private or end. Moving to the south of Malaga the rural character is defined by industrial uses, primarily the Alcoa plant. Future development and clustering would be compatible when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides agriculture and/or recreational opportunities and protects critical areas.

LOWER WENATCHEE RIVER VALLEY

Location and Geology

The Lower Wenatchee River area includes the City of Cashmere and the communities of Monitor and Sunnyslope; and multiple valleys: Ollala, Hay, Nahahum, Warner, Warm Springs, Brender, Brisky, Tripp, Yaksum and Fairview Canyons, Mission, Brender and Swakane Creeks.

This area was first settled by members of the Wenatchi Indian Tribe. Where Cashmere now stands, the winter village of Ntuatckam was located and had a population of about 400 in 1850. Missionaries founded a small mission near the present site of Cashmere in 1863. In 1870, the first irrigation ditch in the valley was built which permitted irrigation around the mission. Other permanent settlers began arriving around 1881. They first settled in the Monitor area, but gradually homesites could be found in all areas of the Wenatchee Valley. The first major irrigation project, the Peshastin Ditch, was completed in 1890 to serve Cashmere and Dryden. The completion of the Great Northern Railway through Wenatchee in 1892 provided the impetus for undertaking the construction of the Highline and Icicle Canals. Completed in the early 1900s, these canals provided a source of water for orchards on the north and south sides of the Wenatchee River.

Today, the agricultural and services industries are the most significant contributors to the economy of the planning area. Orchards are located throughout much of the lower valley between Dryden and Sunnyslope. Major crops include apples, pears and cherries. Service industries are found primarily in the incorporated City of Cashmere and the unincorporated community of Sunnyslope. In 2008 Sunnyslope was included in the City of Wenatchee Urban Growth Area (see Appendix K).

Rural Character

This region of Chelan County provides areas of flat or rolling hills with orchards and residential living among the numerous streams, hills and natural habitat areas. The rural environment is characterized by orchards in the valley and on the lower elevations of the rolling hills. Preservation of farming rights is important to the region. Along the primary river – the Wenatchee River, and the highway there are several communities which provide small town living and work opportunities. These towns are a source of great pride to the local residents. They represent the best of small town living with concentrated development in a core “downtown,” residential homes, and rural public services, such as a post office or school. These areas also contain industrial processing facilities necessary for the agricultural activities. Moving away from the Wenatchee river valley and orchards, land to the north is characterized by evergreen trees while the southern portion of the valley’s undeveloped land contains natural grasses, shrubs and occasional trees. Future development and clustering would be compatible when the development was consistent with farming rights, reduced road cuts and visual impacts, and protects critical areas.

UPPER WENATCHEE RIVER VALLEY

Location and Geology

The Upper Wenatchee River Valley area includes portions of the Wenatchee River, Chumstick Creek, Peshastin Creek and Icicle River Valleys, including the City of Leavenworth, the Urban Growth Area for Peshastin and the community of Dryden.

The topography of the west and north is a direct result of large mountain glaciers that formed in the Icicle, Tumwater, and Chumstick Canyons. Glacial action was responsible for deepening and smoothing the valley floors. These glaciers probably terminated along the Mountain Home Road, to the southeast of Leavenworth, where there is evidence of a terminal moraine.

Throughout much of the area, the soil is underlain with alluvial deposits and glacial drift. Volcanic pumice and ash from the Glacier Peak region have added substantially to the depth and character of the soil in the valleys and drainages. The mountainous terrain, with characteristically steep slopes and high elevations, consist of largely of rock outcroppings and shallow soils.

The Wenatchee and Icicle Rivers and supporting tributaries are important bodies of water. Not only do these bodies of water and their tributaries provide the main source of drinking water for the area, they are also important for irrigation, recreation, and fish and wildlife habitat.

Rural Character

Most of the Upper Wenatchee River Valley contains evergreen mountains with residential development along the rivers and lakes. The development areas are “pockets” of higher densities surrounded by natural lands. Land north and east of Leavenworth contains several unofficial communities – Tumwater, Chumstick, which are expected to continue growth patterns of smaller lots sizes along developed roads and water ways. Land to the west of Leavenworth is extremely limited by the mountains and steep slopes. Small parcel sizes are common due to the building area and ownership patterns. Future development and clustering would be compatible when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides recreational opportunities and protects critical areas.

PLAIN-LAKE WENATCHEE

Location and Geology

The Plain/Lake Wenatchee area is located on the east slope of the Cascade Mountains in west central Chelan County, roughly within the boundaries of the Lake Wenatchee Range District of the Wenatchee National Forest. It is comprised of a number of river valleys which feed into Lake Wenatchee and the Wenatchee River in the Cascade Mountains in North Central Washington State.

Much of the area is mountainous forest land designated as National Forest. Most of the private land in the area is concentrated along the major water bodies and transportation routes.

Due to steep unstable slopes, floodways, wetlands and other critical areas, much of the area is not suitable for development. Development is also constrained by designated resource lands. Current development has occurred on limited areas near the rivers, Lake Wenatchee and Fish Lake.

There are 30 different soil types in the area. Of primary concern is the limitation for septic tank absorption fields, based on soil types. Three of the soil series, the Brief, Burch and Chiwawa have only slight limitations for septic tanks and are therefore desirable soils to develop. The remaining 27 soil types have septic tank limitations.

The area has two large lakes of state-wide significance: Lake Wenatchee and Fish Lake. There are also dozens of smaller alpine lakes in the Wenatchee National Forest, which includes portions of three different wilderness areas. Lake Wenatchee and Fish Lake support a number of recreational uses. There are also a number of significant rivers including: Wenatchee River, Chiwawa River, Nason Creek, Little Wenatchee River, White River, Napeequa River, Phelps Creek, and Whitepine Creek.

Rural Character

Most of the Plain-Lake Wenatchee area contains residential homes among the mountains with denser populations along the lakes and rivers. This is consistent with the rural recreation opportunities of the area. Plain provides a community area with commercial services and a public post office and school. Development is limited by ownership and parks but future development of recreational support services would be consistent with current activities. Future development and clustering would be compatible when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides recreational opportunities and protects critical areas.

STEHEKIN

Location and Geology

The Stehekin area includes the northeastern most portion of the Lake Chelan National Recreation Area, extending to the County boundary and the entirety of the northwest end of Chelan County, including that part of the North Cascades National Park that falls within the County boundary. The National Park Service manages the majority of federal property in the Stehekin. There are about 820 acres of private land, intermingled with federal land administered by the National Park Service and commercial forest lands.

The Stehekin Valley is a U-shaped, glacially-carved canyon in the North Cascades. The valley is nearly 6000 feet deep, and a mile or less wide as it extends 25 miles from Lake Chelan to the

Cascade Crest. The valley floor is relatively flat with very little slope. The walls rise abruptly on each side of the river; hence, all construction has occurred on the floor of the valley. It is prone to flooding. Efforts have been made to move residential structures from the flood plain/way areas to higher ground.

The surface waters of the Stehekin River system, including the upper portion of Lake Chelan, can be characterized as clear and cold, with high oxygen content and low fertility. During major floods, the river spills its banks and occupies its floodplain, moderating the ultimate height of the flood's crest.

Native trees include western red cedar, Douglas and grand firs, ponderosa and white pines, big leaf, Douglas and vine maples, dogwoods, alders and cottonwoods. Limited logging, and timber cutting for firewood have opened some areas to change. Taking advantage of such change, or adapting to it, have been mule deer, black bears, coyotes and cougars, along with numerous small mammals and birds.

Rural Character

Most of the Stehekin is undeveloped federal land. A small community along the northern most shore of Lake Chelan continues to develop and grow as a recreation tourist service center. The area is spotted with remote cabins and is not expected to develop. Should future development or clustering occur it would be compatible when developed in a manner which reduces road cuts and visual impacts, preserves open space, provides recreational opportunities and protects critical areas.

NATURAL SYSTEMS/CRITICAL AREAS

The GMA states that counties should "protect critical areas." Critical areas include the following areas and ecosystems: (a) wetland; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

The GMA requires the adoption of interim development regulations for protection of these critical areas. The County has completed the planning process for developing these regulations following an extensive citizen participation process. Many of the issues and concerns that guided the development of the critical area regulations were discussed and addressed in the comprehensive planning process that led to the formation of this document.

The GMA also requires the provision for the protection of the quality and quantity of ground water used for public water supplies. The land use element is also required to review; where applicable, drainage, flooding, and storm water run-off and to provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state.

IV. Future Needs and Alternatives

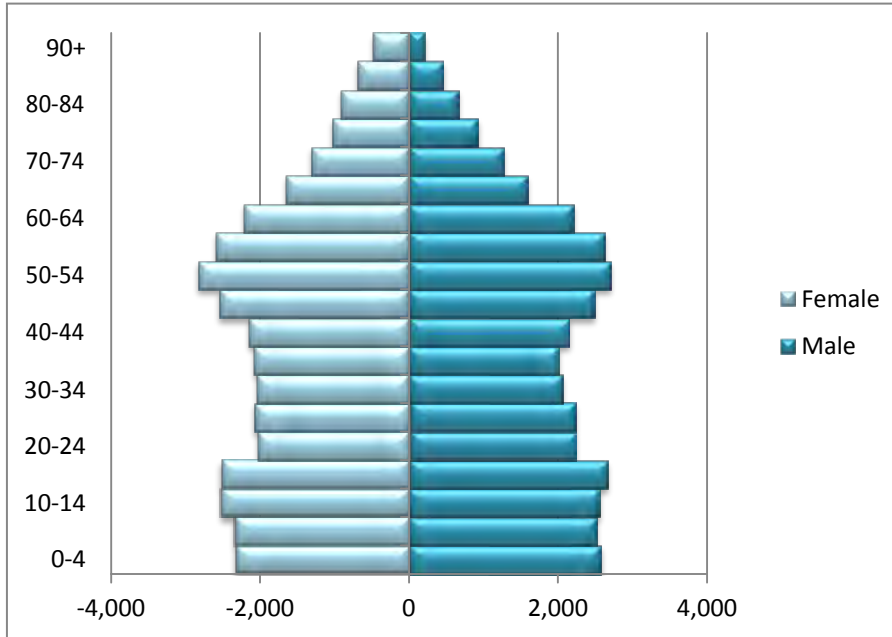
Analysis of Population and Demographics

The analysis of local population and demographic trends is important for a broad understanding of the County and to anticipate future needs.

Age Groups

In 2010, the predominant age group countywide was the 50-54 group, making up 7.6% of the population. Grouping the population in 20 year intervals, the largest generational group are children ages 0-20 with a population of 10,316 followed by ages 40-59 with 9,964 people, then ages 20-39 with 8,530 people, then ages 60-79 with 5,992 people, and finally ages 80 and over with 2,255 people.

Table 1: Age Distribution by Sex



The large group of school aged residents has put the educational system at or over capacity. Several of the schools are adding facilities, see the Capital Facilities Element.

Diversity of Population

There are numerous challenges in collecting cultural data, including, how individuals classify themselves or how they want to be seen by others. Additionally, changes in how demographic information is collected and tracked, through the US Census, make it difficult to compare census data. The following table summarizes 2010 census demographics.

Table 2: 2010 Census Data

Subject	Number	Percent
Total population	72,453	100
One race	70,463	97.3
White	57,484	79.3
Black or African American	236	0.3
American Indian and Alaska Native	700	1
Asian	588	0.8
Native Hawaiian and Other Pacific Islander	100	0.1
Some Other Race	11,355	15.7
Two or More Races	1,990	2.7
HISPANIC OR LATINO		
Hispanic or Latino (of any race)	18,713	25.8
Mexican	17,216	23.8
Puerto Rican	115	0.2
Cuban	22	0
Other Hispanic or Latino [2]	1,360	1.9
Not Hispanic or Latino	53,740	74.2
RACE AND HISPANIC OR LATINO		
One race	70,463	97.3
Hispanic or Latino	17,835	24.6
Not Hispanic or Latino	52,628	72.6
Two or More Races	1,990	2.7
Hispanic or Latino	878	1.2
Not Hispanic or Latino	1,112	1.5

Summary File 1, Tables P5, P8, PCT4, PCT5, PCT8 and PCT11

Population Projections

Table 3: Population Growth Pattern

Year:	Census Data						OFM Projections					
	1960	1970	1980	1990	2000	2010	2015	2020	2025	2030	2035	2040
Chelan County	40,744	41,103	45,061	52,250	66,616	72,453	75,180	78,586	81,885	84,778	87,168	89,246
Unincorporated		17,696	20,791	22,760	29,238	30,498						
Incorporated		23,407	24,270	29,490	37,378	41,955						

The Office of Financial Management (OFM) released population projections in 2012. These projections provided three alternative growth scenarios for Chelan County and the incorporated cities to consider; a high, medium, and a low projection. The City of Wenatchee coordinated with the County and other cities a detailed analysis of historical growth throughout the County which supported the OFM medium projection. The County and cities have adopted population projections for the next 20 years, by Resolution 2015-112.

In summary, the County, excluding the Urban Growth Areas and cities, is projected to grow by approximately 3,752 persons between 2017 and 2037. This is expected to result in approximately 1,406 new residential dwellings (2.67 persons per household), see the Housing Element. As noted in Appendix B, there is adequate land to serve the projected population for the next 20 years.

Growth Patterns

The County anticipates growth to occur in a manner consistent with the land use designations planned for and implemented by the zoning map and regulations. Growth is expected to occur in areas identified as vacant and underutilized by the County Assessor's primary land use classification code. However, there is less land available for development within the Rural Residential/Resource 2.5 and LAMIRD designations. Therefore, the percentage of growth in these areas may be less than other residentially designated lands. As detailed in Appendix B, the County has adequate land to meet the projected population growth over the next 20 years.

V. Goals and Policies for Land Uses

While recognizing that residential development is important and necessary to the sustainability of the County, the following goals and policies were developed to ensure that future development is compatible with surrounding land uses and can be efficiently and effectively served by public facilities and services. Further guidance can be found in the Rural Element and the Housing Element.

Goal LU 1: Residential designations shall provide for an adequate supply of land to accommodate the housing needs and strategies outlined by the comprehensive plan. Implementation regulations shall provide for a variety of residential opportunities to serve a full range of income levels.

Rationale: An adequate supply of housing available to all income levels is necessary to meet the housing needs of the County.

Policy LU 1.1: Promote improved neighborhood character and compatibility through unified design and site requirements for both site built homes and manufactured and modular housing.

Rationale: The placement of should take into consideration compatibility with the character of existing and future residential areas.

Policy LU 1.2: Protect residential neighborhoods from impacts associated with incompatible land uses through application of development standards and permit conditioning.

Rationale: Incompatible land uses located in close proximity to residential neighborhoods may create adverse impacts which could lead to a reduction of the high quality of life for the County residents.

Policy LU 1.3: Develop innovative regulatory strategies that create developer incentives to provide affordable housing to low and moderate income households.

Rationale: This can be accomplished through the use of innovative techniques including but not limited to: density bonuses, performance zoning, zero lot line development, and cluster subdivisions. Incentives may help facilitate the construction of low and moderate income housing.

Policy LU 1.4: Except as provided for by the Rural Element, new residential development which requires urban services and facilities must be located within urban growth areas or LAMIRDs.

Rationale: Residential development at a size and density which requires urban services and utilities normally associated with urban areas should be located within the urban growth areas. Logical expansion of and infill of urban growth areas will assist in reducing the cost of providing necessary infrastructure.

Policy LU 1.5: Encourage infill of vacant and underdeveloped land in existing residential areas within urban growth areas and rural communities, such as LAMIRDs.

Rationale: Many parcels of land are available within existing residential developments that can accommodate further development. Infill within these areas will allow public facilities and services to be provided in a more efficient manner.

Policy LU 1.6: Consider environmental limitation, availability of infrastructure and consistency with the Comprehensive Plan and the Growth Management Act when establishing residential density standards.

Rationale: Physical characteristics and the availability of utilities are important factors in determining residential development patterns and densities. In addition, residential densities must be consistent with the guidance of the comprehensive plan and the requirements of the Act.

Policy LU 1.7: Consistent with the Growth Management Act, ensure provision of necessary public facilities and public services for the development, infill and redevelopment of existing residential and mixed use centers outside urban growth areas, such as LAMIRDs or rural communities. Such services should not be extended in a manner that promotes low density sprawl in rural areas.

Rationale: The Growth Management Act permits the development, redevelopment and infill of existing intensely developed rural areas. The Act does not allow for the expansion of these areas outside of logically set boundaries.

Policy LU 1.8: Ensure that adequate off-street parking is provided for residential development.

Rationale: Off street parking should be provided in safe and convenient locations. Off street parking for high density multifamily residential development should accommodate those with special needs.

GOAL LU 2 Physical Activity: Encourage active communities through land use decisions and designs that support bikeways, pedestrian, equestrian and other non-motorized transportation modes.

Rationale: Land use regulations set the framework for how communities function. Supporting non-motorized transportation through land use not only increases the

transportation functions but benefits an individual's health, the environment and can improve land values.

Policy LU 2.1: Encourage physical activity through land use policies, regulations, design and, when feasible, community awareness and education.

Policy LU 2.2: Support implementation of multi-modal transportation facilities, continued use of public lands, and land uses such as parks, trail systems, sidewalks, road ways and other transportation systems, when reviewing land use designations, development permits and land divisions.

GOAL LU 3: Protect water quality and quantity.

Rationale: The protection of water quality and quantity is important for the public health, the local economy, the environment, and helps to maintain the high quality of life.

Policy 3.1: Support data collection for water quality and quantity which can be used to evaluate land uses and development. Including but not limited to:

- Support the implementation of watershed plans to address water quantity and quality including instream flows. Continue to plan reserves for future population growth and track exempt well use.
- Improve County tracking and coordination efforts with public water providers.
- Evaluate the existing exempt well and reserve tracking system for expansion Countywide.
- Consider varying regulations for each WIRA or sub-basin based on water quantity and quality concerns.
- For areas where physical availability is potentially limiting, support studies on safe sustaining yield of water in relation to planned growth.
- Support mitigation measures including infrastructure projects.
- Support analysis of water bank options, or other alternatives, where instream flow reserves are exhausted, or where there are concerns over legal or physical availability.
- Support development of outreach/educational materials to residents, interest groups and developers.
- Amend the County Comprehensive Plan to reflect new data and revise land uses as appropriate.
- Water source priorities are as follows, in order of priority:
 1. Connection to an existing public water system where available;
 2. Where a public water system is not available, implementation of a new public water system consistent with DOH and CDHD requirements; and
 3. Individual well outside the service of a public water system.

Policy LU 3.2: Encourage and support future and ongoing water quality monitoring programs.

Rationale: Monitoring of water quality helps to determine the impacts of growth and development to water quality. Should water quality problems arise, determining the sources of water quality degradation, and educational and regulatory tools to maintain or improve water quality would be necessary.

Policy LU 3.3: Support water quality education programs which inform local citizens and visitors about water quality issues and ramifications.

Rationale: Education programs can be an effective approach to maintaining or enhancing water quality.

Policy LU 3.4: Encourage appropriate regulatory agencies to actively pursue violators which illegally discharge waste into rivers, lakes and streams.

Rationale: Enforcement of water quality and waste disposal standards is a key element in maintaining contaminant free water resources.

Policy LU 3.5: Support ongoing health department efforts to adequately monitor on-site septic systems, and require the repair of failing on-site septic systems.

Rationale: Failing on-site systems have the potential to introduce fecal coliform and bacteria into water systems.

Policy LU 3.6: Encourage existing and require future public boat launches to incorporate wash-off stations. Vessel sewage pump-out facilities, and fueling provisions shall be sited to implement best management practices for the protection of water quality.

Rationale: Preventative management of water resources is essential to maintain our high quality water environments.

GOAL LU 4: Preserve the integrity of significant natural, historic, and cultural features by minimizing the impacts of development.

Rationale: These features are an important part of the surroundings that contribute to the area's high quality of life.

Policy LU 4.1: Encourage development that is compatible with the natural environment and minimizes impacts to significant natural and scenic features.

Rationale: The design of development proposals should consider the relationship with the natural environment from both aesthetic and environmental perspectives. Capitalizing on natural features can enhance the quality of new development while minimizing potential adverse impacts and exposure.

Policy LU 4.2: Partner with agencies responsible for managing public lands to ensure that local interests are represented.

Rationale: Because public lands comprise such a large percentage of the County, the importance of management that reflects local interest cannot be over-emphasized.

Policy LU 4.3: Promote the use of land preserves and conservation areas to protect important natural area from inappropriate development.

Rationale: Natural resource conservation areas are important for preservation of natural features.

Policy LU 4.4: Establish a framework for the identification and preservation of archeological and significant historic sites and structures within the County.

Rationale: Goal 13 of the Growth Management Act requires the identification of lands, sites, and structures that have historical or archaeological significance.

VI. Urban Growth Areas

A focal point of the GMA is the requirement of designating urban growth areas (UGA's). UGA's are to include areas and densities sufficient to permit the urban growth that is projected to occur in the County over a twenty year planning period. Urban growth areas are to be located first in areas already characterized by urban development where existing public facility and service capacity is available and second, in areas where public or private facilities or services are planned or could be provided in an efficient manner. Planning for growth in this way accomplishes two GMA goals: 1) the efficient provision and utilization of public facilities and services and 2) reduce inappropriate conversion of undeveloped land into sprawling, low density development.

The County contains two urban growth areas surrounding the unincorporated communities of Manson and Peshastin. The County has worked, and continues to work, with these communities to ensure that the development patterns and community objectives are met through the planning process and zoning regulations. In areas where urban growth area boundaries are associated with an incorporated city, the County and cities have worked jointly in the adoption of the urban growth area boundaries as outlined in the County-Wide Planning Policies. The County and the cities also work together to adopt development regulations and land use designations which meet the County and City's objectives for growth and development.

The Chelan County Comprehensive Plan provides guiding goals, policies and land use designations for the rural areas. It also includes in the calculations of population and planning of facilities the urban growth areas for Peshastin and Manson. Peshastin and Manson's subarea plans, within the appendices, are consistent with the County Comprehensive Plan and designate local unique goals, policies and land use designation based on local circumstances. The unincorporated portions of the cities' of Leavenworth, Chelan, Cashmere, Entiat, and Wenatchee Urban Growth Areas are covered by these cities' comprehensive land use plans, as adopted by the County.

The UGA boundaries will be evaluated at least once every ten years, according to RCW 36.70A.130, and may be amended on an annual basis to ensure they are adequate to accommodate the 20 year population projections. The assessment of the UGA capacity is based upon developable lands, environmental constraints, known water quality and quantity issues, housing and economic development needs, public facility and service capacities and the implementation of growth strategies.

The Growth Management Act defines urban growth, and urban governmental services as:

- A. Urban growth refers to growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the

extraction of mineral resources, rural uses, rural development and natural resource lands designated pursuant to RCW 36.70A.170. A pattern of more intensive rural development, as provided in RCW 36.70A.70(5)(d), is not urban growth. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth.

- B. Urban governmental services or urban services include those public services and public facilities at an intensity historically and typically provided in cities, specifically including storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas and normally not associated with rural areas.

VII. Goals and Policies for Urban Growth Area

GOAL LU 5: Encourage development to occur in urban growth areas where adequate public facilities and services exist or can be provided in an efficient manner.

Rationale: Promoting the efficient utilization of land by encouraging urban development within designated urban growth areas will improve the efficiency of infrastructure provision and usage and reduce low density sprawling development within the County.

Policy LU 5.1: Designated urban growth areas should include those areas already characterized by urban growth as well as those areas projected to accommodate future growth.

Rationale: Including areas already characterized by urban growth and those areas projected for urban growth within the urban growth areas is a logical progression that will help to prevent leap frog development, reduce sprawl, and decrease infrastructure costs.

Policy LU 5.2: Designate and size urban growth areas in accordance with the Growth Management Act (RCW 36.70A.110) based on projected population growth; existing land use and transportation systems; capacity of public facilities and services; capacity to fund the necessary infrastructure and capital facilities. Consideration should also be given to addressing grossly irregular corporate boundaries during the process of designating urban growth boundaries.

Rationale: Following these criteria will insure that the urban growth areas will be of sufficient size to allow for future growth and be served with urban level services.

Policy LU 5.3: Implementation regulations should be designed to ensure that urban densities outlined in the comprehensive plan can be accommodated in urban growth areas.

Rationale: Implementation regulations must be consistent with the comprehensive plan. Urban growth areas are the most appropriate location for accommodating urban growth.

Policy LU 5.4: The timing of utility extensions into the urban growth areas should be consistent with the adopted capital facilities plan of the utility purveyor.

Rationale: Public financing for the extension of public facilities and services may not allow for the extension of facilities and services prior to established timelines in the

purveyors capital facility plans. However, coordination between developers and public service purveyors may allow a repayment plan for improvements with provisions for utility assisted financing and latecomer fees.

Policy LU 5.5: Capital Facility Plans should provide for an urban-level of public facilities and services for buildout of lands within the Urban Growth Area.

Rationale: Urban levels of public facilities and services are necessary to accommodate planned urban growth and development.

Policy LU 5.6: Regularly evaluate Urban Growth Area boundaries based on new population projections provided by the State.

Rationale: Changing conditions that could affect growth rates in the future will necessitate a re-evaluation of established urban growth boundaries. Re-evaluations should be done on a more frequent basis than every ten years as required by the Growth Management Act.

Policy LU 5.7: Require developments within Urban Growth Areas to comment to public water and sewer systems, if available at the site. If public water or sewer service is not available, encourage use of community water and sewer systems over individual water wells and septic systems.

Policy LU 5.8: Require curb, gutter and sidewalks for all new roads in urban growth areas, and develop standards for street improvements, including alignment and grading, road surfacing, public road access and right-of-way and stormwater.

Policy LU 5.9: Enhance the visual character of access points to urban growth areas and rural community centers through implementation of development standards addressing signage, setbacks, landscaping and design.

Rationale: Development standards should be adopted to address appropriate signage, setbacks and landscaping to promote an orderly and aesthetic approach into a community.

Policy LU 5.10: Permit development, redevelopment and infill in urban shoreline areas, when consistent with protection of critical areas.

Rationale: The amount of waterfront property suited for residential and multi-use development is limited. The presence of urban-level services will support higher densities, and development at such densities is encouraged in order to make efficient use of the shoreline.

Policy LU 5.11: Promote infill of vacant, partially used, and underutilized land as an important aspect of the efficient development of urban growth.

Rationale: Many parcels of land are available within the residential, commercial, and industrial areas can accommodate further development. Infill within the urban growth area will allow public facilities and services to be provided in a more efficient manner.

VIII. Commercial Development

This sub-element addresses land use goals and policies relating to commercial development. The Citizen Advisory Committees also reviewed the following issues during discussions about

future commercial development: parking, aesthetics, compatibility with adjacent land uses and the efficient provision of public services and facilities. Further guidance for commercial development can be found in the Rural Element.

IX. Urban Growth Area Goals and Policies

GOAL LU 6: Direct future commercial development to designated commercial areas in urban growth areas and to existing rural commercial areas consistent with the Growth Management Act.

Rationale: Commercial activities should occur within urban growth areas which have the infrastructure and services necessary for such development. Under the provisions of the Growth Management Act, commercial development, redevelopment, and infill may also occur in existing rural commercial locations. The Act also provides for cottage industries and small scale tourist commercial activities in rural areas.

Policy LU 6.1: Strengthen existing commercial centers rather than permitting the aimless spread of new development.

Rationale: Strip commercial development causes negative impacts to existing infrastructure and access problems for road systems.

Policy LU 6.2: Support home occupations in residential areas provided such occupations would not alter the residential character of the property or create a nuisance that interferes with the peaceful occupancy of neighboring homes.

Rationale: Home occupations generate substantial economic activity with minimal land use impact.

Policy LU 6.3: Promote employment opportunities for rural residents by permitting isolated cottage industries and small scale businesses where public services and public facilities would be limited to those necessary to serve these uses and be provided in a manner that does not permit low density sprawl.

Rationale: The Growth Management Act provides opportunities for cottage industries and small scale businesses in rural areas.

Policy LU 6.4: Take advantage of Chelan County's rural character and natural setting by promoting small scale, non-residential, recreation and tourist uses, including associated commercial facilities in rural areas.

Rationale: The Growth Management Act provides opportunities for small scale recreation and tourist uses in rural areas.

GOAL LU 7: Support the enhancement and development of successful commercial areas that are aesthetically pleasing, compatible with non-commercial uses, and have adequate access, public facilities, utilities, and parking.

Rationale: Commercial development must take into consideration potential impacts on adjacent land uses and the community.

Policy LU 7.1: Protect residential zones and scenic corridors from visual impacts of commercial development by requiring screening or enclosure of outdoor vehicle or material storage areas.

Rationale: A favorable image is essential for the success of the community, quality of life, and the tourism industry.

Policy LU 7.2: Implement regulations to ensure recreation or tourist uses and associated commercial facilities in rural areas are compatible with surrounding land uses.

Rationale: Potential impacts to surrounding land uses should be addressed.

Policy LU 7.3: Promote commercial development design that maintains high aesthetic quality and includes features to protect less intense land uses, including setbacks, landscape buffers, and screening.

Rationale: Appropriate setbacks and landscape buffers can help mitigate impacts to less intensive land uses.

Policy LU 7.4: Future commercial development should contribute a proportionate share of infrastructure improvement costs, though local government may choose to incentivize desirable commercial development when the public benefits would surpass improvement costs.

Rationale: Existing uses should not be responsible for the costs of system improvements associated with new development. However, development should not be required to contribute to improvements not reasonably related to the development. Desirable commercial development can bring greater benefits to an area than it may cost to provide services.

Policy LU 7.5: Ensure that adequate parking and transportation facilities are provided in conjunction with expansion of or development of additional commercial activities.

Rationale: Sufficient off street parking should be provided in safe and convenient locations and should be compatible with adjacent land uses. Off street parking should accommodate those with special needs.

Policy LU 7.6: Promote and encourage improvements to the appearance of the commercial districts and residential areas throughout the County.

Rationale: Consideration of the compatibility of land uses, and providing for appropriate lighting, curbs and gutters, and sidewalks may encourage improvements to commercial buildings and adjoining residential districts in the County.

Policy LU 7.7: Support placement of commercial activities and land use designations to meet the economic needs of the County and provide for a range of commercial opportunities that support diversification of the area economy.

GOAL LU 8, STEHEKIN: Retain docking facilities at the Stehekin landing for both commercial and private use.

Rationale: The dock is the port area of Stehekin and should be used for the benefit of all.

Policy LU 8.1: Provide the opportunity for appropriate year around moorage at Stehekin landing for commercial and private use.

Rationale: People who work and recreate with watercraft in the Stehekin Area should have access to a portion of the Stehekin boat docks year around.

X. Industrial Development

Existing industrial activities contribute significantly to the economic and employment base of the County. Industrial uses on the whole in the County are primarily resource based. Industrial development opportunities in rural areas are limited due to the lack of available infrastructure including public water and sewer systems. During the discussion of industrial development, several issues and concerns were identified. Some of these include:

- Size of projects
- Emissions from uses (fumes, noise, dust)
- Locating compatible or similar uses together
- Buffering of industrial development and less intensive land uses

Strategies to diversify and provide guidance for industrial development can be found in the Rural Element as well as this sub-element.

XI. Goals and Policies for Industrial Development

GOAL LU 9: Direct future industrial development to designated industrial areas in Urban Growth Areas and LAMIRDs and to existing rural industrial areas, consistent with the Growth Management Act.

Rationale: Industrial activities should occur within urban growth areas and LAMIRDs which have the infrastructure and services necessary for such development. Under the provisions of the Growth Management Act, industrial development, redevelopment, and infill may also occur in existing rural industrial locations. The Act also provides for cottage industries in rural areas.

Policy LU 9.1: Permit siting of industrial uses in rural areas when adverse impacts to the rural community can be minimized and the requirements of the Growth Management Act (RCW 36.70A.365 or RCW 36.70A.070(5)) can be met.

Rationale: Some industrial uses, because of the nature of their operations, are more appropriately located in rural areas.

Policy LU 9.2: Promote the use of innovative development techniques, such as industrial parks, to improve the aesthetic appearance of industrial development and promote positive working environments.

Rationale: Industrial parks can be used to promote the human working environment through the provision of convenient and safe access, parking and landscaping. Site design of industrial parks can improve the aesthetic appearance of industrial developments.

Policy LU 9.3: Encourage industrial development to locate in areas with access to necessary support facilities, services, and transportation systems, and where industrial development would be compatible with nearby land uses.

Rationale: Industrial development should not conflict with adjacent land uses, should be served by a convenient transportation system and have access to necessary public facilities and services.

Policy LU 9.4: Provide necessary public facilities and services for development, infill and redevelopment of existing industrial or mixed use sites outside of urban growth areas, where such services can be provided in a manner that does not promote sprawl, consistent with the Growth Management Act.

Rationale: The Growth Management Act provides for the redevelopment and infill of existing industrial areas.

Policy LU 9.5: Promote revitalization of existing developed industrial areas suitable for continued use.

Rationale: Continued use and on-going redevelopment of developed sites will take advantage of existing infrastructure investments.

Goal LU 10: Maintain Chelan County's existing industrial base and promote further diversification of the area's economy with industries that are compatible with surrounding land uses.

Rationale: Existing industrial and resource based industries provide the foundation for the area's economy. Industrial development and redevelopment should take into consideration impacts to surrounding land uses.

Policy LU 10.1: Encourage public/private partnerships for targeted identification and development of industrial sites.

Rationale: Public/private cooperation can more effectively help implement economic development and diversification of the County.

Policy LU 10.2: Future industrial development should contribute a proportionate share of infrastructure improvement costs, though, local government may choose to incentivize desirable industrial development when the public benefits would surpass improvement costs.

Rationale: Desirable industrial development can bring greater benefits to an area than it may cost to provide services.

Policy LU 10.3: Require industrial development to provide adequate setbacks, landscape buffers and/or screening to aid the transition between industrial development and other land uses.

Rationale: Appropriate setbacks, landscape buffers, and screening provided by vegetation, fencing and other methods can help mitigate impacts to less intensive land uses.

Policy LU 10.4: When evaluating industrial development proposals, ensure potential impacts on nearby properties and public facilities and services are avoided, minimized, or mitigated.

Rationale: Industrial developments can be fairly intensive land uses. When reviewing industrial development proposals, impacts on nearby properties and public facilities and services must be addressed.

Policy LU 10.5: Encourage the development of light industries to diversify the area economy while minimizing negative environmental impacts.

Rationale: Further development of light industries would help diversify the area's economy while minimizing negative environmental impacts.

Policy LU 10.6: Develop regulations to ensure that cottage industries in rural areas are compatible with surrounding land uses.

Rationale: Impacts to surrounding land uses should be addressed.

Policy LU 10.7: Ensure provision of adequate off street parking in conjunction with the expansion or development of industrial sites.

Rationale: Sufficient off street parking should be provided in safe and convenient locations and should be compatible with adjacent land uses. Off street parking should accommodate those with special needs.

Policy LU 10.8: Industrial and natural resource land uses that constitute a nuisance, making them inherently unsuitable for urban areas, may be permitted on a limited basis in remote rural areas, provided that the extension of urban services would not be required and that potential impacts on surrounding land uses can be addressed.

Rationale: Some industrial and natural resource based uses, due to their nature, are not appropriate to be located in urban growth areas but can be located in remote locations within the limits set by rural governmental services, and the protection of the rural character and critical areas. Said uses can play an important role in support of other industries and businesses in the county.

XII. Open Space/Recreation

Open space is an important component of the natural environment and supports natural systems, aesthetic, recreational and economic resources in the rural landscape. Open space is minimally developed or undeveloped land that serves a functional role in the life of a region. Open space helps define the rural character of the County. Open space related to recreation is specifically addressed in the Park and Recreation Element.

Open space lands in Chelan County consist of critical areas, parks and recreational land, wildlife corridors and conservation areas. Within the County a significant amount of land is owned and managed by Federal and State agencies. These areas are an important open space resource providing numerous benefits to the County and its residents.

Open space lands may have some restrictions on their use or management. If the County acquires sufficient interest in a property, or control of resource development, based on public interest, additional restrictions may occur. The County may acquire, by donation or purchase, land ownership and/or easements within these open space corridors.

XIII. Goals and Policies for Open Space/Recreation

GOAL LU 11: Preserve open space for the enjoyment of County residents and visitors.

Rationale: Open space is a valuable resource for the enjoyment of residents and visitors. The retention of open space helps to maintain the natural beauty and rural character of the County.

Policy LU 11.1: Encourage the provision and retention of open space through regulations that allow innovative techniques and incentive-based programs, such as the public benefit rating system, the open space tax program, purchase of development rights or conservation easements by public or private entities, and land trusts.

Rationale: Innovative site and development designs and incentive programs help to encourage the retention and provision of open space.

Policy LU 11.2: Encourage multiple uses of public lands to support open space and recreational use in the County.

Rationale: Public lands can provide opportunities for open space preservation and recreation opportunities while providing for the management of valuable natural resources by public entities.

Policy LU 11.3: Encourage preservation of outstanding natural and scenic resources, critical areas, and significant historic and cultural resources.

Rationale: Protection of these resources will help to maintain the high quality of life enjoyed by residents and visitors of Chelan County.

GOAL LU 12: Encourage development and maintenance of recreational facilities and opportunities to meet the needs of residents and visitors.

Rationale: Recreational opportunities help to promote the area for tourism and provide for a high quality of life.

Policy LU 12.1: State and publicly owned tourist/recreation destinations should provide adequate sanitary facilities.

Rationale: Adequate sanitary facilities help to maintain the quality of recreation opportunities enjoyed by residents and tourists in the area.

Policy LU 12.2: Prepare a comprehensive study of underutilized public rights of way and easements and assess the potential for public benefit through the following steps:

- Identify all undeveloped or underutilized public rights of way and easements and determine ownership status.
- Establish criteria to evaluate public benefit, including, but not limited to, lake access, park siting, trails, view corridors, resale or exchange, open space, critical areas, utility purposes, and property access streets.
- Assess each site's value using criteria established in step "b" to determine value for use or sale.
- Develop and encourage the implementation of a plan for use or sale of each site.

Rationale: Underutilized right of ways and easements offer an opportunity for significant public benefit as open space and recreation.

Policy LU 12.3: Support the development of recreation districts in the County where local support can be demonstrated.

Rationale: This is an opportunity to meet open space and recreation needs within the County.

XIV. Master Planned Resorts

The scenic and natural amenities located within Chelan County afford opportunities for varied recreational activities. It is the intent of this comprehensive plan to provide guidance for Master

Planned Resorts (MPR) as authorized by the general principles contained in RCW 36.70A master planned resorts, as amended.

MPRs are developments with urban characteristics that may be located outside of urban growth areas. A MPR is a fully integrated, self-contained planned unit development, in a setting of significant natural amenities, with its primary focus on destination resort facilities, consisting of short term visitor accommodations associated with a range of developed on-site indoor and/or outdoor recreational facilities. Capital facilities, utilities, and services, including those related to sewer, water, stormwater, security, fire suppression, and emergency medical provided on-site shall be limited to meet the needs of the master planned resort. Implementation regulations will be established for the approval of MPRs that are consistent with the goals and policies contained in this plan and meeting the future development goals of the county.

XV. Goals and Policies for Master Planned Resorts

GOAL LU 13: Provide opportunities for Master Planned Resorts (MPRs), consistent with the provisions of RCW 36.70A.360, to create a diversity of recreational, tourist and economic opportunities in Chelan County.

Rationale: State law contains criteria that are required to be utilized in the review and formation of development standards for MPRs.

Policy LU 13.1: The primary focus of Master Planned Resorts are as a fully-contained destination resorts consisting of short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreation facilities, mix of related convenience goods and services, short-term residential uses, capital facilities, utilities and services and, when feasible, an affordable housing component for employees.

Rationale: RCW 36.70A.360 requires MPRs to have a primary focus on destination resort facilities.

Policy LU 13.2: MPRs should not occur in areas that are designated as agricultural or forest lands of long-term commercial significance under RCW 36.70A.170, unless a finding can be made that the land is better suited in the long-term for development as a MPR than for the commercial harvesting of timber or agricultural production.

Rationale: Chelan County places a prime importance on maintaining the current inventory of commercial forest and commercial agricultural land which is a significant economic contributor to the county. Development of MPRs in rural areas would reduce the amount of productive land for agricultural or forest uses, as required by RCW 36.70a.360(4)(c).

Policy LU 13.3: Ensure the compatibility of MPRs with adjacent land uses through appropriate site design which emphasizes physical and visual separation from the nearest existing developed areas, preservation and protection of critical areas, and cluster development surrounded by open space.

Rationale: The urban characteristics of a MPR may create conflicts with rural uses.

Policy LU 13.4: Development plans for MPRs should blend site development and architecture with the natural character and features of the land, topography, vegetation, geology, slope, soils

etc. The MPR design should also reflect relevant cultural heritage and preservation of the area's rural character or natural resource uses.

Rationale: MPRs are intended to take advantage of the natural amenities, and character of the area. In order to ensure that those amenities continue and are undiminished, the design of the MPR must be compatible with the surrounding area.

Policy LU 13.5: Permanent residential uses may be included within the boundaries of a MPR, provided such uses are integrated into and support the on-site recreational nature of the resort.

Rationale: The primary focus of the MPR is for destination resort facilities with short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreation facilities. Given this focus, single-family or multi-family residential development shall not be the primary component of MPRs.

Policy LU 13.6: Necessary capital facilities, utilities and services may be provided to a MPR by outside service providers, including municipalities and special service districts, provided that all costs associated with service extensions and capacity increases directly attributable to the MPR are fully born by the resort, and provided that such facilities and utilities serve only the MPR and/or urban growth areas.

Rationale: Due to the size and remote distance from existing services, significantly larger costs of extending services and capacity result from an MPR than from other forms of development. Limiting the use of those services outside of an UGA will limit unwanted development outside of those areas.

Policy LU 13.7: Existing resorts seeking designation as Master Planned Resorts should have been completed before July 1, 1990 and planned as self-contained integrated developments focused on short-term visitor accommodations and recreational facilities.

Policy LU 14.8: After designation as a MPR, new urban and suburban land uses should be precluded in the vicinity surrounding the resort, except in areas otherwise designated for urban growth or LAMIRDS.

Rationale: MPRs are created to maintain rural character while allowing development to take advantage to natural amenities. Additional urban or suburban land uses around an MPR will diminish the rural character and should be directed to other areas designated for those types of uses, and as required by RCW 36.70A.362(2).

Policy LU 13.9: An existing resort may be included or expanded as an MPR when consistent with the provisions for a new MPR, critical areas and other regulations.

Rationale: The impacts of the existing resort on the surrounding area have been mitigated in a prior process. The expansion of a resort may create new impacts that must be identified and mitigated with the MPR process prior to approval.

Chapter 3 RURAL ELEMENT

I. Introduction

The Growth Management Act (GMA) requires a Rural Element in the County's comprehensive plan. The Rural Element contains goals and policies to guide the development of rural land including the identification of the general types of uses to be permitted. Rural lands are all lands not designated for urban growth, or agriculture, forest or mineral resource lands.

The GMA recommends providing for a variety of residential densities at levels that are consistent with the preservation of rural character and the requirements of the Rural Element. The Rural Element provides guidance on appropriate land uses and densities for Chelan County's rural areas. Rural governmental services should be provided at a level necessary to support and sustain the land use pattern planned for rural areas. Rural governmental services should not provide the level of service which promotes growth or sprawl in rural areas. The Growth Management Act provides the following definitions of rural development, rural character and rural governmental services:

- A. Rural development refers to development outside the urban growth area and outside agricultural, forest, and mineral resource lands designated pursuant to RCW 36.70A.170. Rural development can consist of a variety of uses and residential densities, including clustered residential development, at levels that are consistent with the preservation of rural character and the requirements of the rural element. Rural development does not refer to agriculture or forestry activities that may be conducted in rural areas.
- B. Rural governmental services or rural services include those public services and public facilities historically and typically delivered at an intensity usually found in rural areas, and may include domestic water systems, fire and police protection services, transportation and public transit services, and other public utilities associated with rural development and normally not associated with urban areas. Rural services do not include storm or sanitary sewers, except as otherwise authorized by RCW 36.70A.110(4).
- C. Rural character refers to the patterns of land use and development established by a county in the rural element of its comprehensive plan:
 - 1. In which open space, the natural landscape, and vegetation predominate over the built environment;
 - 2. That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;



3. That provide visual landscapes that are traditionally found in rural areas and communities;
4. That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;
5. That generally do not require the extension of urban governmental services; and
6. That are consistent with the protection of natural surface water flows and ground water and surface water recharge and discharge areas.

II. Intent

It is the intent of this Rural Element to preserve the rural character and way of life in the rural area, and to protect private property rights while considering impacts to the environment of Chelan County.

As noted in the Land Use Element, the majority of land within the County is in Federal or State ownership, and is therefore considered unbuildable within the planning horizon of this plan.

As documented in the Parks and Recreation Element, the Federal and State lands provide the County with one of the largest rural and natural park lands, these include: Glacier Peak Wilderness, Lake Chelan Sawtooth Wilderness, Wenatchee National Forest, Alpine Lakes Wilderness, Henry M Jackson Wilderness, North Cascades National Park and Lake Chelan National Recreation Area. These very large wilderness and park areas are not expected to develop but rather enhance the character of the County as a recreation and natural resource to locals and visitors.

In addition to Chelan County's rural character being dominated by park lands, Chelan County has a history of agricultural uses - primarily orchards of various sizes, residential rural living; forest practices, rural industrial activities, mining and small town settlements. Over the last ten years, some areas have transitioned to vineyards, wineries, smaller-scale agricultural production and agricultural and recreational tourism.

Within the Land Use Element each region of the County has been defined by the unique characteristics and rural character, including innovative tools for development. The goals and policies in the Rural Element are to guide land use activities in and surrounding rural lands. Goals and policies have been developed for the preservation of the rural character by:

- Containing or otherwise controlling rural development;
- Assuring visual compatibility of rural development with the surrounding rural area;
- Reducing the inappropriate conversion of undeveloped land into sprawling, low-density development in the rural area;
- Protection of critical areas, surface water and ground water resources; and,
- Protecting against conflicts with the use of agricultural, forest, and mineral resource lands of long-term commercial significance, see Resource Element.

The County land use designations can be grouped as Rural, LAMIRD, Resource and Urban Growth Area. This Element addresses the siting criteria and Goals and Policies of the Rural and LAMIRD designations. Additionally, each designation is broadly defined with intended uses and densities under the siting criteria. Services for the rural lands are addressed in the Capital Facilities and Utilities Elements.

Rural designations include: Rural Residential/Resource 2.5, 5, 10 and 20

LAMIRD designations include: Rural Waterfront; Rural; Rural Village; Rural Recreational/Residential; Rural Commercial; and, Rural Industrial

III. Goals and Policies – Rural Designations

Goal RE 1: Maintain a balance between human uses and the natural environment in rural areas of the County.

Rationale: Residents who choose to live in the rural areas need to realize that their lifestyle has an impact on the natural environment and efforts need to be made to find and maintain a balance between human activity and the natural environment.

Policy RE 1.1: Rural development shall avoid and mitigate impacts to critical areas, which have value as wildlife habitat and open space.

Rationale: Wildlife habitat and open space are all land uses which are typically located in rural areas and are an important part of the reason why people choose to live in a rural setting. Therefore, development may occur when suitable mitigation is provided to address impacts to Critical Areas existing in rural lands.

Policy RE 1.2: Uses not specifically addressed or prohibited in the comprehensive plan are not automatically allowed and should be reviewed on their own merits for compatibility with existing goals and policies.

Rationale: Should there be a new land use or an innovative technique towards the management of growth, they can be reviewed during the annual review process to analyze their compatibility with existing goals and policies of the plan.

Policy RE 1.3: Establish a variety of rural land use designations that would accommodate a wide variety of rural uses and densities consistent with the County's rural character.

Rationale: The rural areas of Chelan County contain a variety of land uses and densities that comprise the rural character of the area. Continuing this pattern, will help to maintain and enhance this rural character.

Policy RE 1.4: Essential public facilities and/or services should be sited and developed in a manner that maintains the rural character of the area. Essential public facilities and/or services are appropriate for location in rural areas when suitable mitigation is provided.

Rationale: Essential public facilities and/or services should not compromise the goal of the Rural Lands.

Goal RE 2: Maintain natural environment features that support and enhance natural resource-based economic activities, wildlife habitats, traditional rural lifestyles, outdoor recreation, and open space.

Rationale: There is value in rural lands that have in the economic vitality, rural lifestyles, and healthy environments.

Policy RE 2.1: Review rural development applications to determine the potential for groundwater contamination.

Rationale: Preventing groundwater contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm.

Policy RE 2.2: Rural development should not preclude use of rural lands for agriculture and timber production and should avoid or mitigate impacts on existing agriculture or timber operations.

Rationale: Productive agriculture and timber lands exist in the rural areas. Potential negative impacts to these lands from more intense land uses should be avoided through the application of appropriate mitigation measures and/or the use of innovative techniques.

Policy RE 2.3: Ensure that rural development (residential, commercial and industrial) near designated resource lands occurs in a manner that minimizes potential conflicts and reduces conversion of farm and forest land to non-resource uses. Develop mitigating measures to provide adequate protection against potential conflicts.

Rationale: The close proximity of rural lands to resource lands is unavoidable. The presence of these resource activities such as forests and agricultural production adds to the character of these rural lands. However, many activities which take place on these resource lands are not compatible with other activities, especially residential uses. Since the conservation of these resource lands may be jeopardized by development which is not sensitive to the activities that characterize a resource based land use; it is important to provide mitigating measures that will provide an adequate transition area between potentially conflicting land uses.

Policy RE 2.4: Encourage the preservation and protection of unique, rare and fragile natural features, scenic vistas, unstable bluffs, and culturally significant features.

Rationale: These features contribute to the character and attractiveness of the rural area. Their preservation enhances the openness and aesthetic quality of the area. The use of voluntary incentives including the Chelan County Public Benefit Rating System used in evaluating applications for current use taxation of property under the Open Space Program and clustering provisions will help to encourage the preservation and protection of these areas.

Policy RE 2.5: When open space areas are provided in a development, provisions shall be made to identify: who owns the open space, what uses or activities will be permitted on it, how the area will be maintained, and whether public access will be provided. This information shall be contained on the face of the plat.

Rationale: One of the drawbacks of providing open space is determining how it should be managed. It is important to establish this at the design stage so everyone is clear on their responsibilities. When the information is noted on the face of the plat, all subsequent property owners will be aware of the open space provisions.

Policy RE 2.6: To achieve a variety of rural densities and uses, allow for development clustering, density transfer, design guidelines, conservation easements, and other innovative techniques to accommodate growth consistent with rural character.

Rationale: The amount of privately owned developable land in the County is limited. Innovative techniques can provide for rural development while protecting the rural character of the County.

Policy RE 2.7: Protect local environmental and visual resources in hillside areas by encouraging development to locate on existing benches and terraces and by applying appropriate development standards and performance criteria.

Rationale: Hillside residential development offers a number of potential advantages, if properly established. If hillsides are to be both used and enjoyed by present and future residents of the area, development policies must include soundly based standards and performance criteria, yet have sufficient flexibility to fit varied environmental conditions.

Policy RE 2.8: Protect hillside areas from erosion by requiring development to adequately capture storm drainage and avoid duplication of road systems.

Rationale: Road cuts impact on the visual quality of hillsides and are a source of erosion and shall be minimized.

Goal RE 3: Develop at densities such that demands will not be created for urban levels of public services and facilities in rural areas.

Goal Rationale: Development in rural areas should not be at densities which require urban levels of service. Development at lower densities will also help protect the rural quality of life.

Policy RE 3.1: Provide government services in non-urban areas at a limited level appropriate to the rural setting, including police, fire, roads, and general utilities.

Rationale: Limited public facilities and services will be provided to persons living and working in rural areas. Urban levels of services should not extend beyond urban growth areas, except where provided for under the Growth Management Act.

Policy RE 3.2: Permit development of rural areas adjacent to urban growth areas at densities that will allow for orderly extension of urban utilities and services as urban growth areas expand in the future.

Rationale: Land that is immediately adjacent to an urban growth area is unique in that it has a greater potential to eventually develop at higher densities. Therefore, it is appropriate that these lands develop at an appropriate rural density so that when they do obtain the opportunity to develop in an UGA, they will permit the orderly extension of public utilities.

Policy RE 3.3: Promote orderly expansion of urban facilities and infrastructure by including rural areas adjacent to urban growth areas with capital facilities and transportation plans. These plans should try to anticipate, where appropriate, where future additional infrastructure and facilities will be sited.

Rationale: Anticipation of future siting needs for facilities and infrastructure will help ensure the orderly expansion of urban growth areas.

Policy RE 3.4: Promote use of innovative site designs that employ alternatives to conventional on-lot wastewater disposal systems.

Rationale: Innovative site designs can take advantage of alternative wastewater systems such as community drain-fields within open space areas which may be effective in reducing potential failures and contamination of water sources.

Policy RE 3.5: Where consistent with State and local requirements, encourage innovative site designs that utilize community water systems.

Rationale: Innovative site designs can provide an affordable option for rural residential development since many of the site improvement costs and restrictions associated with individual wells can be distributed equally between all the home sites.

Policy RE 3.6: Develop fire protection standards for all commercial, industrial and residential development in rural areas, including, but not limited to, use of fire retardant building materials, access to on-site water bodies (lake, ponds, cisterns, pools, etc), and firewise vegetation removal or fire breaks.

Rationale: Rural development depends upon adequate safety standards to protect life and property in rural areas.

Policy RE 3.7: Seek input from rural fire districts and the County Fire Marshal on design standards for adequate ingress and egress to new developments to address fire safety issues.

Rationale: To provide adequate escape routes for residents and emergency vehicles.

Policy RE 3.8: Appropriate rural densities and designations should be applied which maintain the rural character, accommodate rural population projections and can be provided with rural services within the constraints of the County Budget and Capital Facility Plan.

Rationale: In order to plan for and fund the proper size and extent of supporting public facilities, utilities and services, the density and extent of future development areas must be specified.

Policy RE 3.9: Allow the infill, development, and redevelopment of existing intensely developed rural areas where consistent with the goals and policies of the comprehensive plan, including recreational, residential, mixed-use, and shoreline developments.

Rationale: Rural recreational developments provide the opportunity for residential development, multiple uses of a recreational area, and innovative techniques to meet the needs and desires of the public to live and recreate in rural areas, with access or close proximity to natural amenities.

Policy RE 3.10: Necessary public facilities and public services may be provided for the development, infill, and redevelopment of existing intensely developed residential, mixed use, shoreline, commercial and industrial areas outside of urban growth areas. Provision of such services shall not be provided in a manner which permits low density sprawl outside of the boundary of the designation area.

Rationale: This policy recognizes the existence of intensely developed areas in rural lands and provides for the provision of necessary public facilities and services.

Goal RE 4: Encourage rural economic development consistent with the goals and policies of the Chelan County Comprehensive Plan and the Growth Management Act.

Rationale: The comprehensive plan provides for a range of rural economic activities including: rural agriculture, forestry, and mineral resource industries as well as a range of rural development opportunities consistent with the Growth Management Act.

Policy RE 4.1: Permit rural development of small scale recreational, tourist, and resort uses that rely on a rural location and setting, including commercial facilities to serve such uses, provided they do not include new residential development and are otherwise consistent with other goals and policies of this plan.

Rationale: These uses are appropriate in rural areas when it can be demonstrated that they are compatible with the goals and policies of the comprehensive plan. Public services and public facilities shall be limited to those necessary to serve the recreational or tourist use and shall be provided in a manner that does not permit low density sprawl.

Policy RE 4.2: Additional commercial centers or activities may be considered in existing rural activity centers, villages, hamlets, or crossroad developments in the rural area during the yearly amendment process for the comprehensive plan when consistent with RCW 36.70A.070(5) and the goals and policies of the comprehensive plan.

Rationale: Limited commercial development may be appropriate in some rural areas to meet the needs of residents and visitors.

Policy RE 4.5: Encourage new visitor facilities and services, consistent with the national mandate for recreation and visitors in the Lake Chelan National Recreation Area and in coordination with the General Management Plan for the Lake Chelan National Recreation Area.

Rationale: Growth of the state and all associated areas indicates increased visitor use for Stehekin. Tastefully constructed and environmentally sensitive installations to support the increased number of visitors are required and desired.

Policy RE 4.6: MPRs may be considered within rural areas when consistent with the provisions of the comprehensive plan and RCW 36.70A.360.

Rationale RCW 36.70A.040 requires all land use regulations to be consistent with and implement the adopted comprehensive plan.

Goal RE 5: Support RCW 17.10 purpose to limit economic loss and adverse effects to Washington's agriculture, natural, and human resources due to the presence and spread of noxious weeds on all terrestrial and aquatic areas in the State.

Policy RE 5.1: Encourage public awareness and removal of noxious weeds through the Chelan County Noxious Weed Department and Control Board.

IV. Designations/Siting Criteria – Rural:

The following designations apply to the implementation of the Comprehensive Plan through the zoning map. The following purpose and locational guidelines provide a basic understanding of the zoning districts intent and how they relate to the Comprehensive Plan designations, see the Land Use Element.

A. RR20, RURAL RESIDENTIAL/RESOURCE: 1 DWELLING UNIT PER 20 ACRES

Purpose: To allow for low intensity rural development, agricultural and forestry uses which do not require the extension of services or infrastructure. These areas provide greater opportunities for protecting sensitive environmental areas and creating open space typical of a rural setting.

Uses appropriate for these areas include: open space; residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: natural resource support facilities and services; mineral resource activities; intensification of existing small scale recreational or tourist uses that rely on a rural location or setting, but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses; home occupations; bed and breakfasts; and community facilities.

Density: One (1) dwelling unit per twenty (20) acres.

Locational Guidelines:

1. Geographical and Geological Characteristics. These areas tend to be remote or have been historically rural in character. Soil characteristics, steep slopes or other physical constraints to development may be present. Large tracts of undeveloped, open space exist.
2. Natural Resources. The area may have agricultural or forest land practices of both small scale and/or commercial significance. The area may also be adjacent to designated resource lands.
3. Public Services. Uses do not require extension or provision of urban level services. In many cases public roads or infrastructure are not available to serve the area, and may not be available in the 20 year planning period.

4. Existing Land Uses. Dispersed single family residences, farms or forest management activities, and other low intensity rural development may be present. Predominant parcel sizes are 20 acres or greater.

B. RR10, RURAL RESIDENTIAL/RESOURCE: 1 DWELLING UNIT PER 10 ACRES

Purpose: To allow for rural development, forestry and agricultural uses consistent with the rural character and rural development provisions outlined in the goals and policies of the comprehensive plan. These areas can function as areas of transition between resource lands and areas of more intense rural or urban development. These areas also provide opportunities for protecting sensitive environmental areas and creating open space typical of a rural setting.

Uses appropriate for these areas include: open space; residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: natural resource support facilities and services; mineral resource activities; intensification of existing development or new development of small scale recreational or tourist uses that rely on a rural location or setting but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses that are not principally designed to serve the existing and projected rural population and nonresidential uses, but do provide for job opportunities for rural residents; home occupations; bed and breakfasts; and community facilities.

Density: One (1) dwelling unit per ten (10) acres. Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. Geographical and Geological Characteristics. The area is predominantly rural in character. Soil characteristics, steep slopes or other physical constraints to development may be present. Significant areas of undeveloped open space may exist.
2. Natural Resources. The area may have agricultural or forest land practices of both small scale and/or commercial significance. The area may also be adjacent to designated resource lands.
3. Public Services. Uses do not require the extension or provision of urban level services. These areas are rural in character and may have access or limited access to rural governmental services and infrastructure. These areas may have the potential to be provided with rural governmental services within the 20 year planning period.
4. Existing Land Uses. Dispersed single family residences, farms or forest management activities and other rural development may be present. Predominant parcel sizes are 10 acres or larger.

C. RR5, RURAL RESIDENTIAL/RESOURCE: 1 DWELLING UNIT PER 5 ACRES

Purpose: Provides opportunities for small scale agricultural activities, and rural development consistent with the rural character and rural development provisions outlined in goals and policies of the comprehensive plan. These areas may provide opportunities for protecting sensitive environmental areas and open space typical of a rural setting. RR5 designations adjacent to urban growth areas are intended to encourage the preservation of rural areas until such time as they serve as urban growth

areas and urban services become available. RR5 designations can also act as buffers between designated resource lands and more intense rural or urban development.

Uses appropriate for these areas include: open space; residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: natural resource support facilities and services; mineral resource activities; intensification of existing development or new development of small scale recreational or tourist uses that rely on a rural location or setting but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses that are not principally designed to serve the existing and projected rural population and nonresidential uses, but do provide job opportunities for rural residents; home occupations; bed and breakfasts; and community facilities.

Density: One (1) dwelling unit per five (5) acres. Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. **Geographical and Geological Characteristics.** The area is predominantly rural in character. Soil characteristics or other physical constraints to development may also be present. Some areas of undeveloped, open space may exist. The area may also be adjacent to designated urban growth areas.
2. **Natural Resources.** The area may have agricultural or forest land practices of both small scale and/or commercial significance. The area may also be adjacent to designated resource lands.
3. **Public Services.** Uses do not require extension or provision of urban level services. Rural governmental services are available or may be provided for within the 20 year planning period.
4. **Existing Land Uses.** Dispersed single family residences, farms or forestry uses, cottage industries and small businesses, and other rural development may be present. Predominant parcel sizes are 5 acres or larger.

D. RR2.5, RURAL RESIDENTIAL: 1 DWELLING UNIT PER 2.5 ACRES

Purpose: To maintain the range of rural development opportunities consistent with the rural character and rural development provisions outlined in the goals and policies of this comprehensive plan. These areas can provide buffering or transitions between existing rural developments and areas of higher or lower densities. This designation should not function as an urban reserve area, although these areas may someday be incorporated into an urban growth area.

Uses appropriate for these areas include: residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: intensification of existing development or new development of small scale recreational or tourist uses that rely on a rural location or setting but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses that are not

principally designed to serve the existing and projected rural population and nonresidential uses, but do provide job opportunities for rural residents; home occupations; bed and breakfasts; and community facilities.

Density: One (1) dwelling unit per 2.5 acres. Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. **Geographical and Geological Characteristics** The area may have moderate soil limitations and may have other limited physical constraints to development. The area may be immediately adjacent to existing residential or rural developments. The area may be adjacent to urban growth areas.
2. **Natural Resources.** The area has limited resource management potential. The area may be adjacent to resource lands.
3. **Public Services.** Uses do not require extension or provision of urban levels of services. Rural governmental services and infrastructure are typically available, planned and or funded for.
4. **Existing Land Uses.** Single family residences, agricultural uses, cottage industries and small businesses, and other rural development may be present. Predominant parcel sizes are currently 2.5 acres or greater in size but typically less than 5 acres.

E. RURAL PUBLIC LANDS AND FACILITIES (RP):

Purpose: To provide open space, recreational opportunities, sites for necessary public facilities, utilities and services, and protection of critical areas. Encourage joint public/private ventures, where consistent with the rural development and rural character provisions, and goals and policies of this comprehensive plan.

Uses appropriate for these areas include: public facilities and services, open space and developed open space; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: natural resource support facilities and services; mineral resource activities; intensification of existing or new development of small scale recreational or tourist uses that rely on a rural location or setting but that do not include new residential development; and intensification of development on lots containing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses that are not principally designed to serve the existing and projected rural population and nonresidential uses.

Locational Guidelines:

1. **Geographical and Geological Characteristics:** These lands are in public ownership and may contain critical areas. The County has no jurisdiction over federal lands.
2. **Natural Resources:** Public lands may contain resource lands.

Public Services: Services should be limited to the needs of the public agencies. Extension of public services can be considered for joint public/private ventures if consistent with the provisions of the comprehensive plan. Development in these areas shall not create a need for urban governmental services.

V. Limited Areas of More Intensive Rural Development (LAMIRD)

Introduction

Generally, the rural element is to provide for a variety of rural densities, uses and facilities and services, and to recognize that a variety of developments already exist in rural areas. This includes some development that is more compact than the surrounding rural lands, which are considered to be Limited Areas of More Intensive Rural Developments (LAMIRD). There are three distinct types of LAMIRDs that may be designated pursuant to RCW 36.70A.070(5)(d). Type 1 can either be commercial, industrial, residential, or mixed-use. Type 2 delineates existing commercial tourist or recreational commercial uses as well as allowing some new commercial tourist uses that rely on a rural location. The Type 3 LAMIRD identifies isolated small-scale businesses. Generally, limited areas of more intensive rural development include necessary public facilities and public services to serve that area.

Intent

LAMIRDs are designated to identify more intense areas of existing development, and to minimize and contain those existing developed areas within the rural lands. LAMIRDs are not intended by the Legislature to be mini-UGAs, suburbs or areas for significant future development. LAMIRDs are rural; they are contained and compact, and, with minor exceptions, were built before July 1, 1990. Though the LAMIRD will recognize existing development, it cannot promote sprawl or low-density growth in the rural area. In designating LAMIRDs, the County has established clear criteria to address each type of LAMIRD. Those criteria generally address the need to contain and control existing development, and the need to preserve the character of the community, its physical boundaries and prevent abnormally irregular boundaries. The criteria will also determine how public facilities and services will be provided in a manner that does not permit low density sprawl.

General LAMIRD Criteria

Lands designated as LAMIRDs will not extend beyond the logical outer boundary of the existing area or use. Existing areas are those that are clearly identifiable and contained and where there is a logical boundary delineated predominately by the built environment, but may also include limited undeveloped lands within the LAMIRD. Generally, future development may occur as infill or redevelopment, although new development can occur in some LAMIRD types. In establishing the logical outer boundary the County will address (A) the need to preserve the character of existing natural neighborhoods and communities, (B) physical boundaries such as bodies of water, streets and highways, and land forms and contours, (C) the prevention of abnormally irregular boundaries, and (D) the ability to provide public facilities and public services in a manner that does not permit low-density sprawl. Upon the initiation or update of a community and/or sub-area plan in the rural areas of the County, future LAMIRDs will be evaluated and existing LAMIRD designations will be updated as necessary to be consistent with the Growth Management Act provisions in RCW 36.70A.070(5) for Limited Areas of More Intensive Rural Development (LAMIRDs).

Type 1 LAMIRD- commercial, industrial, residential, or mixed-use.

Type 1 LAMIRDs are described as rural development consisting of existing and potential infill of commercial, industrial, residential, or mixed use, whether characterized as shoreline developments, villages, hamlets, rural activity centers, or crossroads developments. These LAMIRDs must meet the general criteria listed above, and must be principally designed to serve the existing and projected rural population (with the exception of industrial LAMIRDs and/or industrial uses within a mixed use LAMIRD, which are not required to meet this standard). It is also important that these designations are consistent with the character of the existing uses, particularly in terms of building size, scale, use or

intensity. Changes in use from vacant land or some previous use may be allowed, provided the new use complies with these above requirements.

Type 2 LAMIRD- existing commercial tourist or recreational commercial uses as well as some new commercial tourist uses in a rural location.

Type 2 LAMIRDs are an intensification of development on lots containing, or new development of, small-scale recreational or tourist uses, including commercial facilities to serve those recreational or tourist uses that rely on a rural location and setting. This type of LAMIRD designation is not required to only serve the existing and projected rural population, but it also may not include new residential development. Public services and public facilities are limited to those necessary to serve the recreation or tourist use and will be provided in a manner that does not permit low-density sprawl.

Type 3 LAMIRD- isolated non-residential, cottage industries and small-scale businesses.

Type 3 LAMIRDs are the intensification of development on lots containing isolated nonresidential uses or new development of isolated cottage industries and isolated small-scale businesses. This type of LAMIRD is not principally designed to serve the existing and projected rural population and nonresidential uses, but does provide job opportunities for rural residents. The County may allow the expansion of small-scale businesses as long as those small-scale businesses conform with the rural character of the area as defined by the County through a process consistent with RCW 36.70A.030(14). The County may also allow new small-scale businesses to utilize a site previously occupied by an existing business as long as the new small-scale business conforms to the rural character of the area as defined by the County. Public services and public facilities are limited to those necessary to serve the isolated nonresidential use and will be provided in a manner that does not permit low-density sprawl.

VI. Goals and Policies – LAMIRDs

Where applicable, existing policies identified within the Comprehensive Plan which are consistent with LAMIRD designations should be considered when addressing LAMIRD development.

GOAL RE 6: Designate limited areas of more intensive rural development (LAMIRDs) for infill, development or redevelopment of existing commercial, industrial, residential or mixed use areas.

Policy RE 6.1: Development in LAMIRDs, except for industrial areas or industrial sites within mixed-use areas, should be principally designed to serve the existing and projected rural population.

Rationale: Requirements of the Growth Management Act allowing more intense development in rural areas include a provision that these areas serve primarily the existing and projected rural population, generally to ensure rural sprawl does not occur where inappropriate.

Policy RE 6.2: Apply development standards in LAMIRDs to ensure the design of development or redevelopment is consistent with the character of the existing areas and the proposed use conforms to the intent of this Comprehensive Plan.

Rationale: Requiring new and/or redevelopment within LAMIRD designations to be consistent with the provisions of this element ensure that the County remains consistent with the requirements of the Growth Management Act with respect to LAMIRD designations.

VII. Designations/Siting Criteria – LAMIRDs:

The following designations apply to the implementation of the Comprehensive Plan through the zoning map. Comprehensive Plan Land Use Designation for the Rural areas are identified and discussed in the Land Use Element. The following purpose and locational guidelines provide a basic understanding of the zoning districts intent and how they relate to the Comprehensive Plan designations, see the Land Use Element.

A. RURAL WATERFRONT (RW):

This designation is considered an implementation of a Type 1 LAMIRD as described above, consistent with the Growth Management Act.

Purpose: This designation will provide the opportunity for the development, redevelopment and infill of existing intensely developed shoreline areas for residential, and water related/water dependent recreational and tourist development consistent with the rural character and rural development provisions outlined in the goals and policies of this comprehensive plan. These areas provide a distinct water related lifestyle. Potential impacts to the surrounding area, critical areas, and water quality shall be addressed. These areas must be clearly identifiable as existing intensely developed rural shorelines; where a logical boundary can be delineated and set by the built environment. Such a boundary shall not permit or encourage a new pattern of sprawling low density or urban type development.

Uses appropriate for these areas include: open space and developed open space; residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: intensification of existing development or new development of small scale water related/water dependent recreational or tourist uses, including commercial facilities to serve those recreational or tourist uses, that rely on a rural location or setting but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses; home occupations; bed and breakfasts; and community facilities.

Density: May allow for less than 1 acre per dwelling unit, when consistent with the Health District standards. The provision of necessary public facilities and services shall not permit or encourage low density sprawl or urban type development outside of the designation boundary. Existing urban governmental services in some areas, may allow for higher densities than those with rural governmental services.

Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. **Geographical and Geological Characteristics:** Parcels are located on or near shorelines identified by the Chelan County Shoreline Master Program. The area may have moderate soil limitations and may have other limited physical constraints to development.
2. **Natural Resources:** This designation shall not be applied on resource lands of long term commercial significance.
3. **Public Services:** Necessary public facilities and public services to serve the development, redevelopment or infill of these areas may be provided. There may be some existing urban

governmental services. Rural governmental services are typically available, planned and or funded for.

4. Existing land uses: Seasonal and year-round residences, tourist and recreational activities and other rural development may be present. Predominant parcel sizes are 1 acre or smaller.

B. RURAL RECREATIONAL/RESIDENTIAL (RRR)

This designation is considered an implementation of a Type 1 LAMIRD as described above, consistent with the Growth Management Act.

Purpose: This designation will provide the opportunity for the development, redevelopment and infill of existing intensely developed rural recreational/residential areas for residential, recreational and tourist development consistent with the rural character and rural development provisions outlined in the goals and policies of this comprehensive plan. These areas provide a distinct rural lifestyle closely associated with the many natural amenities found within Chelan County. Potential impacts to the surrounding area, critical areas, and water quality shall be addressed. These areas must be clearly identifiable as existing intensely developed rural recreational development; where a logical boundary can be delineated and set by the built environment. Such a boundary shall not permit or encourage a new pattern of sprawling low density or urban type development.

Uses appropriate for these areas include: open space and developed open space; residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: intensification of existing development or new development of small scale recreational or tourist uses, including commercial facilities to serve those recreational or tourist uses, that rely on a rural location or setting but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses; home occupations; bed and breakfasts; and community facilities.

Density: May allow for less than 1 acre per dwelling unit, when consistent with Health District standards. The provision of necessary public facilities and services shall not permit or encourage low-density sprawl or urban type development outside of the designation boundary.

Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. Geographical and Geological Characteristics: Developments are closely associated with natural amenities found within Chelan County. The area may have moderate soil limitations and may have other limited physical constraints to development.
2. Natural Resources: This designation shall not be applied on resource lands of long term commercial significance.
3. Public Services: Necessary public facilities and public services to serve the development, redevelopment or infill of these areas may be provided. Rural governmental services are typically available, planned and/or funded for.
4. Existing land uses: Seasonal and year-round residences, tourist and recreational activities and other rural development may be present. Predominant parcel sizes are 1 acre or smaller.

C. RURAL VILLAGE (RV):

This designation is considered an implementation of a Type 1 LAMIRD as described above, consistent with the Growth Management Act.

Purpose: This designation recognizes the existence of intensely developed rural residential developments and communities, with densities less than 2.5 acres per dwelling unit, which typically will not have sewer service. This designation will provide the opportunity for the development, redevelopment and infill of existing intensely developed rural residential areas for residential and other rural development consistent with the rural character and rural development provisions outlined in the goals and policies of this comprehensive plan. Potential impacts to the surrounding area, critical areas, and water quality shall be addressed. These areas must be clearly identifiable as existing intensely developed rural residential development; where a logical boundary can be delineated and set by the built environment. Such a boundary shall not permit or encourage a new pattern of sprawling low density or urban type development.

Uses appropriate for these areas include: developed open space; residential; agriculture; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: intensification of existing small scale recreational or tourist uses that rely on a rural location or setting but that do not include a new residential component; intensification of development on lots containing existing isolated nonresidential uses; home occupations; bed and breakfasts; and community facilities.

Density: May allow for less than 2.5 acres per dwelling unit. The establishment of densities shall consider pre-existing development patterns, Health District standards, proximity to resource lands, existence of critical areas and the availability of necessary public facilities and services. The provision of necessary public facilities and services shall not permit or encourage low density sprawl or urban type development outside of the designation boundary.

Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. **Geographical and Geological Characteristics:** The area may have moderate soil limitations and may have other limited physical constraints to development. The area may be adjacent to a variety of rural development, and areas with varying residential densities. The area may be adjacent to urban growth areas.
2. **Natural Resources.** The area has low resource management potential. The area may be adjacent to resource lands.
3. **Public Services:** Sewer service is typically not available. Rural governmental services and infrastructure are typically available, planned and/or funded for. Necessary public facilities and public services to serve the development, redevelopment, or infill of these areas may be provided.
4. **Existing Land Uses.** Single family residences and other rural development may be present. Predominant parcel sizes are less than 2.5 acres.

E. RURAL COMMERCIAL (RC):

This designation is considered an implementation of a Type 1 LAMIRD as described above, consistent with the Growth Management Act where it is applied to existing mixed use areas. Additionally, this designation is considered an implementation of Type 2 and Type 3 LAMIRDs as described above, consistent with the Growth Management Act where the existing uses consist of only commercial activities, whether general retail or tourist recreational in nature.

Purpose: To provide for a range of commercial uses to meet the needs of local residents, and small scale tourist or recreational uses including commercial facilities to serve those recreational or tourist uses within the rural areas to meet the needs of local residents and visitors. This designation will provide the opportunity for the development, redevelopment and infill of commercial uses in existing rural commercial developments, mixed use areas or intensely developed residential areas consistent with the rural character and rural development provisions outlined in the goals and policies of this comprehensive plan. Potential impacts to the surrounding area, critical areas, and water quality shall be addressed. These areas must be clearly identifiable as existing rural commercial developments, mixed use areas or intensely developed residential developments; where a logical boundary can be delineated and set by the built environment. Such a boundary shall not permit or encourage new rural commercial development outside of these boundaries.

Uses appropriate for these areas include: commercial facilities and services; developed open space; above ground floor residential housing; agriculture; forestry; natural resource support facilities and services, tourist or recreational uses; home occupations; bed and breakfasts; and community facilities.

Locational Guidelines:

1. **Geographical and Geological Characteristics:** The area may have moderate soil limitations and may have other limited physical constraints to development. The area may be adjacent to a variety of rural development.
2. **Natural Resources.** These areas have low resource management potential. The area may be adjacent to resource lands.
3. **Public Services:** Rural governmental services and infrastructure are typically available, planned and/or funded for. Necessary public facilities and public services to serve the development, redevelopment or infill of these areas may be provided.
4. **Existing Land Uses.** Commercial, or higher intensity residential uses may be present, in addition to other rural development.

F. RURAL INDUSTRIAL (RI):

This designation is considered an implementation of a Type 1 LAMIRD as described above, consistent with the Growth Management Act.

Purpose: To recognize the need for rural industrial and resource based industrial activities within the rural areas. This designation will provide the opportunity for the development, redevelopment and infill of existing rural industrial developments or former industrial sites consistent with the rural character and rural development provisions outlined in the goals and policies of this comprehensive plan. Potential impacts to the surrounding area, critical areas, and water quality shall be addressed. These areas must be clearly identifiable as existing rural industrial developments or former industrial sites; where a logical boundary can be delineated and set by the built environment. Such a boundary shall not permit or encourage new industrial development outside of these boundaries.

Uses appropriate for these areas include: industrial facilities and services; intensification of development on lots containing isolated nonresidential uses; agriculture; forestry; caretaker residence for industrial facilities; and natural resource support facilities and services. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: mineral resource activities.

New industrial sites may be designated during yearly comprehensive plan amendments if consistent with criteria and requirements outlined in RCW 36.70A.365 and the goals and policies of this comprehensive plan. Such a new industrial area would be designated as an urban growth area and have the potential to receive urban services.

Locational Guidelines:

1. **Geographical and Geological Characteristics:** The area may have moderate soil limitations and may have other limited physical constraints to development. The area may be adjacent to a variety of rural development.
2. **Natural Resources.** Existing rural industrial sites have low resource management potential. The area may be adjacent to resource lands. Future industrial sites may be located in areas with agricultural or forestry uses if consistent with the criteria outlined in RCW 36.70A.365.
3. **Public Services:** Rural governmental services and infrastructure are typically available, planned and/or funded for. Necessary public facilities and public services to serve the development, redevelopment, or infill of these areas may be provided. Some industrial sites may currently have sewer service. Industrial sites designated pursuant to RCW 36.70A.365, as urban growth areas, would have access to urban services.
4. **Existing Land Uses.** Industrial developments currently exist or the area may have been utilized in the past for an industrial use. Areas identified as having potential for infill for industrial uses may be currently utilized for a variety of rural development and resource activities. Future industrial sites designated pursuant to RCW 36.70A.365, may presently have a variety of rural development and resource activities.

Chapter 4 Resource Element

I. Introduction

This Resource Element provides a concise overview of the Agricultural, Forest and Mineral Resources and critical areas within Chelan County consistent with the Goals of the Growth Management Act, in accordance RCW 36.70A, WAC 365 and with the County-Wide Planning Policies. Furthermore, it has been integrated with all other planning elements to ensure consistency throughout the comprehensive plan.

The goals and policies contained in the Resource Element form the basis of the land use strategy to support long-term resources:

- Providing for a supply and distribution of land use types to accommodate the population and employment growth projected for the planning area;
- Reducing development pressures and patterns of sprawl within rural areas;
- Conserving agricultural, forest and mineral resource lands of long-term commercial significance; and
- Preserving and protecting critical areas and areas of rural character.

The State legislature found that it is in the public interest to identify and provide long-term conservation of those productive natural resource lands that are critical to and can be managed economically and practically for long-term commercial production of food, fiber, and minerals. Successful achievement of the natural resource industries' goal set forth in RCW 36.70A.020 requires the conservation of a land base sufficient in size and quality to maintain and enhance those industries and the development and use of land use techniques that discourage uses incompatible to the management of designated lands.

II. Overview of Chelan County

Chelan County is divided by mountains and rolling hills which form several valley and basins areas where agricultural and mineral resources compete with growing rural and urban land uses. It is not uncommon for development and resource lands to be intermixed or in close proximity to each other.

This Element summarizes the current resource lands, provides guidance for locating and protecting resources and specific goals and policies for managing these resources to “assure that the use of lands adjacent to agricultural, forest, or mineral resource lands shall not interfere with the continued use of these designated lands for the production of food, agricultural products, or timber, or for the extraction of minerals.”¹

Overall, two key issues, land ownership and access, currently restrict the County for accessing the vast potential for resources. First, as discussed in the Land Use Element, most of Chelan County is in federal or state ownership. Ownership has less of an impact on Forest/Timber resource management than on Agriculture and Mineral Resources.

¹ RCW 36.70A.060

Secondly, as discussed in the Transportation Element, the road network provides major trucking routes which support related resources industries. Hauling routes are limited, in part, due to topography. For the three types of resources reviewed in this Element, mineral, agriculture and forestry, the current primary economic exports are agriculture and forestry products.

III. Chelan County Agricultural Lands

Chelan County contains agricultural lands that are important to the economy of the area. It must be recognized that in order to continue to exist, orchards must remain profitable. In an attempt to encourage existing and future agricultural development as a viable land use and a significant economic activity within the County, agricultural lands of long term commercial significance have been designated according to the U.S. Soil Conservation Service's classification for prime and unique farmland soils, and criteria outlined in WAC 365-190-050. These areas have been identified on the land use map designated as Commercial Agricultural Lands (AC). The Growth Management Act defines "long term commercial significance" to include the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land.

Typically the most successful agricultural land conservation programs in the United States have been ones that combine incentive and regulatory techniques chosen according to the needs and conditions of a community. The opportunity for differential tax assessment for orchardists in Chelan County, helps to provide landowners an incentive to remain in an agricultural use. Buffers, parcel size, and a clustering development option provide regulatory techniques to retain agricultural land. This combination of conservation techniques provides property owners the flexibility for some non-farm development, helps reduce conflict between non-farm development and agricultural operations, and preserves farmable orchard parcels in support of retaining a viable orchard industry.

Chelan County participates in the Voluntary Stewardship Program (VSP) program. The VSP is an optional, incentive-based approach to protecting critical areas while promoting agriculture. The VSP is allowed under the Growth Management Act (RCW 36.70A.700-760) as an alternative to traditional approaches to critical areas protection, such as "no touch" buffers. Chelan County is one of 28 counties that has "opted in" to VSP.

Land Use Designation/Siting Criteria: Commercial Agricultural Lands

Purpose: To assure the long-term conservation of commercial agricultural lands; to protect and preserve the farmers ability to farm; encourage existing and future agricultural land uses as a viable land use and a significant economic activity within the community; and, to protect agricultural land of long term commercial significance not already characterized by urban development from encroachment and incompatible uses.

Uses appropriate for these areas include: agriculture; open space; residential; and forestry. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: natural resource support facilities and services; mineral resource activities; intensification of existing small scale recreational or tourist uses that rely upon a rural setting but that do not include A new residential component; intensification of development on lots containing existing isolated nonresidential uses; home occupations; bed and breakfasts; and community facilities.

Density: One (1) dwelling unit per 10 acres. Clustering consistent with the underlying densities and the rural character and rural development provisions of the goals and policies of the comprehensive plan

may be permitted. Topography, critical areas, other environmental constraints, and compliance with all other applicable development standards shall be considered in the provisions to allow for clustering.

Locational Guidelines:

1. Geographic and Geological Characteristics: The area contains farmland soils classified as prime or unique by the Natural Resource Conservation Service. Soil characteristics, moderate slopes or other physical constraints to development may be present. The area should not be adjacent to intensive urban or incompatible rural development. The predominant land use in the area is agriculture.
2. Natural Resources: The area should contain or have the potential to contain agricultural or agriculture support activities. The area should meet the criteria under WAC 365-190-050, as agricultural lands of long term commercial significance.
3. Public Services: Uses should not require extension or provision of urban level services. These areas may have access to rural governmental services and infrastructure or have the potential to be provided with rural governmental services within the 20 year planning period. Urban services should not be present.
4. Existing Land Uses: The prevailing land use pattern consists of agricultural operations and agricultural support facilities and services. Dispersed single family residences and low intensity rural uses may be present. The predominant parcel size is typically 5 acres or larger.

Agricultural Resource Lands: Goals & Policies

While developing goals and policies and designating agricultural resource lands, many issues and concerns were identified during the public participation process and addressed during the development of the goals and policies for the agricultural section of the Land Use Element including: Agriculture vs. residential development

- Who is responsible for mitigation measures (developer of incompatible use)
- Where should development occur
- Recognize as a significant economic activity
- Agricultural uses vs. compatible and incompatible uses
- Availability of irrigation water
- Protecting farmers options
- Periodic re-examination of the Commercial Agriculture designations

Areas not designated as agricultural resource lands of long term commercial significance that do not meet the designation criteria can still play an important part in the local agricultural industry. Rural designations and buffers between orchards and non-farm development may be beneficial in retaining much of the rural area's current orchards. Future expansion of long term agriculture into rural undeveloped areas is a possibility, but will heavily depend upon the availability of water, water rights, and market conditions.

GOAL AL 1: Support the viability of agriculture and encourage the continued use of rural and resource lands for agriculturally related land uses.

Goal Rationale: The County benefits from a commercially significant and viable agricultural industry.

Policy AL 1.1: Encourage air quality standards and policies that accommodate necessary agricultural practices.

Rationale: Burning is essential to orchard renewal.

Policy AL 1.2: The farmer shall have the right to farm, consistent with appropriate local, state and federal requirements.

Rationale: Agriculture plays a significant role in the welfare of the County and its residents, and should be supported.

Policy AL 1.3: Encourage the maintenance of agricultural lands in current use property tax classification consistent with RCW 84.34, the Open Space Taxation Act.

Rationale: Open space taxation allows property owners to be assessed at current use rather than highest and best use. This provides an incentive for the property owner to continue to use land for resource production.

Policy AL 1.4: Conserve agricultural lands for productive economic use by identifying and designating agricultural resource lands whose principal and preferred land use is commercial agricultural resource management.

Rationale: Activities in designated agricultural resource lands should be discouraged that would limit or eliminate the ability to continue agricultural operations.

Policy AL 1.5: Agricultural resource lands should be classified and designated based on the criteria and procedures established in WAC 365-190-040, and 050, with special consideration given to long-term viability commercially significant agricultural land.

Rationale: Agricultural Resource lands should be identified based on the best available information at the time of the designation.

Policy AL 1.6: Support public and private programs and efforts to ensure the viability of the agricultural industry.

Rationale: Strong agricultural markets and a supportive regulatory environment are two of the necessary components of a healthy agricultural industry. Attempts to secure these will be beneficial to the general welfare of the County.

Policy AL 1.7: In rural and resource lands, permit facilities and services that support Chelan County's natural resource industries, provided such facilities are compatible with surrounding uses and potential impacts can be mitigated.

Rationale: The agricultural industry in Chelan County is a significant economic activity. Necessary support services and facilities should be accommodated.

Policy AL 1.8: Protect the economic viability of the agricultural industry by supporting construction of agricultural worker housing near orchard areas. Where permitted by state agencies, consider the reduction of site development and fire protection standards for temporary housing units for migrant workers.

Rationale: This will assist the agricultural industry to remain economically viable, reduces transportation needs, and provides adequate housing for agricultural workers.

Policy AL 1.9: Develop regulations promoting agriculture-related accessory uses on existing farms to supplement farm income, improve farming efficiency, and provide employment for farm family members.

Rationale: Regulatory opportunities for limited enterprises such as direct marketing of unprocessed and value added agricultural products and agriculturally related small scale tourist

operations can help supplement the agricultural industry and maintain the primary use of agriculture.

Goal AL 2: Conserve agricultural lands of long-term significance by controlling encroachment of incompatible uses.

Goal Rationale: Limiting the encroachment of incompatible uses will help to insure that agricultural lands remain viable.

Policy AL 2.1: All plats, short plats, binding site plans, development permits and building permits issued for development activities on or within five hundred feet of lands designated as agricultural resource lands, shall contain a notice that the subject property is within or near designated agricultural resource lands. The notice shall further state that a variety of commercial activities may occur on these designated lands that are not compatible with the development.

Rationale: Such notification will help property owners and purchasers to make educated decisions.

Policy AL 2.2: Encourage clustering of residential development on lands adjacent to agricultural resource lands provide open space buffers between uses and address incompatibility issues.

Rationale: Clustering can provide for open space adjacent to the resource use and may help to minimize conflicts.

Policy AL 2.3: Require new non-farm development in rural areas, adjacent to an existing orchard operation, to provide appropriate buffers and/or mitigation measures to minimize potential conflicts.

Rationale: Orchard operations in rural lands account for a significant amount of the agriculture within Chelan County. It is important to protect the farmer's ability to continue to farm by minimizing potential conflicts.

Policy AL 2.4: Development on or adjacent to designated agricultural resource lands, including plats, short plats, and binding site plans, should avoid and minimize potential conflicts with agricultural operations through appropriate siting and mitigation measures, such as buffers, screening, dust control, and pest control.

Rationale: Buffers can reduce the potential for conflicts between agricultural operations and other land uses.

Policy AL 2.5: Designated agricultural resource lands should be protected from inappropriate infrastructure improvement assessments. Deferral programs or other measures should be considered that would protect the farmer's ability to continue farming.

Rationale: Additional taxes would impact the viability of agricultural operations. Infrastructure improvements or assessments inconsistent with the comprehensive plan should not be supported.

IV. Chelan County Mineral Lands²

Chelan County has a Mineral Resource Lands Overlay (MRLO) which identifies and protects lands that have the potential to contain mineral resource deposits of long-term commercial significance, to recognize the importance of preserving mineral lands to ensure the future supply and to ensure compatibility between mineral resource lands and surrounding land uses.

² Mineral Resource data contained within this Element reflects work completed by BERK Consulting, Inc with grant funds from the Department of Commerce, July 26, 2017.

Mineral resources in Chelan County are classified into two tiers of commercial importance. This MRLO focuses on Primary resources:

Primary: Sand, gravel, and rock/stone (either solid or crushed for use in aggregate). The Mineral Resource Lands Overlay (MRLO) is generally applied to areas of existing production and those rural lands with high potential for production. It should be noted that large areas of potential mineral production are under federal ownership and therefore not considered available or mapped but may be designated if the site meets the MRLO criteria.

Secondary: All other metallic, non-metallic, and petroleum mineral resources occurring in Chelan County. Historically, mining was a major component of the regional economy, including extraction of copper, zinc, silver and gold. The MRLO is not generally applied to areas where these resources occur, but property owners may apply for designation if the site meets the MRLO criteria.

Surface Mineral Extraction Sites

In 2017, the Washington State Department of Natural Resources (DNR) records documented eleven active surface mining sites in Chelan County. Three of these mines are rock/stone quarries, and the remaining eight are sand and gravel extraction sites. Morrill Asphalt and Paving, the recorded owner of two pits in Wenatchee, appears to be out of business, reducing the number of active permitted surface mining sites in the County to nine.

In addition to DNR-permitted surface mines, mineral extraction also occurs in Chelan County at smaller scales. Mines with surface disturbance of less than three acres or a depth of less than 30 feet may operate without a DNR surface mining permit, and DNR does not track these operations. The Chelan County Assessor documents an additional 12 locations with a current land use classification of "Mining Activities." Of these, one is owned by a land conservation organization, four are owned by the federal government and one appears to be a single-family residence.

Mining operations occur near agriculture, forestry, manufacturing/industrial, single-family residential, government service, and undeveloped land, by the County Assessor. Of the eleven active mines in the County, five³ are adjacent to or located on land classified as single-family residential. This is consistent with Exhibit 1 which identifies high-potential mineral sources lands within the Rural Residential/Resource zoning district, covering nearly 57,000 acres. Current and potential impacts to residential development may occur and should be reflected in mitigation measures.

Current Mining Operations

A review of DNR permits, in 2017, indicated that five of the 11 permits estimated a total lifetime deposit sizes between 1 million and 1.5 million cubic yards of material. Tunnel Hill Granite estimated their lifetime extraction volume at 3 million cubic yards, and R&P Rock estimated theirs at 6 million cubic yards. Three producers, Wenatchee Rock Products, Morrill Asphalt, and Chelan Concrete, had much smaller deposits at 660,000 cubic yards, 200,000 cubic yards, and 150,000 cubic yards, respectively. Public information on the acreage permitted for mining and permitted depth indicates that a volume of approximately 71,987 acre-feet (116,138,787 cubic yards) is permitted for mining in Chelan County; this is inclusive of overburden and any other waste material that must be excavated to access the mineral deposits themselves.

³ Two Rivers Quarry, the R&P Rock Blewett Pass Quarry, the Pipkin Construction Entiat Mine, the Wenatchee Rock Products Rock Pit, and the Chelan Sand and Gravel Howard Flats Mine

Demand

Past sales⁴ indicate that during most of the previous decade, sales associated with mining varied between \$300,000 and \$600,000, but sales dipped slightly in 2009 before rising again, likely due to effects of the recent recession. The average annual sales between 2006-2015 were approximately \$454,000.⁵

Making detailed predictions about future mineral product demand from this data would be difficult, but the information available provides an estimate of baseline mineral product production value in Chelan County and reinforces the idea that the mineral products market is potentially subject to periodic spikes in demand.

Mineral Resource Lands Overlay

Based on review of available mineral resources data, information gained from local businesses and agencies, the requirements of the Growth Management Act, and designation frameworks employed by other jurisdictions, the Mineral Resource Lands Overlay (MRLO), shown on Exhibit 1, covers the following areas:

- Properties housing active mining operations and adjacent parcels under unified ownership;
- Lands classified by NRCS as “good” sources of sand, gravel, or road fill material; and
- Lands classified by NRCS as “fair” sources of sand, gravel, or road fill material and which are located outside cities and urban growth areas.

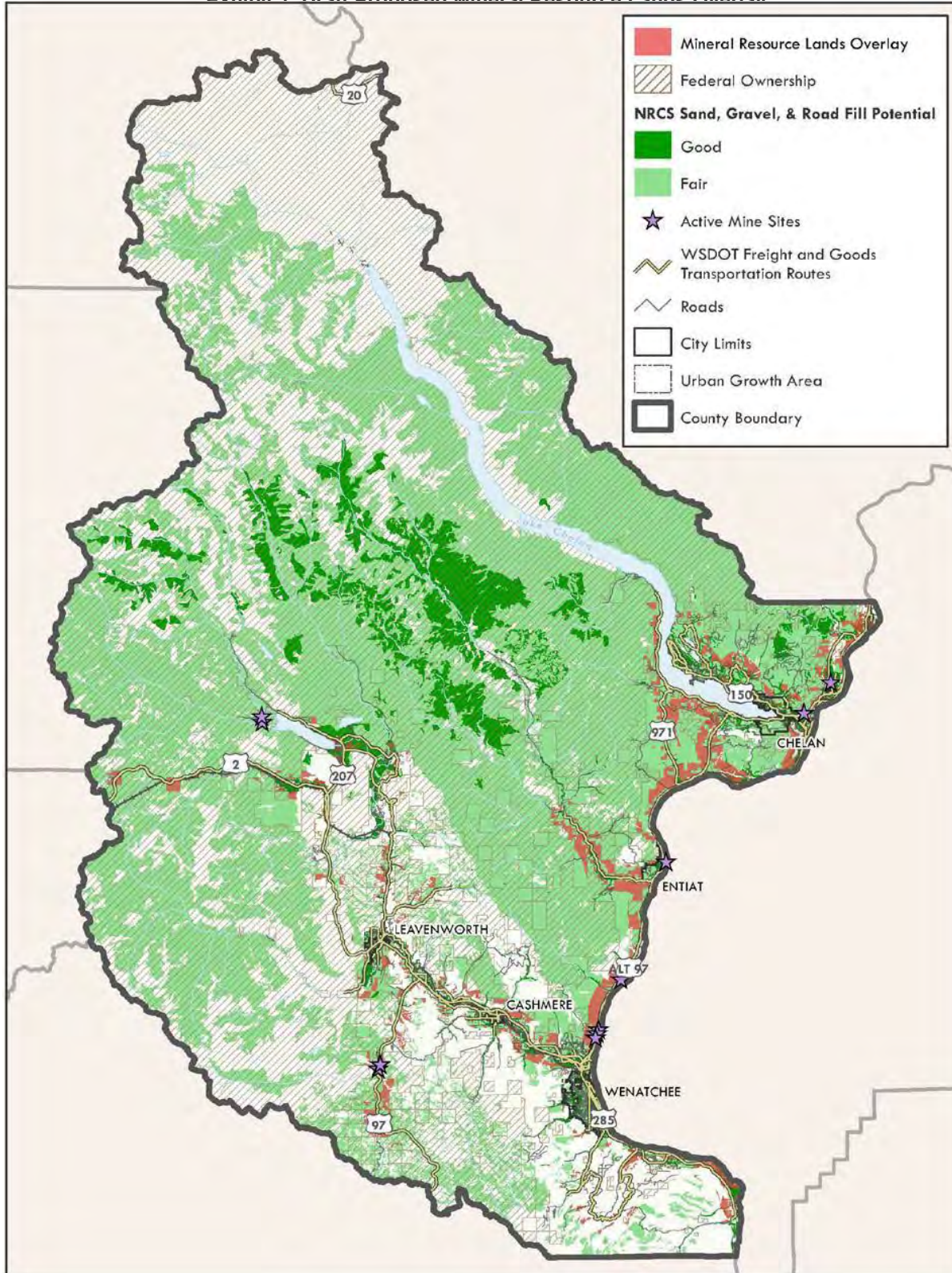
The following areas are excluded from the overlay:

- Properties currently developed for single-family residential or commercial uses.
Rationale: Mining on or near these lands poses a possibility of adverse impacts that must be mitigated.
- Properties zoned for commercial or residential uses at urban intensities.
- Land zoned for a minimum lot size smaller than 10 acres.
- Developed properties less than 20 acres in size.
Rationale: Large properties are better able to accommodate buffers from surrounding uses.
- Properties under Federal ownership.
- Lands designated as Natural by the Chelan County Shoreline Master Program.
Rationale: The SMP prohibits mining activities in these areas for the protection of valuable shoreline natural resources.
- Lands more than one mile from a designated WSDOT Freight and Goods Transportation route.
Rationale: WAC 365-190 requires consideration of the availability of roads and public infrastructure, as well as the distance from mineral deposits to market. Mining operations have the potential to generate significant truck traffic, which will require roads designated to handle high volumes of freight trips.

⁴ Taxable Retail Sales data from the Washington State Department of Revenue

⁵ Washington Department of Revenue, 2017

Exhibit 1 Draft Proposed Mineral Resource Lands Overlay



Land Use Designation/Siting Criteria: Commercial Mineral Lands

The following purpose and locational guidelines provide a basic understanding of the zoning districts intent and how they relate to the Comprehensive Plan designations.

Designation Guidelines:

1. Geographic and Geologic Characteristics: The designated property should be at least 20 acres in size, and the estimated deposit size should be sufficient to meet both of the following:
 - a. Depth of overburden should be no more than 25 feet, and
 - b. The ratio of the amount of resource to be extracted to the amount of overburden to be removed should be at least 3:1.
2. Natural Resources: The designated property does not contain environmentally critical areas, including wetlands, riparian areas, threatened or endangered species, geological hazards, and critical aquifer recharge areas, or adequate mitigation can be provided.
3. Transportation Infrastructure: Extraction and processing sites have adequate access to the regional transportation network:
 - a. Mineral Resource Lands should be located within one mile of a designated WSDOT Freight and Goods Transportation System route; and
 - b. Truck haul routes from the site should avoid areas of residential development or employ appropriate mitigation measures to avoid impacts to residences.
4. Existing Land Uses: Adjacent land uses are generally compatible with mineral extraction and processing activities – examples include mining, agriculture, commercial forestry, industrial development, and undeveloped land. Designation of land adjacent to large-lot residential (no more than 1 dwelling per 5 acres) is conditional on mitigation of impacts from any future mineral extraction or processing activities on nearby residences.

Mineral Resource Lands: Goals & Policies

Goal ML 1: Protect Chelan County's mineral resource lands of long-term commercial significance and allow for short-term mineral resource extraction opportunities in unincorporated areas, where appropriate.

Rationale: Conservation of these resources must be assured through measures designed to prevent incompatible development in or adjacent to designated mineral resource lands, and to mitigate impacts of mineral extraction activities on adjacent land uses.

Policy ML 1.1: Assure conservation of designated mineral resource lands through land use regulations that prevent incompatible development on or adjacent to mineral resource lands.

Rationale: Mineral resource extraction, such as sand and gravel, pits are typically incompatible with residential and other types of land uses due to noise, dust and heavy equipment traffic. Therefore, it is important to develop appropriate land use regulations that protect mineral resource lands as well as adjacent land uses.

Policy ML 1.2: Require the reclamation of land after the completion of gravel and mineral extraction.

Rationale: Effective reclamation of mining sites can insure future redevelopment of the site and prevent impacts from erosion and visual impacts.

Policy ML 1.3: Require mining and extraction operations to be sited and designed to avoid and mitigate conflicts with surrounding land uses. Screening, buffers, the provision of open space and other mitigation measures should be considered and required where necessary.

Rationale: The careful design and siting of mining operations can prevent or minimize impacts to surrounding land uses.

Policy ML 1.4: Require mining sites to be served by roadways, adequate to handle industrial traffic and not endanger public health and safety.

Rationale: Transportation system impacts and public health and safety issues must be addressed.

Policy ML 1.5: Encourage development locating adjacent to designated mineral resource lands to incorporate screening, buffers, open space, or other design features to prevent conflicts with existing or future mineral resource extraction activities.

Rationale: The minimization of potential conflicts helps to maintain the viability of mineral resource extraction operations.

Policy ML 1.6: Protect water quality and prevent sedimentation through use of settling ponds, retaining basins, ditches, diking and re-vegetation of slopes and other measures for mining and production operations.

Rationale: Water resources must be protected.

Policy ML 1.7: Surface mining should not lower the ground water table of surrounding properties in a manner that directly impacts their use.

Rationale: Lowering of the ground water table could have serious effects on domestic water supplies.

Policy ML 1.8: Clustering of residential development on adjacent non-resource lands is encouraged.

Rationale: Clustering will provide for open space adjacent to the resource use and will minimize conflicts.

Policy ML 1.9: Designated mineral resource lands not included in urban growth areas should be protected from infrastructure improvement assessments such as, but not limited to, local improvement districts and local utility districts with deferral programs or other measures.

Rationale: Additional taxes would pressure the property owner into converting resource land into other uses.

Policy ML 1.10: Support the maintenance and development of mineral resource extraction that is consistent with the comprehensive plan to provide necessary materials for the development of roads, structures and other projects.

Rationale: Materials provided by mineral extraction operations are vital to the community, and are a significant economic activity and supports broader economic development.

Policy ML 1.11: Protection of mineral resources under the MRLO shall occur in two tiers:

- Lands actively being mined for commercial production of sand, gravel, or rock/stone are designated as mineral resource lands of long-term commercial significance. Owners of these properties may request an amendment to remove the MRLO once mineral production has permanently ceased.

- For lands not currently in active mineral production, the MRLO shall act as an interim measure to protect mineral resources until the presence of a commercially viable mineral deposit can be verified through a geologic study. Property owners who wish to finalize designation of their property and undertake mining activities may submit a study by a qualified geologist indicating the presence of commercially significant, accessible mineral resources. Likewise, property owners may request removal of their property from the MRLO by submitting a study from a qualified geologist confirming the absence of such resources.

Rationale: Sand, gravel, and rock are the primary mineral products in Chelan County and are therefore given the highest protection. Mineral resources not currently under production can be evaluated and added to the overlay as more detailed information becomes available.

Policy ML 1.12: Inclusion of a property under the MRLO does not imply approval for a specific mineral extraction activity and does not substitute for any necessary local or state mining permit required.

Rationale: The MRLO is designed to protect and preserve mineral lands, but permitting is necessary to ensure mineral extraction is conducted consistent with applicable laws and regulations.

Policy ML 1.13: As part of the periodic comprehensive plan update process under the Growth Management Act, the County shall regularly review the criteria for economic viability of a mineral resource and update the criteria for designation as appropriate.

Rationale: Economic conditions, market trends, and demand for mineral products can change over time, and the MRLO designation criteria may need to be periodically revised to reflect current conditions. The regular GMA plan review cycle is an appropriate time to review this information.

Policy ML 1.14: All plats, short plates, development permits, and building permits issued on properties within 500 feet of lands designated as part of the MRLO shall include a notice to that effect. The notice shall disclose that development of the nearby MRLO lands may include uses and activities that are not compatible with residential development.

Rationale: This notice is required under the Growth Management Act (RCW 36.70a.060(1)(b)). Additionally, such notification will allow potential real estate purchasers to make educated decisions.

Policy ML 1.15: Mineral extraction and processing activities in the MRLO shall be required to implement best management practices (BMPs) to avoid, reduce, or mitigate environmental impacts associated with mining activities. Such BMPs shall be designed to protect the natural environment, adjacent land uses, and the long-term viability of mineral lands.

Rationale: Mineral resource extraction operations are intensive land uses that can involve large amounts of ground disturbance, noise, dust, and heavy equipment traffic. BMPs are necessary to prevent unnecessary impacts on sensitive natural resources and nearby development.

Policy ML 1.16: Once mining activities have commenced on a MRLO-designated property, development of said property under the rules of the underlying zoning may apply in conjunction with the restoration of the mining activities.

Rationale: Postponing development of any part of the site until after reclamation is complete ensures that the property is safe for use and that no incompatible land uses are introduced while mining operations are ongoing.

Policy ML 1.17: At the time of permitting, the County should coordinate with property owners and the Department of Natural Resources to identify post-reclamation uses for MRLO properties that are consistent with the County's comprehensive plan and zoning code, both for the mine site itself and for planned adjacent uses.

Rationale: Coordination on future use of the property will help ensure that County plans recognize post-mining conditions in these areas and reduce the potential for future development that is incompatible with surrounding uses.

V. Chelan County Forest/Timber Lands

Forestland is defined as *"land primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production...and has long-term commercial significance,"* RCW 36.70A.030.

Timber harvesting is a type of natural resource industry with a long history in Chelan County. The following outlines the declining trend of timber harvesting, as documented by the Department of Natural Resources.⁶ The following table denotes "thousand board feet" of harvested timber.

Year	1990	1995	2000	2005	2010	2015
Ownership						
Private Industrial	5,710	18,192	1,800	-	-	19,820
Private Large		7,486	636	9,482	1,866	-
Private Small	866	31,286	6,698	2,780	882	2,374
Private Unknown					186	719
Total Private	6,576	56,964	9,134	12,262	2,934	22,913
State	7,989	5,921	897	2,455	1,100	43
Federal	68,382	6,703	8,990	15,913	6,200	-
Other Public	13,035	9,708		588	-	9,091
Total Public	89,406	22,332	9,887	18,956	7,300	9,134
Total All:	95,982	79,296	19,021	31,218	10,234	32,047

Land Use Designation/Siting Criteria: Commercial Forest Lands

The growth management process requires identification of forest lands of long-term commercial significance as part of the growth management process. The identification of these lands is an attempt to conserve and encourage existing and future forest practice land uses as a viable, permanent land use and a significant economic activity within the County. Forest land also provides recreational opportunities, scenic value and wildlife habitat. In addition, the identification and land use regulations of the commercially significant forest lands will provide protection for forest lands from encroachment and incompatible land uses. The Growth Management Act defines "long term commercial significance" to include the growing capacity, productivity, and soil composition of the land for long-term commercial

⁶ Industry – companies and individuals operating wood, using plants; private large – non-industrial companies and individuals not operating wood-using plants but with statewide holdings totaling 1,000 or more acres; private small – non-industrial companies and individuals not operating wood-using plants and owning less than a total of 1,000 acres.

production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of the land.

The following purpose and locational guidelines provide a basic understanding of the zoning districts intent and how they relate to the Comprehensive Plan designations.

Purpose: To assure the long-term conservation of commercial forest lands; to preserve and encourage existing and future forest land uses as a viable, permanent land use and a significant economic activity within the community; and to protect forest lands of long term commercial significance not already characterized by urban development from encroachment of incompatible uses.

Uses appropriate for these areas include: forestry, open space; residential; and agriculture. Additional uses may be considered with supplemental provisions. These provisions shall address performance standards, impacts to the surrounding area, and be consistent with the goals and policies of the comprehensive plan. Such uses may include: natural resource support facilities and services; mineral resource activities; intensification of existing development or the development of new small scale recreational or tourist uses that rely upon a rural setting but that do not include new residential development; intensification of development on lots containing existing isolated nonresidential uses; home occupations; bed and breakfasts; and community facilities.

Density: One (1) dwelling unit per 20 acres.

Locational Guidelines:

1. Geographic and Geological Characteristics: Soil characteristics, steep slopes or other physical constraints to development may be present. The area should not be adjacent to intensive urban or incompatible rural development. Large tracts of land oriented to forest resource management exist.
2. Natural Resources: The area should contain or have the potential to contain commercial forest resource management operations and commercial forest support facilities and services. The area should meet the criteria under WAC 365-190-060, as forest resource lands of long term commercial significance.
3. Public Services: Uses should not require extension or provision of urban level services. These areas may have access to rural governmental services and infrastructure or have the potential to be provided with rural governmental services within the 20 year planning period. Urban services should not be present.
4. Existing Land Uses: The prevailing land use pattern consists of commercial forest resource management operations and commercial forest support facilities and services. Dispersed single family residences and low intensity rural uses may be present. The predominant parcel size is typically 20 acres or larger. Recreational and small scale tourist commercial opportunities may be present.

Forest/Timber Resource Lands: Goals & Policies

Goal FL 1: Conserve forest lands of long term commercial significance. Encourage sustainable timber production in rural and resource lands as a viable, permanent land use and a significant economic activity within the community.

Goal Rationale: Timber production remains an important aspect of the County's economy.

Policy FL 1.1: Conserve forest lands for productive economic use by identifying and designating forest resource lands where the principle and preferred land use is commercial resource management.

Rationale: Timber production remains an important aspect of the County's economy and the productive capacity of area forests cannot be ignored. Activities in designated forest resource lands that would limit or eliminate the ability to continue commercial forest resource management should be discouraged.

Policy FL 1.2: Promote multiple uses of forest resource lands where such uses do not eliminate or limit commercial forest resource management.

Rationale: Forest resource lands provide unique opportunities and locations for land uses such as natural resource extraction and open space and recreation development.

Policy FL 1.3: Protect designated forest resource lands from inappropriate infrastructure improvement assessments through deferral programs or other measures that would protect the ability to continue long-term commercial forest resource management.

Rationale: Additional taxes would impact the viability of commercial forest resource management operations. Infrastructure improvements or assessments inconsistent with the comprehensive plan should not be supported.

Policy FL 1.4: Classify and designate forest resource lands based on the criteria and procedures established in WAC 365-190-040, and 060 with special consideration given to the determination of whether forest resource lands considered for designation are viable as long term commercial significant forest resource lands.

Rationale: Resource lands should be identified based on the best available information at the time of the designation.

Policy FL 1.5: Support maintenance of forest lands in timber and current use property tax classification consistent with RCW 84.28, 84.33, and 84.34.

Rationale: Open space taxation assists the property owner in maintaining property in commercial forest production.

Policy FL 1.6: Promote cooperative resource management between government agencies and private entities.

Rationale: This policy would provide for equal representation and efficient management regarding forest issues.

Policy FL 1.7: Use the permit review process to promote implementation of forest management practices that minimize the potential for catastrophic wildfires.

Rationale: The potential for catastrophic forest fires as in 1994 should be reduced.

Goal FL 2: Icicle River Valley: Where appropriate, encourage sustainable timber production in the Icicle Valley.

Goal Rationale: Timber production remains an important aspect of Chelan County's economy, and the productive capacity of forest in the Icicle Valley cannot be ignored. Consideration of visual management to maintain the scenic quality of the Icicle Valley should be encouraged, while at the same time providing for the growing, management, and harvesting of timber resources.

Policy FL 2.1: Promote timber production in the Icicle Valley, subject to appropriate conditions for protection of the area's scenic qualities and water resources.

Rationale: It is important to maintain the environmental and scenic qualities of the Icicle Valley.

Policy FL 2.2: Protect the visual character of the Icicle Valley by discouraging clear cutting, except where such cuts can be designed in the form of small, irregular patch cuts that take advantage of natural variations in the vegetation and topography.

Rationale: Such measures will help to mitigate the visual impact of clear cutting.

Policy FL 2.3: Minimize logging road construction; approval of new logging roads should be conditional on evaluation of visual and environmental impacts.

Rationale: Minimizing the construction of logging roads will help to preserve the environmental quality of the area.

VI. Chelan County Natural Systems/Critical Areas

The Growth Management Act states that counties should “protect critical area.” Critical areas include the following areas and ecosystems: (a) wetland; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

The County has completed the planning process for developing these goals and policies and corresponding regulations following an extensive citizen participation process.

Natural Systems: Critical Area Goals & Policies

GOAL CL 1: Identify and protect critical areas from adverse environmental impacts while providing for reasonable use of private property.

Goal Rationale: Preservation of critical areas will help protect the environment and maintain and enhance the quality of life. Implementation regulations should provide for reasonable use of private property.

Policy CL 1.1: Promote residential, commercial, and industrial development regulations that protect the availability of potable water by preventing contamination of ground water sources.

Rationale: The maintenance of a safe potable water supply is vital to the County.

Policy CL 1.2: Encourage restoration of contaminated ground water sources.

Rationale: The restoration of contaminated ground water helps to meet County needs for potable water and is beneficial to the environment.

Policy CL 1.3: Classify, designate and protect all critical areas, including frequently flooded areas, wetlands, fish and wildlife habitat conservation areas, aquifer recharge areas and geologically hazardous areas using best available science, pursuant to RCW 36.70A.172 and WAC 365-190.

Rationale: Critical areas add to the quality of life within a community, as well as performing important natural functions that assist with protecting private property from damage from natural disasters and events. Identifying critical areas and protection measures for those areas are important steps in ensuring that those functions and values are preserved for future generations’ enjoyment and protection.

Policy CL 1.4: Regulate development in floodplains to protect property and mitigate the loss of floodplain storage capacity.

Rationale: The loss of floodwater storage results in a potentially greater level of destruction to downstream properties from the resultant higher flood elevations and water flow velocities.

Policy CL 1.5: Discourage development on unstable soils or steep slopes and in areas susceptible to landslide, flood, or avalanche.

Rationale: Discouraging development in natural hazard areas helps to protect the public health, safety and general welfare.

Policy CL 1.6: Adopt an excavation and grading ordinance to regulate excavation, grading and earthwork construction activities.

Rationale: Uncontrolled filling and grading can cause erosion and siltation of streams, rivers and ponds. These activities can also be detrimental to adjacent properties.

Policy CL 1.7: Support the purchase of critical areas by public or private organizations for purposes of preservation or conservation.

Rationale: This option allows interested private and public organizations to purchase lands they wish to put into a long term conservation or preservation programs.

Policy CL 1.8: Critical area regulations shall not preclude reasonable use of property or affect a taking in violation of the U.S. Constitution, the Constitution of the State of Washington, or substantive due process.

Rationale: Private property rights must be protected.

Policy CL 1.9: Allow for open space and recreational use of critical areas where such use does not negatively impact critical areas.

Rationale: Open space and recreational use of critical areas provides an opportunity for residents and visitors to enjoy the natural amenities of the County.

Policy CL 1.10: When reviewing development proposals, the County shall apply appropriate conditions to avoid or mitigate negative impacts to critical areas. Proposal review should also include evaluation of the cumulative impacts of development proposals in critical areas.

Rationale: It is important to take a comprehensive approach to development in a critical area since there is often a compounding effect resulting from changes to natural systems

Policy CL 1.11: Protect water quality and fish habitat by requiring dredging and filling activities to minimize introduction of suspended solids, leaching of contaminants, or habitat disturbance.

Rationale: Uncontrolled dredging and filling activities can negatively impact fish habitat and water quality.

Policy CL 1.12: Encourage the restoration and enhancement of critical areas.

Rationale: The enhancement and restoration of critical areas improves the functions and values they provide.

Policy CL 1.13: Encourage the use of innovative techniques to protect critical areas, such as purchase of development rights, transfer of development rights, clustering, conservation easements, land trusts, and the Public Benefit Rating System.

Rationale: Innovative techniques can benefit the public, land owner, and help to protect critical areas.

Policy CL 1.14: In designating and protecting critical areas, the County shall use best available science to develop policies and development regulations. The County should also give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

Rationale: Inclusion and consideration of best available science ensures that the best available information and protection measures are utilized.

Policy CL 1.15: Critical area regulations and designations shall be reviewed when adopting a comprehensive plan under RCW 36.70A.040 and implementing development regulations under RCW 36.70A.120 and may be altered to ensure consistency. In addition, subsequent studies and information will be reviewed when drafting development regulations.

Rationale: Consistency between the comprehensive plan and development regulations is required. Additional studies may constitute best available science.

Policy CL 1.16: The goals and policies of the Chelan County Shoreline Master Program, as amended, are considered an element of the comprehensive plan, and are included by reference as if fully set forth herein.

Rationale: The goals and policies of the Shoreline Management Act, as set forth in RCW 90.58.020, are considered one of the goals of the Growth Management Act. The Growth Management Act requires that shoreline master programs be integrated as an element of the comprehensive plan.

Policy CL 1.17: Support ongoing watershed planning efforts.

Rationale: Watershed planning is essential to address a variety of issues including endangered and threatened species listings and water quantity issues.

Natural Systems: Air Goals & Policies

GOAL NS 1: Protect and maintain air quality.

Goal Rationale: The protection of air quality is important for the public health, the local economy, the environment, and helps to maintain the high quality of life enjoyed by County residents and visitors alike.

Policy NSL 1.1: Support future and ongoing air quality monitoring programs.

Rationale: Monitoring of air quality helps to determine the impacts of growth and development to air quality. Should air quality problems arise, determining the sources of air quality degradation, and educational and regulatory tools to maintain or improve air quality would be necessary.

Policy NS 1.2: Promote industrial development that meets air quality standards and is compatible with adjacent property.

Rationale: Air pollution can cause health problems, obscure visibility, create unpleasant odors and damage animal and plant life.

Policy NS 1.3: Support public awareness of air quality, including wood stove standards and burning restrictions as adopted by the Department of Ecology.

Rationale: Federal and state agencies set air quality standards for outdoor air. The purpose of these standards is to prevent air pollution from reaching levels that hurt human health. When an area does not meet an air quality standard, the state must develop a plan to clean up the air.

Natural Systems: Icicle Valley Goals & Policies

Goal NS 2: ICICLE RIVER VALLEY: Encourage retention of the scenic character and environmental quality of the Icicle Valley.

Goal Rationale: The preservation of the scenic and environmental qualities of the Icicle Valley, ensures the retention of significant open space and recreational opportunities, and critical areas.

Critical Area Policy CL 2.1: Continue to utilize the Icicle Valley Design Review Overlay District or design guidelines to retain the scenic and environmental qualities of the Icicle Valley.

Rationale: The Icicle Valley Design Review Overlay District provides additional standards to ensure that development does not negatively impact the scenic and environmental qualities of the Icicle Valley.

Critical Area Policy CL 2.2: Residential development should occur at a very low density, and in a scattered, diffused pattern in the Icicle Valley Design Review Overlay District.

Rationale: Dispersed very low density development will help to limit negative visual and environmental impacts.

Critical Area Policy CL 2.3: Implement visual quality standards within the Icicle Valley Design Review Overlay District to protect scenic resources.

Rationale: These standards will allow for continued recreational use of the Icicle Valley and avoid or mitigate visual and environmental impacts.

Critical Area Policy CL 2.4: Private property within the Icicle Valley Design Review Overlay District should continue to be designated as an environmentally sensitive area under the provisions of the State Environmental Policy Act.

Rationale: This designation helps assure that environmental aspects are properly considered.

Critical Area Policy CL 2.5: Protect both wilderness values and reserved rights within the Alpine Lakes Wilderness so that clean and reliable water resources and water supply continue into the future.

Rationale: A variety of users, including wilderness recreationists and water suppliers (municipal, irrigation and fish hatchery) rely on the cold, clean and clear water resources of the Icicle Valley for people, farms and fish.

I. Introduction

The purpose of this element is to evaluate Chelan County's existing housing inventory, and determine land and housing needs for future growth at all economic levels. This element includes a review of market indicators, such as median household income, median housing cost, rental costs, and other related items that define affordable housing.

This Housing Element considers the condition of the existing housing stock in the County, and identifies existing and future housing needs over the next 20 years. The development of this Element was completed, in part, using the County-Wide Planning Policies guidelines, along with regional plans and studies, and other elements of the County Comprehensive Plan. Using existing guidelines, plans, and other elements helps ensure an overall consistency with each City, the neighboring Counties, and the tenets of the Growth Management Act (RCW 36.70A).

When reviewing housing conditions, the County has an opportunity to evaluate, identify, and prioritize local housing issues and trends, and provide strategies to address housing priorities through development regulations, housing programs, and innovative housing options.

This Element includes:

- Housing Goals & Policies
- Housing Inventory
- Affordable Housing Overview
- Supportive Housing Needs
- Future Housing Demands
- Monitoring Options

II. Executive Summary

The overall findings of this review conclude that Chelan County has enough existing and projected housing to meet the expected population growth. However, affordable housing options and supportive housing (for seniors and special needs) within the County are limited primarily due to three factors:

1. The County's role within the Growth Management Act is the preservation of rural lands which limits development options and higher density development.
2. The County is limited in its ability to provide infrastructure, primarily water and sewer, which are necessary to development more affordable housing.
3. Affordable housing in rural areas becomes less "affordable" when factoring in transportation costs.

Despite these limitation, the County has incorporated several regulatory options to support housing alternatives, including permitting of accessory dwelling units, subdivisions options for existing housing, bonus density associated with cluster development or planned developments and allowance of manufactured home parks. Additionally, the County supports the Housing Authority and other agencies, cities and private groups which advance housing diversity and supply of affordable housing needs throughout the County.

Looking forward, the County may consider additional options:

- Collaboration with the Land Trust Organization. The County may partner with the land trust to lease land for development.
- Regulations of Mobile/manufactured home parks. The County permits Manufactured Home Parks but limits density. It may be appropriate to consider reviewing regulations to provide for higher density allowances with provisions for protection of the existing rural character.

- **Redefining Cluster Provisions.** Cluster development has proven to be a helpful subdivision tool, primarily preserving critical areas. Expanding this tool to include multi-family dwellings could diversify housing options.
- **Minimized Yard Setbacks.** Reducing or removing yard setbacks for multi-family dwellings may provide property owners with design and financing flexibility necessary to increase feasibility.
- **Use of Recreational Vehicle Parks.** Many communities have developed regulations for non-transient (residential) RV Parks. If the County were to review this option it may include a detailed analysis of residential building codes.

III. Goals & Policies

The housing goals and policies are closely tied to the Land Use Element, which identifies land use designations, urban growth areas, and resource lands. Chelan County provides for a variety of housing types and subdivision options throughout the County to promote affordable residential living. Effective implementation regulations, monitoring, and coordination with affordable housing efforts are necessary to ensure that affordable housing can be achieved in Chelan County.

While the following Goals and Policies focus on housing, they are also supported by other Elements within the Comprehensive Plan, which should be considered in support of policy changes or specific land use decisions. For example, the Land Use and Transportation Elements include goals and policies that direct various land use activities with the potential to impact housing decisions.

The following goals and policies are not listed in order of priorities but should be considered equally.

Goal H 1: Encourage the availability of affordable housing to all economic segments of the population of the county.

Rationale: Affordable housing opportunities should be accessible to all residents.

Policy H 1.1: Encourage communities within the County to provide a fair share of affordable housing to low and moderate income households by promoting a balanced mix of diverse housing types.

Rationale: All communities should strive to provide low and moderate

income housing for residents of the County.

Goal H 2: Promote a variety of residential densities and housing types.

Policy H 2.1: Promote a diversity of housing unit types and densities to meet the needs of all existing and future residents of the County, including both site-built and manufactured and modular homes.

Rationale: An adequate supply of appropriately zoned land will ensure that the GMA plan does not artificially create inflation in housing prices by restricting competition in the land market.

Policy H 2.2: Encourage development of housing types that meet the needs of the elderly, physically challenged, mentally impaired, and special needs segments of the population (e.g., congregate care facilities).

Rationale: Housing needs should represent the diversity of County residents.

Policy H 2.3: Where appropriate, provide for higher density residential housing developments within existing residential communities and urban growth areas, where adequate infrastructure and services can be provided.



Why is home ownership important?

Homeownership is an indicator of housing affordability and economic security (asset-building) for residents.



Rationale: To reduce the cost of housing, higher density residential developments should be encouraged within existing residential communities and urban growth areas.

Policy H 2.4: Encourage appropriate placement and use of vacation rentals.

Rationale: Vacation rentals impact the character of a neighborhood and impact housing stock.

Goal H 3: Encourage the appropriate preservation of existing housing stock.

Policy H 3.1: Where appropriate, encourage the retention and revitalization of existing housing stock with methods such as:

- a. Permitting accessory housing or the division of existing structures in single family neighborhoods; and,
- b. Protecting existing manufactured home parks and permitting manufactured homes on single family lots; and,
- c. Participating in or sponsoring housing rehabilitation programs offered by the state and federal government.

Rationale: Incentives to renovate existing housing are needed to help provide a variety of residential housing types that are available to all segments of the population.

Policy H 3.2: Support and encourage the retention, rehabilitation and weatherization of existing housing units.

Goal H 4: Support regulatory changes and economic programs that promote affordable housing options.

Policy H 4.1: Provide incentives for projects that enhance or provide lower cost or specialty housing types such as congregate care facilities.

Rationale: The development and requirement of impact fees could be an effective tool to acquire the capital needed for mitigating impacts to schools, water systems, streets and other public facilities and services. Permitting specific exemptions from impact fees to encourage housing for low income households is an effective incentive tool which can be used to help provide affordable housing.

Policy H 4.2: Where appropriate, establish incentives for developers to provide housing affordable to low and moderate income households.

Rationale: This can be accomplished through the use of innovative techniques, including but not limited to: density bonuses, performance zoning, zero lot line development, and cluster subdivisions. Incentives may encourage developers to construct housing for low and moderate incomes households.

Policy H 4.3: Support the Housing Authority and other housing programs with financial and technical support, when appropriate.

Rationale: A county-wide housing authority could provide a coordinated county-wide effort for development of low and moderate income housing.

Policy H 4.4: Support the Housing Authority or other agency's efforts to acquire and development lands for low income housing.

Rationale: Public and private agencies should lend efforts to acquire land needed to serve low income housing population.

Policy H 4.5: Identify high-priority areas for housing redevelopment, rehabilitation, and revitalization, and participate in federal rehabilitation programs as appropriate.

Rationale: Twenty-three percent of the housing units in Chelan County were built in 1939 or earlier. The preservation of these older units is important for providing affordable housing. The County may wish to participate in federally funded rehabilitation programs.

Policy H 4.6: Major concentrations of housing should be located in areas with access to existing and projected transportation systems to minimize expansion of road systems.

Rationale: Supporting the placement of development which minimizes the development of extensive road systems and/or reduces the transportation (travel) costs of residences may result in less impact to the road system and reduce living costs to residents.

Goal H 5: Support year-round and seasonal agricultural worker housing.

Policy H 5.1: Protect the economic viability of the agricultural industry by supporting construction of agricultural worker housing near orchards. Consider the reduction of site development standards and building fees for agricultural housing units.

Rationale: This will assist the agricultural industry to remain economically viable, reduce transportation needs, and provide adequate housing for agricultural workers.

IV. Inventory

Understanding the existing characteristics and supply of housing within the County provides a foundation for addressing housing conditions and determining future needs. The following compilation of data is intended to provide a general overview of housing type, location and vacancy. Depending on the data source, the data will vary slightly and should not be considered absolute without individual studies, market analysis, or a physical inventory which can account for local circumstances.

Number of Housing Units

The County has historically reviewed housing within the various Census County Subdivision Districts, termed CCDs. These boundaries are similar to the Land Use Element division of the County and therefore, may correlate to the Land Use Element vision statements.

The County has seen an increase of over 5,500 housing units from 2000 to 2015. The largest increase of housing has been located in the Leavenworth-Lake Wenatchee CCD (1,632 units) followed by the Wenatchee CCD (1,465 units) and Manson CCD (806 units).

Table 3.1 Housing Units

	Housing Units		
Region	2000	2010	2015 est
TOTAL COUNTY	30,407	35,465	35,934
Cashmere CCD	4,114	4,504	4,719
Chelan CCD	4,134	4,570	4,506
Entiat CCD	1,032	1,121	1,125
Leavenworth-LK			
Wenatchee CCD	4,076	5,461	5,708
Malaga CCD	1,323	1,507	1,743
Manson CCD	1,568	2,194	2,374
Stehekin CCD	166	278	300
Wenatchee CCD	13,994	15,830	15,459

Census Data QT-H1 Table; 2015 estimated data from American Fact Finder (DP04)

Housing Types

The most common type of housing within Chelan County is a single-family residence with 26,126¹ units. Single-family residences include manufactured housing, which is not tracked separately or regulated differently from single-family residences.

Single-family Residences

Single-family residences (SFRs) mean a building containing one dwelling unit that is not attached to any other dwelling by any means, and is surrounded by open space or yards². Chelan County considers manufactured homes or park model homes in the same manner as single-family residences under the zoning regulations. Over the last ten years, the County building records indicate that 1,970 single-family homes and 256 manufactured/park model homes have been placed.³

Accessory Dwelling Units

Accessory Dwelling Units (ADUs) may be attached, detached, or within an existing structure¹. The classification of an ADU under the Building Permit process requires a kitchen. If a structure does not include a kitchen, such as a guest house, living space above a garage, loft, or studio, it is considered habitable space, but not an ADU. Some property owners are not willing or able to classify a structure as an ADU because of the existing structures or the regulatory requirements. This provides a challenge when trying to determine which ADU structures are used for housing purposes.

Tracking specific residential structures, including ADUs, will improve our understanding of housing conditions and needs throughout the County.

Chelan County permits the placement of ADUs in all residential zoning districts with the intent to lessen housing demand and manage housing cost throughout the County.

¹ Chelan County Assessor's coding as of December 2016

² Chelan County Code Chapter 14.98 Definitions

³ Building Records: SFR: 266 in 2016; 238 in 2015; 226 in 2014; 191 in 2013; 156 in 2012; 121 in 2011; 171 in 2010; 130 in 2009; 198 in 2008; 273 in 2007. MH/PM: 21 in 2016; 15 in 2015; 14 in 2014; 17 in 2013; 12 in 2012; 17 in 2011; 23 in 2010; 36 in 2009; 43 in 2008; 58 in 2007

Over the last ten years (2007-2016), the County building records indicate that 131 ADUs have been permitted. The classification of building permits requires that a structure be listed as either an ADU or by type of building – such as manufactured homes. Therefore, it is possible that, during this same time, buildings classified as modular, mobile, manufactured homes or park models could be used as ADUs.⁴

Mobile Home Parks

Mobile or Manufactured Home Parks generally offer a small piece of land which can be leased for the placement of a manufactured home. Chelan County has 14 Mobile Home Parks, some with seasonal or recreational housing, and some with traditional residential housing. Based on a review of the County Assessor's data, there are approximately 363 residential units within the 14 Mobile Home Parks.

Multi-family Dwellings

Multi-family dwellings are buildings containing three or more dwelling units, including units that are located over the other⁵. Most multi-family dwellings within the County require additional land for the placement of adequate septic systems, and require an approved water source. For these reasons, they are less common in the County than in urban areas where sanitary sewer systems and domestic water are available.

Mixed Use Housing Options

Residential uses are permitted in commercial and industrial zoning districts as either a form of mixed use to promote a variety of housing options, reduction of work commuting time, reduction in infrastructure demands, or as caretaker dwellings.

Seasonal Housing

Seasonal Housing is defined as a second home, recreational home, or occasional use home, similar to Ancillary Housing within the Land Capacity Analysis, Appendix B. Seasonal housing is often a type of investment property used as a vacation rental.

The conversion of a residence (or a residential lot) to seasonal housing reduces the overall housing inventory (or land) available for residential use, thereby impacting the options for local home buyers and renters, driving up the demand for housing.

Seasonal housing is most common in and around the Cities of Chelan and Leavenworth, in Stehekin, and the Manson Community Urban Growth Area. At this time, Manson is the only community requiring a yearly permit to track vacation rentals. On average, there are 100 Manson vacation rentals registered with Chelan County each year.

Other Housing

Chelan County includes Institutional Lodging units, which generally include multiple dwellings within one structure, housing individuals who may require support or assistance.

⁴ Building Records: ADU: 26 in 2016; 15 in 2015; 11 in 2014; 18 in 2013; 7 in 2012; 11 in 2011; 10 in 2010; 13 in 2009; 11 in 2008; 9 in 2007

⁵ Chelan County Code Chapter 14.98 Definitions

Vacant Housing

The following chart lists the overall number of housing units, vacant units, vacant – seasonal use, and owner or renter occupied units by CCD. Seasonal Use was pulled from the Census data in an effort to understand the potential demographic changes within various communities.

When residential dwellings are used for vacation homes, the vacancy rate is often higher than a traditional neighborhood. In 2010, the number of overall vacant homes was 40% or higher in the Chelan, Leavenworth-Lake Wenatchee, Manson and Stehekin CCDs. Of the vacant dwellings, 75% were listed as used for “seasonal, recreational, or occasional use.”⁶

Table 3.2 Housing Unit Occupancy

	Housing Units	Vacant	Vacant - Seasonal Use	Owner Occupied	Renter Occupied	Housing Units	Vacant	Vacant - Seasonal Use	Owner Occupied	Renter Occupied	Housing Units	Owner Occupied	Renter Occupied
Region	2000					2010					2015 est		
TOTAL COUNTY	30,407	5,386	2,815	16,178	8,843	35,465	7,638	5,454	17,684	10,143	35,934	17,761	9,291
Cashmere CCD	4,114	290	44	2,584	1,240	4,504	470	188	2,662	1,372	4,719	2,626	1,122
Chelan CCD	4,134	1,671	1,296	1,565	898	4,570	2,046	1,651	1,580	944	4,506	1,842	827
Entiat CCD	1,032	248	151	517	267	1,121	281	203	600	240	1,125	672	201
Leavenworth-LK Wenatchee CCD	4,076	1,635	1,041	1,791	650	5,461	2,714	2,431	2,039	708	5,708	2,076	750
Malaga CCD	1,323	85	14	931	307	1,507	144	49	1,053	310	1,743	1,172	328
Manson CCD	1,568	454	97	744	370	2,194	813	622	887	494	2,374	799	513
Stehekin CCD	166	127	126	17	22	278	223	211	21	34	300	5	24
Wenatchee CCD	13,994	876	46	8,029	5,089	15,830	947	99	8,842	6,041	15,459	8,569	5,526

Census Data QT-H1 Table; 2015 estimated data from American Fact Finder (DP04)

Vacancy Rate

The vacancy rate is the percentage of all available units that are vacant or unoccupied at a particular time. A high vacancy rate indicates that there a lot of rentals/homes available presumably at lower rents. This is not necessarily true for areas where a vacant home is used seasonally or as a vacation rental. Vacation rentals are a transient use not available for residential occupancy; therefore, when data is available, vacation rentals should be removed from the vacancy analysis so that a true count of available housing stock may be obtained.

A low vacancy rate indicates a high demand for housing. The longer a region maintains a low vacancy rate, the more pressure there is on the housing market. People who cannot rent/buy may have the option to:

- Look for housing outside of their community (increasing travel expense)
- Rent/buy at a higher than desirable value
- Rent/buy a smaller unit/home
- Move to a new community/region

Chelan County has a 12.4% rental vacancy rate which would indicate low demand and multiple options for renters. However, when reviewing the largest market in the County – Wenatchee, the vacancy rates are 1-2% indicating a high demand and increasing rents. If this trend continues, the County and other urban areas may experience increase demand for rentals.

⁶ American Fact Finder H005 Vacancy Status

A second type of vacancy rate to monitor is the number of residential structures which are vacant and not used as rentals. Chelan County has a low homeowner vacancy rate of 2.4% indicating a high demand for homes to purchase and increasing home prices. This is reflected in the Wenatchee's median sales price increase of 8% YTD (January - November 2016).

It is worth noting, that the East Wenatchee housing market is closely linked to the Wenatchee housing market due to the proximity of the two communities which is experiencing similar housing demands.

In conclusion, the County has more available rentals than homes for sale.

Table 3.3 Vacancy Rates

	2010	2014	2010	2014
	Homeowner Vacancy rate		Rental Vacancy rate	
Chelan County	2.6%	2.4%	6.9%	12.4%
Cashmere CCD	1.5	4.6	4.1	5
Chelan CCD	5.1	0	13.2	13.2
Entiat CCD	2.3	2	6.2	4.2
Leavenworth CCD	3.8	5.9	12.1	19.7
Malaga CCD	1.4	1.8	4.3	10.2
Manson CCD	3.6	1	4.6	12.2
Stehekin CCD	4.5	0	7.1	33.3
Wenatchee CCD	2.2	0.7	6	7

Table 3.4 Wenatchee Vacancy Rates

Wenatchee Market	2011	2012	2013	2014	2015	2016
Condo	4%	6%	2%	0%	0%	0%
Single Family	3%	3%	1%	3%	2%	2%
Multi-Family	4%	3%	2%	3%	2%	1%
Plex Units (2-4 units)	3%	3%	3%	2%	0%	1%
Overall	4%	3%	2%	2%	2%	1%

DP-1 2010 Census; ACS – DP04 5-year survey; Pacific Appraisal – Wenatchee Market September Data

Housing Locations

The distribution of housing types can be compiled by reviewing the Chelan County Assessor's data for each zoning district, see Distribution table 3.5. It should be noted that land uses are always in some form of fluctuation, as well as the methods of data collection; therefore, this information is a representation of the general conditions.

Table 3.5 Distribution

Zoning Districts	Single-Family	Households 2-4	Multi-units 5+	Residential Condo Units	Mobile Home Parks	Institutional Lodging	Other Residential	Vacation/ Cabin	Totals
Commercial Agricultural (AC)	989	0	0	0	0	0	19	1	1,009
Commercial Forest (FC)	53	0	0	0	1	0	11	58	123
Commercial Mineral (MC)	6	0	0	0	0	0	0	0	6
Rural Residential/Resource 2.5	1,728	1	0	9	0	0	308	569	2,615
RR 5	2,350	1		0	4	0	306	556	3,217
RR 10	765	0	0	0	0	0	62	173	1,000
RR20	477	0	0	21	0	2	159	529	1,188
Rural Village (RV)	1,150	1	0	0	2	0	36	71	1,260
Rural Waterfront (RW)	268	0	0	48	1	0	1,490	1,201	3,008
Rural Recreational/Residential (RRR)	796	0	0	146	2	0	61	385	1,390
Rural Industrial (RI)	108	1	2	0	2	0	2	0	115
Rural Public (RP)	86	0	0	0	1	0	21	38	146
Rural Commercial (RC)	72	1	3	0	1	0	0	6	83
TOTAL (outside UGAs):	8,848	5	5	224	14	2	2,475	3,587	15,160
Unincorporated (includes UGAs)	12,582	30	10	328	18	2	2,749	3,659	19,378
Incorporated (Cities)	13,486	457	123	1,673	25	20	190	225	16,199
Total Units Countywide:	26,068	487	133	2,001	43	22	2,939	3,884	35,577

County Assessor's data as of October 2016, correlated to GIS data

Housing Conditions

Good physical and mental health depends on having homes that are safe and free from physical hazards. When suitable housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability, and control, it can make important contributions to physical and mental health. In contrast, poor quality and inadequate housing contributes to health problems such as infectious and chronic diseases, injuries, and poor childhood development.⁷

Housing Facilities

Housing which lacks plumbing and kitchen facilities has a higher probability to expose residents to unsafe living conditions, and impact surrounding property values. The US Census collects information on the condition of residential structures. Those structures which lack complete plumbing and kitchen facilities are considered to be in poor condition. The 2000 Census was the last count where data was collected specifically regarding plumbing and kitchen facilities. The 2014 data is estimated by the American Community Survey, and is considered less accurate.

While it is acknowledged that some areas of Chelan County include “dry cabins,” it is assumed that housing which lacks plumbing and kitchen facilities is either used for recreational purposes, or may require updating, repair or replacement.

⁷ Commission to Build a Healthier America by Robert Wood Johnson Foundation, September 2008

Table 3.6 Facilities

Region	2000 Basic Facilities			2014 Basic Facilities		
	All Housing Units	Lack of Plumbing Facilities	Lack of Kitchen Facilities	Occupied Units	Lack of Plumbing Facilities	Lack of Kitchen Facilities
TOTAL COUNTY	30,407	771	701	35,755	254	379
Cashmere CCD	4,114	36	26	3,763	5	41
Chelan CCD	4,134	207	146	2,707	63	63
Entiat CCD	1,028	76	99	871	11	11
Leavenworth-Lake Wenatchee CCD	4,076	166	110	2,881	0	27
Malaga CCD	1,323	0	0	1,496	75	75
Manson CCD	1,568	53	53	1,303	38	38
Stehekin CCD	170	69	45	19	2	7
Wenatchee CCD	13,994	164	222	14,143	60	117

2000 Data, US Census QT-H4; 2014 Data ACS 5-year estimate

Housing Age

Older homes are assumed to need a higher level of maintenance and repair to ensure that they can continue to provide housing for residents. Additionally, older homes are more prone to fire damage, due to older electrical and heating systems, and a lack of fire protections within the home.

Table 3.7 Year Built

	Built 1939 or earlier	Built 1940-1949	Built 1950-1959	Built 1960-1969	Built 1970-1979	Built 1980-1989	Built 1990-1999	Built 2000-2009	Built 2010 or later	TOTALS
Cashmere CCD	907	249	564	441	552	675	800	496	51	4,735
Chelan CCD	529	216	512	375	729	762	886	595	17	4,621
Entiat CCD	234	52	84	41	133	99	246	264	13	1,166
Leavenworth-Lake Wenatchee CCD	526	164	407	158	905	1307	1,071	1115	15	5,668
Malaga CCD	239	0	51	62	330	244	425	323	22	1,696
Manson CCD	171	64	201	134	327	354	438	538	23	2,250
Stehekin CCD	72	10	33	76	34	23	6	19	1*	273
Wenatchee CCD	2,322	699	2662	1,601	1720	1968	2,435	1792	150	15,349
TOTALS	5,000	1,454	4,514	2,888	4,730	5,432	6,307	5,142	291	35,758

2014 ACS 5-year estimate

The repair or rehabilitation of substandard housing can be addressed through education of the general public or support of organizations or agency efforts but may also require code enforcement actions when there are identified safety concerns.

Housing – Persons Per Household

The Department of Housing considers overcrowding as a potential public health concern, due to the risk of a higher rate of communicable diseases, and a higher rate of homelessness⁸. Overcrowding can be defined by the number of persons per household (PPH). The PPH is calculated as an average. A 2.5 PPH means that the average home contains two and half persons

⁸ HUD, “Measuring Overcrowding in Housing” September 2007

(better defined as one home of 2 persons and a second home of 3 persons). Depending on the level of detail, a community may find it helpful to determine PPH by neighborhood, then review the size of the homes and identify any potential risk concerns. Seasonal or vacation dwellings are not included within the PPH calculations.

It is not uncommon for different cultures to have extended families within one home, which may increase the PPH. Additionally, it is common in regions with high rents and/or low incomes, such as areas surrounding colleges/universities, to have an increase in the PPH.

Chelan County averages 2.67 PPH which is higher than 2.51 for Washington State⁹. There are a few areas in the County where the PPH is relatively high, especially for rental units. The Chelan, Manson, and Malaga CCDs rental PPH is 3.5 or greater indicating the potential need for additional rentals, larger rentals and/or more affordable housing.¹⁰

Table 3.8 Occupancy

	Chelan County	Cashmere CCD	Chelan CCD	Entiat CCD	Leavenworth-Lake Wenatchee CCD	Malaga CCD	Manson CCD	Stehekin CCD	Wenatchee CCD
Total:	2.67	2.83	2.58	2.56	2.18	2.77	2.62	1.63	2.74
Owner occupied	2.51	2.83	2.01	2.44	2.22	2.48	1.97	1.67	2.66
Renter occupied	2.96	2.82	3.96	2.86	2.09	3.49	3.55	1.63	2.86

ACS 2014 (estimated) Average Household Size

Land Availability

As noted in the Land Use Capacity Appendix B, there is enough land in the County to satisfy future housing needs; however, the overall number of residential building permits exceeds the creation of new lots (subdivisions).¹¹ This may impact housing costs, affordability and availability as demand continues to grow.

Employment Data

Demand for housing is proportionally affected by employment factors. In order for employers to hire from outside of the County, there is a need for adequate housing and rental options. Employment rates, pay scales, and diversity of job opportunities each play a role in a community's balance of housing vs rental needs.

Within Chelan County, agriculture is a dominant industry with 24.1 % of the total employment (2014), followed by private health services with 13.5% of employment, according to the Employment Security Department. Other large employers include local government, retail trade, and hotels¹².

The highest payroll sectors fall in a different order with Health services providing the largest income, followed by local government, agriculture, retail trade, wholesale trade, and all other industries.

The unemployment rate for Chelan County was 4.3%, as of September 2016. This is consistent with the previous three years, all under 5%, and the third lowest rate out of all Counties in Washington State. The

⁹ 2010 Census data

¹⁰ The PPH data collection process does not count seasonal workers but rather counts residents and their children. A review of seasonal worker housing is addressed within this Element.

¹¹ New tracking system finds that in the last two years there have been 504 single-family residences and during the same time a request for 218 lots (created by either short plat or plat processes).

¹² Employment Security Department

averaged State unemployment was 5.6% for the same time period⁶. Where most of the work force is employed with median or above wages, there will be more opportunities for home ownership and a lesser demand on rentals.

In 2015, the County lost a major employer when ALCOA closed/reduced operations. The impacts to the housing market are still under review and may not be known for some time.

V. Affordability Options

The market indicators show that housing costs are increasing with each passing year. If housing prices are too high, or little housing is available, it may be difficult to attract and retain workers. On the flip side, if costs are low and availability is high, the creation of new housing will slow, impacting construction employment. Finding ways to balance housing needs, costs, and demands will support residents, developers, builders, and lenders.

Countywide, there is an assumption that the market place will guarantee adequate housing for those in the upper economic brackets, but adequate provisions for the needs of middle and lower income persons will be necessary to ensure affordable housing¹³.

Housing Affordability Index

The Housing Affordability Index (HAI) is calculated and maintained by the Washington Center for Real Estate Research. It measures the ability of a middle income family to make mortgage payments on a median priced home. The HAI uses a calculation method to determine an affordability value based on a median priced home, a 20% down-payment, a 30-year fixed mortgage and the median income. A value of 100 means a family with the median income has exactly enough income to qualify for a mortgage on a median-priced home. For Chelan County, the HAI shows an average of 79.6 over the last year (spring 2016-spring 2015) and an average of 74.6 over the last 10 years - varying between 115.2 and 49.9¹⁴.

Income Levels

Median household income measures all sources of income – wage/salary, investments, rents, pensions, transfer payments. The median household income is the value at which 50% of households in Chelan are below and 50% are above. Households are different from families, since they may contain unrelated people living together or single inhabitants in a dwelling. Household income in 2014 was estimated to be \$50,825 for Chelan County as compared to \$60,153 for Washington State¹⁵.

The median household income may be averaged countywide; however, there is a distinct variance in income between an owner-occupied household and a renter-occupied household, which may be reviewed under the same affordability calculation.

Chelan County defines Affordable Housing as: Housing where the occupant (household) pays no more than 30% of their median income for total shelter costs, including rent or mortgage payment, taxes and insurance, and utilities. The adjusted monthly income levels shall be those prepared annually by the US Department of Housing and Urban Development.

¹³ Housing expenditures that exceed 30 percent of the household income have historically been viewed as an indicator of a housing affordability problem. This standard originated in the United States National Housing Act of 1937 and has been used ever since.

¹⁴ Chelan-Douglas Trends

¹⁵ Office of Financial Management

Table 3.9 Income

Median Household Income			
	2000	2010	2015
All of Chelan County	\$ 34,120	\$ 48,674	\$ 51,837
Owner occupied	\$ 48,121	\$ 58,360	\$ 60,573
Renter occupied	\$ 24,060	\$ 32,497	\$ 37,959

2000 date from American Factfinder Table HCT012;
2010 and 2015 from Table B25119

Expanding the same income table to calculate an affordable mortgage or rent payment of 30% or less of the household income, it can be determined that housing expenses for a median household income should be no more than \$1,296 to be classified as affordable in 2015.

Table 3.10 Occupancy Income

Median Household Income									
	2000	30% of Income	Monthly Expense	2010	30% of Income	Monthly Expense	2015	30% of Income	Monthly Expense
All of Chelan County	\$ 34,120	\$ 10,236	\$ 853	\$ 48,674	\$ 14,602	\$ 1,217	\$ 51,837	\$ 15,551	\$ 1,296
Owner occupied	\$ 48,121	\$ 14,436	\$ 1,203	\$ 58,360	\$ 17,508	\$ 1,459	\$ 60,573	\$ 18,172	\$ 1,514
Renter occupied	\$ 24,060	\$ 7,218	\$ 602	\$ 32,497	\$ 9,749	\$ 812	\$ 37,959	\$ 11,388	\$ 949

Median Home Values

Home values have generally increased year to year. Within the 2016 calendar year home values have increased 8% according to Pacific Appraisal Associates, ending the year with a median sales price of \$268,750 through November.

Table 3.11 Home/Rental Values

Year	Owner Occupied		Renter Occupied			
	Chelan County Median Resale Value*	Paying 30%+ of household income	One Bedroom Rent**	Two Bedroom Rent**	Paying 30%+ of household income	Paying 50%+ of household income
2016	\$249,400	n/a	\$907	\$899	n/a	n/a
2015	\$255,800	20.50%	\$662	\$823	32.6	10.9
2010	\$230,000	29.40%	\$598	\$702	45.7	24.8
2005	\$172,100	22.10%	\$480	\$616	38.0	16.6

*Chelan-Douglas Trends, first quarter data; **fall data

Housing Affordability in Chelan County

Reviewing median household income and median housing cost, conclusions can be made about housing affordability. There are many lending agencies and selling companies that provide standard “affordability” calculators to help individuals gauge income and debts to determine an affordable housing cost. For the purposes of simplicity, the following review is calculated using the median sale price as of November 2016 of \$268,750. Based on the median household income of \$51,837 affordable housing would be a monthly expense of \$1,296 or less. It appears that the current increases in the housing prices are resulting in few affordable housing options for residents.

Table 3.12 Home Expense

	Median Home Value	20% Down Payment	Est Insurance	Est Taxes	Principle & Interest 4.25%	Total Est Payment
Nov 2016	\$268,750	\$53,750	\$67	\$222	\$1,040	\$1,328
Mar 2016	\$249,400	\$49,880	\$67	\$206	\$975	\$1,248
Mar 2015	\$255,800	\$51,160	\$67	\$211	\$990	\$1,267
Mar 2010	\$230,000	\$46,000	\$67	\$190	\$899	\$1,156
Mar 2005	\$172,100	\$34,420	\$67	\$142	\$673	\$882

**Home values shown in prior chart; estimations by Zillow Mortgage calculator*

Median household incomes can be reviewed Countywide, or can be calculated based on income for owner-occupied households and renter occupied households. Within Chelan County, there may be less renter occupied households than owner occupied households.

Using the renter occupied data to calculate affordable rent is simply defined as 30% of monthly income. Given the current rent rates between \$899-907, it appears that households making the median income have access to affordable homes.

Table 3.13 Affordability Rate

County Median Income		Monthly Income	30% of Monthly
2015	\$51,837	\$4,320	\$1,296
2010	\$48,674	\$4,056	\$1,217
2000	\$34,120	\$2,843	\$853
Owner Occupied Income			
2015	\$60,573	\$5,048	\$1,514
2010	\$58,360	\$4,863	\$1,459
2000	\$48,121	\$4,010	\$1,203
Renter Occupied Income			
2015	\$37,959	\$3,163	\$949
2010	\$32,497	\$2,708	\$812
2000	\$24,060	\$2,005	\$602

** estimations by Zillow Mortgage calculator*

VI. Supportive Housing

Farmworker Housing

Chelan County employed an estimated 7,900 seasonal workers in 2012. Finding enough seasonal housing for farmworkers is a challenge. If there is not enough temporary housing, it may result in the use of permanent housing and/or overcrowding.

Washington State Department of Health & Labor and Industries – temporary worker housing

Washington State provides options for temporary worker housing. Temporary worker housing can be a tent, garage, cabin, apartment, motel room, house or bunkhouse. Workers may rent, lease, have payroll deduction or have no change for the use of the temporary worker housing. Employers or other persons offering temporary worker housing must be licensed by the State, RCW 70.114A. Housing standards are regulated pursuant to WAC 296-833. Chelan County encourages the use of the State programs to place temporary housing throughout the County.

The Department of Health licenses all temporary housing facilities. In 2016, there were 16 active temporary worker housing licenses.

While most farmworker housing is addressed through the employers and agencies, the County does manage one seasonal housing camp in Monitor from June 1st through November 1st. During the cherry season (early in the summer) there are 380 beds which are reduced to 300 beds for the pear/apple season (late summer).

Other temporary housing options and housing agencies include:

Washington Growers League

The Washington Growers League has been actively developing seasonal (April 1st – November 30th) farmworker housing in Chelan County:

- In 2007/08, they opened Sage Bluff, a development with 41 housing units for 270 people.
- In 2015, they opened Brender Creek, with 200 beds in 25 trailers/apartments and 180 beds in 30 tents.

Worker housing is expensive to build, furnish and maintain. For example, the Brender Creek project was built (excluding furnishings) by The Washington State Housing Trust Fund at a cost of \$6 million.

Chelan County Housing Authority

Housing is available in Malaga as part of the Housing Authority's seasonal program. Columbia Pointe opened in 2009 with 26 housing units serving a maximum of 136 people.

WAFLA (Washington Farm Labor Association)

WAFLA was formed in 2007 to provide labor and employment consulting services for seasonal employers. Part of their mission is to support a quality migrant and season workforce. To do this, they partner with agricultural associations, migrant health clinics, community colleges, and others who serve workers. They also offer support for employers who want to participate in the federal guest worker H-2A program.

Guest Worker Housing (H-2A)

The H-2A program is a Federal program which admits into the United States foreign agricultural workers through a visa program. Employers recruit, hire, and maintain a Temporary Labor Certificate to be in the H-2A program. Terms of work can be as short as a month or two, or, in most cases, as long as 10 months. All workers are covered by U.S. wage laws, workers' compensation, and other standards, such as the Affordable Care Act. Additionally, H-2A

employers are the only group of employers who are required to pay inbound and outbound transportation, provide free housing, and provide meals for their workers.

Special Considerations – Needs

“Special needs” may include handicapped people as well as people who are not able to live independently but require a group home, nursing home, assisted-care facility, in-house care, or other type of social/healthcare needs. The 2014 ACS data divides the concerned populations into two categories, one for difficulty with self-care, and the other for difficulty living independently.

Summarizing the data, we find that an estimated 2.4% of Chelan County residents have difficulty with self-care and 5.7% struggle with independent living. Independent living appears to be more difficult as individuals age, indicating a potential need for more senior housing options as the overall population ages.

Individuals who need in-house, group, or other forms of assisted living generally receive support within an extended family network before turning to organizations or agencies.

Chelan County permits through the zoning regulations Adult Family Homes and Dependent Care Housing in all residential zoning districts. Furthermore, the County does not distinguish (nor discriminate) housing for persons with handicaps. The development of additional housing for special needs currently relies on market demand and community groups/agencies.

Table 3.14 Difficulty with self-care

	Chelan County	Cashmere CCD	Chelan CCD	Entiat CCD	Leavenworth- Lake Wenatchee CCD	Malaga CCD	Manson CCD	Stehekin CCD	Wenatchee CCD
Total:	68,056	10,073	6,667	2,171	6,033	3,958	3,250	33	35,871
Male:	33,740	4,920	3,752	1,020	2,913	2,060	1,752	12	17,311
5 to 17 years:	128	30	0	0	0	0	0	0	98
18 to 34 years:	0	0	0	0	0	0	0	0	0
35 to 64 years:	370	2	0	3	8	27	27	10	293
65 to 74 years:	48	7	0	5	23	0	0	0	13
75 years and over:	169	16	11	11	0	0	7	0	124
Female:	27,944	4,160	2,502	968	2,695	1,486	1,172	21	14,940
5 to 17 years:	5	5	0	0	0	0	0	0	0
18 to 34 years:	19	0	0	0	4	0	0	0	15
35 to 64 years:	207	33	24	10	15	21	9	0	95
65 to 74 years:	114	11	0	0	28	0	7	0	68
75 years and over:	607	66	29	18	56	24	0	0	414

2014 American Community Survey

Table 3.15 Difficulty with independent living

	Chelan County	Cashmere CCD	Chelan CCD	Entiat CCD	Leavenworth-Lake Wenatchee CCD	Malaga CCD	Manson CCD	Stehekin CCD	Wenatchee CCD
Total:	54,997	7,998	5,436	1,811	5,289	3,072	2,554	33	28,804
Male:	27,053	3,838	2,934	843	2,594	1,586	1,382	12	13,864
18 to 34 years:	220	37	71	4	0	0	0	0	108
35 to 64 years:	613	24	0	17	18	54	27	10	463
65 to 74 years:	116	17	0	9	6	0	0	0	84
75 years and over:	385	64	11	11	50	0	7	0	242
Female:	27,944	4,160	2,502	968	2,695	1,486	1,172	21	14,940
18 to 34 years:	313	31	0	4	0	0	0	0	278
35 to 64 years:	472	155	13	22	19	30	71	0	162
65 to 74 years:	202	32	29	3	35	0	27	0	76
75 years and over:	819	75	29	35	101	24	21	0	534

2014 American Community Survey

Homelessness – Ten-Year Action Plan¹⁶

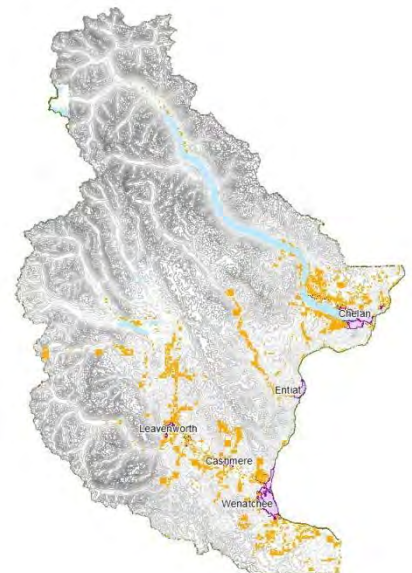
In 2005, the Washington State Legislature passed the Homeless Housing & Assistance Act requiring each County to establish a task force, develop a ten-year plan to reduce homelessness, implement a homeless management information system (HMIS), conduct a point-in-time count each January and, when available, use funds for homeless reduction activities.

Chelan and Douglas Counties have been working together, with the City of Wenatchee as the lead entity, to achieve and maintain the goals of the State. In 2005, the communities united in the development of the “Ten-Year Plan to Reduce Homelessness in Chelan & Douglas Counties.” The plan was updated in 2015 and documents several accomplishments, including the establishment of a Homeless Steering Committee and Homeless Task Force; developing services ranging from outreach, emergency shelter, transitional housing, rental assistance, permanent supportive housing, and case management; establishing a HMIS to collect client data and measure performance; and, establishing a Community Housing Network (with a Hotline) to provide a single point of contact for the community.

Homelessness does not have a short term answer, but the immediate needs include more affordable housing options and maintenance of existing housing stock. Chelan County seeks to provide a variety of housing while encouraging the upkeep of housing throughout the County.

VII. Challenges to Rural Housing

Chelan County has approximately 22,206 people living outside of incorporated Cities and Urban Growth Areas. This population is spread out primarily among the lake and river valleys (see orange on the map showing residential parcels). This historic land use pattern developed over the last 100 years, as settlers removed trees and diverted water to create orchard and farm land. There are several areas where land was subdivided for higher-densities which shaped smaller communities, such as Ardenvoir, Blewett, Chumstick, Coles Corner, Dryden, Holden Village, Lucerne, Malaga, Merritt, Monitor, Peshastin, Plain, Stehekin, Telma, Wenatchee Heights and Winton. A few of these historic communities



¹⁶ Ten-Year Plan To Reduce Homelessness in Chelan & Douglas Counties: 2015 Action Plan Update, November 2015

include commercial land uses, but most are currently “pockets” of higher residential density or small vacant lots. Chelan County permits the building on legal parcels which do not meet the current zoning code minimum lot size or width.

All residential development within the County is challenging to develop due to rural or primitive roads, distance to communities, water availability, and land for septic.

Lack of Infrastructure

Rural residences are generally served by private roads, on-site septic, exempt wells (or group well systems), PUD power, and local cable/internet/phone. While each of type of infrastructure has different limitations and costs based on the site location, the common problem for building is water availability and land for septic systems.

It is assumed that individuals wanting to build affordable housing would need to start with affordable parcels. Chelan County provides in the regulations options for clustering parcels and planned developments with an increase in density (density bonus). This provides for smaller, and presumably, more affordable lots, but it does not include infrastructure costs.

Water

Water availability is determined by Chelan County and addressed within the Land Use Element.

Waste-water

Smaller lots may have limited ability to accommodate on-site septic systems. As an alternative, public sewer in limited areas may be used or expanded, within the rules of the Growth Management Act. Another option within the County is the development of large on-site waste-water systems (LOSS).

Septic systems can be grouped into three categories. The first is the most common and the third is the least common and most expensive:

- (1) On-site septic wastewater systems processing up to 3,500 gallons per day that flow through a single point in the system, managed by the Chelan-Douglas Health District (CDHD). A large on-site septic system processing 3,500 gallon system could include nine homes with three bedrooms each (3,240 gallons per day).
- (2) Large Onsite Septic System (LOSS) processing 3,500 gallons up to 100,000 gallons per day, managed by the Department of Health.
- (3) Systems above 100,000 gallons or LOSS systems that use chlorine or lagoon type treatment systems, managed by the Department of Ecology. These are generally city sewer plants.

Some large subdivisions designed with small lots or cluster lots have opted to use multiple large on-site septic systems (up to 3,500 gallons per day) to avoid designing, building and maintaining a LOSS facility. Multiple large on-site septic systems require property owner’s to be informed and responsible to sustain property maintenance.

The LOSS system is designed to handle larger developments and to limit the risk of failure. Within Chelan County, there are fourteen active LOSS systems and five LOSS systems pending approval.

Chelan County also permits “composting toilets” or holding tanks to be used depending on the site location, type of development, and building regulations.

New options for the County and Cities may include flexible regulations for developers which provide for conversion to city sewer such as “shadow platting.” A shadow plat is a subdivision that is designed to accommodate higher-density development in the future but allows for initial lot sizes to be larger to address the current infrastructure and market. The limitations of this type of planning fall on the property owners and developers, who provide future utility and transportation easements, restrict the placement of buildings and develop segments of “dry” sewer infrastructure needed for the future higher density.

Power

While less common, there are some areas of the County which cannot be served by Chelan County PUD, power. These areas have traditionally been limited to very remote areas or areas which provide safety concerns for placement and maintenance of power lines, generally on steep and/or erosive slopes. The County provides building tools for “off-grid” construction which has provided some options for development.

Affordable Housing Costs

The ability to develop housing within Chelan County is driven by market factors, building availability, and access to infrastructure. For affordable housing, these challenges can be amplified by the limitations of the Growth Management Act requirements to preserve rural lands and focus development in urban areas.

Generally, land which is more remote is less expensive and may be appealing to low income households. However, the additional development costs (infrastructure) and travel expense can quickly reduce savings. For every mile one moves further from work, it results in two miles of travel time and cost. Likewise, if traveling for basic amenities often located within or near cities, such as groceries, daycare/school and entertainment, the cost of living and road impact increases two-fold.

Transportation Costs

To help home buyers consider the cost of transportation, HUD has developed a Location Affordability Portal to provide a resource for calculating combined housing and transportation costs¹⁷. Using general information for the Wenatchee zip code, the Location Affordability Portal estimates that housing and transportation costs in the Wenatchee zip code are \$24, 372 or 46% of the household income¹⁸.

Building Lot Inventory

Finally, the number of building permits for single-family residences exceeds the total number of new lots created each year.¹⁹ This may result in builders building on less desirable lots (with a higher cost of construction or located further from amenities).

¹⁷ <http://www.locationaffordability.info/>

¹⁸ Using the median household income of \$52,780 (OFM) and assuming a four person (owner occupied) household with two working persons with housing costs of \$1,500 per month (mortgage, taxes, insurance, utilities) and two vehicles with 24 miles per gallon (and a gas cost of \$2.59) driving 938 miles per month each.

¹⁹ New tracking system finds that in the last two years there have been 504 single-family residences and during the same time a request for 218 lots (created by either short plat or plat processes)

If the trend for demand of residential buildings in the rural areas continues, home costs will increase. New subdivisions are one tool for providing new areas of development. Additional tools may include reviewing land use designations to provide housing densities that encourage development where appropriate.

On a related topic, it is also worth noting that during the housing downturn in 2007-2009, fewer homes were under construction with smaller profit margins resulting in many local builders cutting back employees, closing their business, moving to other communities, or focusing on high-end residential or commercial building. The construction industry is rebounding, but it will take time and resources to make up for the years of slower development and reduced construction labor force.

VIII. Overcoming Challenges

Chelan County has incorporated several housing options to support the efforts of the rural communities by providing options for land divisions and flexible development regulations. The goal of these efforts is to support a variety of housing without reliance on government funds or public infrastructure expansions.

Affordable housing options are supported through the zoning code which provides opportunities for clustering of lots, bonus densities with some types of development, planned unit developments, master planned resorts, segregation of residential homes, and accessory dwelling units. The County adopts regulations for the urban growth areas which reflect the associated City housing goals and densities. Additionally, Chelan County has several support programs which assist people in locating and maintaining housing. The following is a summary of some of the programs available for County residents.

Funding Programs

Chelan County maintains three budget items in support of affordable housing needs:

- ② Community Services and Housing Fund, which is used for Dispute Resolution, Domestic Violence, Homeless Housing and Low Income Housing. The housing funds currently are passed through to the City of Wenatchee homeless programs.
- ② Revenue Source of Homelessness, funded with recording fees pursuant to State law
- ② Low Income Housing Component, funds provided to all cities pursuant to an interlocal agreement. A portion of these funds are retained by the County for Countywide benefit

Chelan County provides direct assistance with the Chelan-Douglas Community Action Council and the Housing Authority.

Chelan-Douglas Community Action Council

In 1965, the Chelan-Douglas Community Action Council was formed as a private not-for-profit corporation to assist individuals and families move from poverty to self-sufficiency. They work to

Growth Management Act

Pursuant to the Growth Management Act, RCW 36.70A.540, the County may enact affordable housing incentive programs to include (a) density bonuses within the urban growth area, (b) height and bulk bonuses, (c) fee waivers or exemptions, (d) parking reductions, (e) expedited permitting, or other incentive programs. Additionally, the County should provide for innovative land use management techniques, including, but not limited to, density bonuses, cluster housing, planned unit developments, and the transfer of development rights, RCW 36.70A.090, which can result in more affordable development and housing options.

connect low to moderate income residents to resources and engage local communities and businesses in ways to elevate those who are economically in need.

Their housing programs include short term rental assistance programs for people who are homeless or who are at-risk of becoming homeless; transitional housing, housing essential needs program, permanent housing programs and tenant based rental assistance. Other related programs include energy assistance, food bank, weatherization and literacy work.

Housing Authority of Chelan County & the City of Wenatchee

In support of affordable housing, the City of Wenatchee formed the Housing Authority in 1981. In the 1990's Chelan County joined the Housing Authority resulting in a new organization structure with 2 Board of Directors from the City of Wenatchee, 1 member from each of the Chelan County Cities, 3 members from Chelan County, 1 member from the City of East Wenatchee and 1 member to represent Douglas County.

The Housing Authority manages approximately 500 housing units (most within Chelan County) and provides Section 8 vouchers for about 500 privately owned rental units. Their programs assist low-income, agricultural workers and veterans and include:

- ☐ HUD-VASH Program: a partnership between the Department of Housing and Urban Development (HUD), the Department of Veterans Affairs (VA) and CCWHA
- ☐ Section 8 Programs: for low income citizens meeting CCWHA criteria
 - Tenant Based Rental Assistance Program
 - Family Self-sufficiency Program
- ☐ Family Self-Sufficiency Program: Establishes financial and independency goals for participants within the Section 8 Housing Choice Voucher Program. Goals may cover job training, education, job search, money management, credit repair, and home ownership. Participants work as a team with service providers and staff to achieve their goals.
- ☐ Utility Allowances
- ☐ Housing for senior/disabled
- ☐ Housing for low-income families
- ☐ Housing for year-round agricultural workers
- ☐ Housing for migrant agricultural workers
- ☐ Home-ownership

Community Housing Network

Chelan and Douglas counties have seven Community Housing Network offices staffed by Housing Specialists who can assist people looking for housing and housing support services including rental assistance, transitional housing, permanent supportive housing, and short-term emergency shelter.

Columbia Valley Housing Association (Columbia Valley Affordable Homeownership)

The Columbia Valley Housing Association was developed through a grant and work done by the Housing Authority of Chelan County & City of Wenatchee. It now operates as a non-profit with support from government grants or the general public. Their primary function is supporting first-time home buyers.

Habitat for Humanity

Habitat for Humanity has been in Chelan County since 1990. They work with people who have a desire to help themselves gain homeownership. The Wenatchee based organization serves the Cities of

Wenatchee and East Wenatchee and all lands within 5 miles of the city limits. Homes are sold to qualifying low-income families at cost with a 25-30 year affordable mortgage. Because volunteers and the families provide nearly all of the labor on the home, the cost is much lower than for conventional housing.

Upper Valley MEND (Meeting Each Need with Dignity)

MEND was established in 1983 as a food bank but has expanded to an independent service organization focused on basic health, housing and hunger needs throughout the Stevens, Peshastin, Dryden, Blewett Pass region. Three of their five programs provide housing support: emergency assistance, homeownership stewardship programs and housing for adults with disabilities.

IX. Future Housing Needs

The County identified current housing and land necessary for future housing and determined that there is adequate land and housing diversity with Chelan County for the next 20 years. The County is dedicated to addressing housing needs for all segments of the community. Homelessness is specifically addressed in partnership with the City of Wenatchee and Douglas County. Agricultural housing is provided by the County, employers, and organizations. The development of special needs housing is addressed through individual situations, market demand, and support organizations. Affordable housing is primarily addressed in the urbanized areas of the County and specific County regulatory tools.

Role of UGAs

In response to the current and future housing needs, the County has coordinated with the cities to ensure that urban growth areas are adequately sized to accommodate the majority of population growth with a variety of urban densities and housing types. While outside of the UGA, rural and resource land use designations accommodate a variety of residential densities and housing types consistent with the goals of Chelan County.

Chelan County strives to provide areas and opportunities for a variety of housing and housing developments that meet the needs of the residents. However, there are some limitations related to density and infrastructure, which can only be addressed within the Cities and Urban Growth Areas.

Role of Annexations

As an Urban Growth Area is annexed into the respective City limits, the opportunities for greater densities may correspond to the availability of wastewater treatment (sewer). For example, the Summer Blossom plat, within the City of Wenatchee's Urban Growth Area, was developed with 14 residential lots on 5.14 acres with each lot designed to accommodate individual septic systems. If the same 5.14 acres was developed with a LOSS system (large septic reviewed and approved by Department of Health), an estimated 23 lots²⁰ could have been developed. Or, if the same area had been served by public sewer, the zoning would have permitted 37 residential lots. There is a substantial difference in the costs and profits for each type of development.

Considerations for Affordability Housing Options

The following options for housing, especially affordable housing, are intended to spark ideas and discussions for future consideration.

²⁰ With one or more structures containing no more than three bedrooms on each lot.

- Land Trust Organizations. Due to the Housing crisis of 2007-09, several communities have developed creative alternatives to provide affordable housing. The cities of Seattle and Bellingham contracted with community land trusts to use land which may be developed. The land trusts retain the property and sell the improvements, similar to a manufactured home park, but with the limitation that the resale of the home must stay “affordable” for at least 90 years.
- Regulations of Mobile/manufactured home parks. The County permits Manufactured Home Parks but limits density. It may be appropriate to consider reviewing regulations to provide for higher density allowances with provisions for protection of the existing rural character.
- Redefining Cluster Provisions. Cluster development has proven to be a helpful subdivision tool, primarily preserving critical areas. Expanding this tool to include multi-family dwellings could diversify housing options.
- Minimized Yard Setbacks. Reducing or removing yard setbacks for multi-family dwellings may provide property owners with design and financing flexibility necessary to increase feasibility.
- Use of Recreational Vehicle Parks. Many communities have developed regulations for non-transient (residential) RV Parks. If the County were to review this option it may include a detailed analysis of residential building codes.

X. Monitoring

The County offers several tools for development of a variety of housing serving all income levels. The tools and programs cover a range of public, semi-public, and private groups/industries. It would be appropriate to review development tools and assistance programs periodically to determine areas of success and areas of need. These reviews should be coordinated to provide timely information to the Board of County Commissioners and respective City Councils and, at a minimum, occur with each Comprehensive Plan update.

Chapter 6 CAPITAL FACILITIES ELEMENT

I. INTRODUCTION

The Capital Facilities Element reflects requirements and direction from the Growth Management Act (GMA), the Procedural Criteria as established by the Washington Administrative Code and the County-Wide Planning Policies. This element estimates capital facility needs for the next 20 years based on the County's selected levels of service standards, and the growth, densities and distribution of land uses anticipated in the Land Use and Rural elements of this plan. Financing approaches to fund these capital facilities is identified to support decision making to achieve the County goals for capital facilities planning.

The Capital Facilities Element promotes efficiency by requiring the prioritization of capital improvements for a longer period of time than the single budget year. In addition, the identification of adequate funding may results in the prioritization of needs.

This Element addresses water systems, irrigation systems, sanitary sewer systems, stormwater, flood management, schools, law enforcement, fire protection and government properties. Even though the County does not own many of these facilities, it is required to address them, RCW 36.70A.170 and Western WA Growth Management Decisions 95-2-0067 and 00-2-0062.

The County works with all agencies to coordinate capital facilities plans and projects but may not always have the most up-to-date information. Each agency is maintained by separate commissioners which manage their own budgets and projects. However, the State requires that any agency adopting a planning document be reviewed by the County for "consistency." This consistency review, when completed, ensures that all agencies are using the Chelan County Comprehensive Plan as a base for their plans, policies and projects.

Additional capital facility information related to roads, utilities and parks can be located in the Transportation Element, Utilities Element and the Park and Recreation Element.

II. LEVEL OF SERVICE STANDARDS

The GMA requires that levels of service be established for capital facilities. Levels of service (LOS) are quantifiable measures of the capacity or other service thresholds that are to be provided in the County.

The GMA indicates that public facilities needed to support a development should be available concurrent (at the same time as) with the impacts of the development. The intent of this concurrency requirement is that no development or permit should be approved if it would result in a reduction in the LOS below the standards adopted by the County. This concurrency test must be met for transportation facilities in order for development to proceed. This test is encouraged but not expressly required for other types of public facilities. Minimum standards for levels

Growth Management Act:

A Capital Facilities Element includes:

- (a) an inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities;*
- (b) a forecast of the future needs for such capital facilities;*
- (c) the proposed locations and capacities of expanded or new capital facilities;*
- (d) at least a six year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and*
- (e) a requirement to reassess the land use element if probable funding falls short of meeting needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.*

of service for capital facilities provided by public entities are as follows:

RECOMMENDED LEVELS OF SERVICE STANDARDS

Water

Proof of water availability in conformance with standards provided by The Washington State Department of Health and Chelan-Douglas Health District is required for development. This availability is also required to be confirmed by Chelan County, pursuant to RCW 36.70A.030(15).

Sanitary Sewer Systems

Treatment capacity shall conform to standards set by the Washington State Department of Health. Treatment capacity must be adequate to treat peak flows.

Collection systems must be adequate to accommodate 2.5 times the peak flow volume.

In the rural areas on-site sewage disposal will be utilized in conformance with the standards provided by The Washington State Department of Health and the Chelan-Douglas Health District. Limited sewer service to mitigate an existing health problem or protect surface water quality in areas of existing development may be allowed. Providing limited sewer service for the infill, development or redevelopment of existing intensive areas of rural development may also be allowed in conformance to the provisions outlined in the Growth Management Act.

Stormwater Systems

Stormwater from new development must be controlled so as not to contribute additional off site flows that exceed predevelopment flow rates. Chelan County Public Works regulates and approves stormwater plans throughout the County. All new development is reviewed for Construction and Post-Construction Stormwater Runoff Control Program applicability to control and remove off site flows that exceed predevelopment flow rates.

Within the Wenatchee basin additional planning has been completed through the Comprehensive Stormwater Plan, adopted 2012. This plan addresses conveyance concerns, water quality elements, operation and maintenance schedules and capital projects intended to address deficiencies within the Wenatchee basin.

Stormwater projects are managed and addressed within the Transportation Element.

School Districts

The standard for schools is the current State standard for funding as determined by the State Superintendent for Public Instruction.

Fire Protection

The standard for fire protection is to be in conformance with the International Fire Code standards or alternatives as approved by the Chelan County Fire Marshal.

Law Enforcement

The standard for law enforcement is to answer calls for assistance within a reasonable time consistent with the nature of the call.

III. INVENTORY AND PLANNED IMPROVEMENTS

The following discussion generally describes capital facilities that are used in providing for public services within Chelan County. During the preparation of this element of the plan, many agencies were contacted to provide information relative to capital facilities planning. Many of the agencies providing services or facilities have prepared comprehensive plans that will be adopted by reference and will be available for review at the specific agency or facility and at the Chelan County Department of Building/Fire Safety and Planning office. In some cases, plans are being prepared by the service agency and are not yet available.

Water Systems

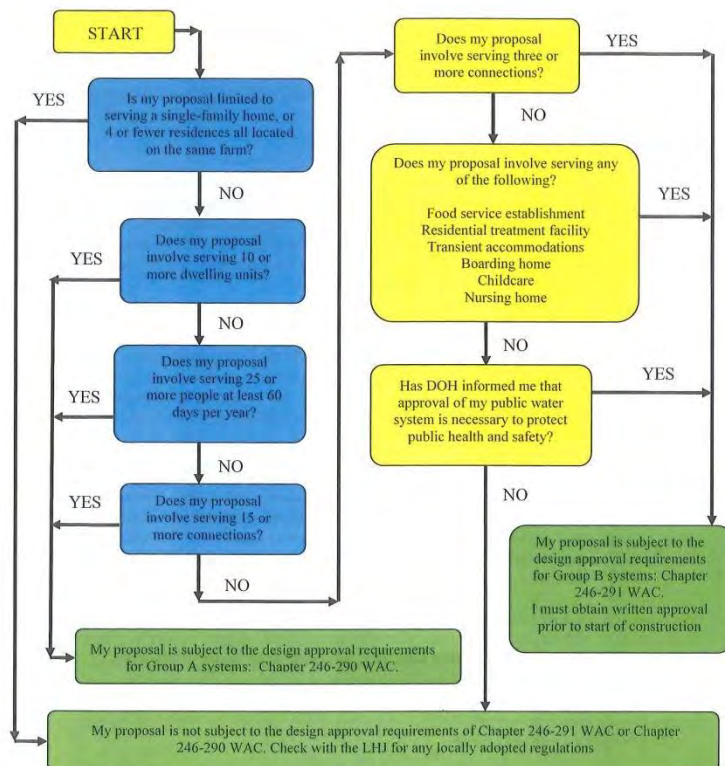
Domestic water in Chelan County is provided through several hundred private and public sources. A “public water system” means any system, excluding a system serving only one single-family residence and a system with four or fewer connections all of which serve residences on the same farm, providing piped water for human consumption, including collection, treatment, storage, or distribution facilities used primarily in connection with such system (WAC 246-291-010), see flow chart. The Chelan-Douglas Health District classifies a “Group A” system

as serving 15 or more connections, regardless of the number of people, or a transient business with 25 or more customers per day for at least 60 days per year, or 10 or more dwelling units. A “Group B” system serves less than 15 connections and any of the following uses: food service establishments, residential treatment facility, transient accommodations, boarding homes, childcare, or nursing homes. A two party system is a public system but is exempt from the requirements for a “Group B” water system.

The larger public water systems operated by public entities include the following:

Chelan County Public Utility District (PUD) – Wenatchee Water System

The PUD Wenatchee system surrounds the City of Wenatchee’s water system and serves north along SR 97 to Tree Top Fruit, west to the community of Monitor and south through Squilchuck to the Forest Ridge Subdivision. The service area is identified in the PUD’s Wenatchee Water System Plan completed in 2016. Source water and water rights are provided by the Regional Water System.



Wenatchee Regional Water System

The City and Chelan PUD collaborated to develop the Eastbank Aquifer as a regional water supply source for both entities under the terms of the original Water Contract – Regional Water System (1979 Contract). The land on which the aquifer is located is owned by Chelan PUD and located within the Rocky Reach Hydro Electric project and subject to the Federal Energy Regulatory Commission (FERC) licensing requirements. In its 1979 order, FERC approved the PUD's permitting of this land to the City for the purposes of constructing the Regional Facilities.

The East Wenatchee Water District (EWWD) contracted to be a participant in the Regional Water System in November 1998 through an Amended Water Contract – Regional Water System Contract (Contract). The defined facilities, lands, water rights, and rights of way necessary for this development are referred to as the Regional Facilities. The source was developed to meet the projected water demand of the Wenatchee Regional Water System Supply area.

The wells for the Regional Facilities are located just north of the Rocky Reach Dam on the east side of the Columbia River. This source supplies domestic water service for the City, the PUD and EWWD service areas through the following metered connections, which are also part of the Regional Facilities.

Existing Regional Facilities include four (4) operating ground water wells; four (4) pumps (one for each well); a sodium hypochlorite injection system; surge control; control building; power supply; and a 30-inch ductile iron transmission pipeline. Also part of the system are 19 combination air/vacuum release valves, 16 drain stations, and 7 mainline valves. The mainline transitions to a 36-inch steel as it passes through the Columbia River Bridge (SR2) then reduces back to 30-inch ductile. The Regional pressure and pump operation is controlled by the City's low (883) zone reservoirs and distribution system by means of a radio telemetry system. Included in the telemetry system is a source meter used for monitoring supply and determining quantity of chlorine needed for disinfection and monitoring of the EWWD and PUD supply stations.

The Regional Facilities also include emergency standby wells near Kentucky Street (wells 4 and 5) and the Cascade Avenue (well 7) located in Douglas County.

Current annual supply to the three members totals 11,500 acre-feet. Regional water rights authorize withdrawals from the Eastbank Aquifer totaling 13,277 acre-feet annually. Regional's water rights authorize withdrawals of 22,065 acre-feet annually (13,277 acre-feet from Eastbank with the remainder from other locations). As of December 2016, Regional is evaluating an alternative source of supply in Chelan County near Chelan PUD's Rock Island Dam.

Chelan County PUD - Chelan Falls Water System

The Chelan Falls water system is owned by the Chelan Falls Water District and operated and managed by Chelan PUD. The Chelan Falls water system is located along the Columbia River, southeast of the City of Chelan in the southwest portion of Township 27 N. and Range 23 E. The system is located primarily along the Columbia River. Two wells, a pump station, a storage tank, and approximately 15,000 lineal feet of 6-inch and 8-inch diameter distribution mains serve approximately 140 connections.

Water rights for the Chelan Falls water system are covered by Certificate G4-27862. The system is authorized to withdraw 470 gallons per minute at any given time, not to exceed a total yearly withdrawal of 300-acre feet (97.8 million gallons per year). Current annual supply is approximately 36.2 million gallons.

Chelan County PUD - Chelan Ridge Water System

The Chelan Ridge Water System is located on the south shore of Lake Chelan near the intersection of Navarre Coulee Road and South Lakeshore Road. The system consists of a groundwater well located in the First Creek State Park, a 100,000 gallon reservoir and an 8-inch PVC and ductile iron distribution system. There are approximately 40 service connections plus the State Park.

The system has a capacity of 90 E.R.U.s (equivalent residential units) with 30 of these allocated to the Lake Chelan State Park. The estimated future demand for the system is 90 E.R.U connections.

Chelan County PUD - Olalla Canyon Water System

The Olalla Canyon water system is located in Olalla Canyon just west of the City of Cashmere and North of U.S. Highway 2. The system consists of a spring source, collection box, submersible pump, 3-inch HDPE transmission main, 100,000-gallon reservoir and 6-inch ductile iron distribution system.

The system currently serves 30 connections. The water rights place of use is limited to the existing parcels. There are no plans for additional users on this system.

Chelan County PUD - Dryden Water System

The Dryden water system is located along the Wenatchee River in Dryden. The system consists of two groundwater wells, 6 and 8-inch distribution mains and an 80,000 gallon concrete reservoir. The system supplies approximately 62 service connections on both the north and south of US Highway 2. Water rights are covered by G4-27929C. The system is authorized to withdraw 150 gallons per minute at any given time, not to exceed a total yearly withdrawal of 74-acre feet (24 million gallons per year). Current annual supply is approximately 7 million gallons.

Lake Chelan Reclamation District Water System

The domestic water system for the community of Manson was purchased by the Lake Chelan Reclamation District (LCRD) in February of 1922. The system has two intakes in Lake Chelan, one raw water reservoir, a Water Treatment Plant, two finished water reservoirs and over 47 miles of distribution system. The system serves approximately 1,690 connections and a peak tourist population of 6,000 in the summer months. Connections are projected at 1,950 in the year 2025 with an estimated peak tourist population served of approximately 8,500.

The area served by the LCRD domestic water system is a mixture of commercial agriculture, rural residential and urban residential and commercial land uses. Agricultural and rural residential usage is the dominant land use while the remaining uses are located within the Manson urban growth area.

The LCRD has an approved Domestic Comprehensive Plan for the system, dated March 2014, that includes a description, analysis and proposed improvements to the system, and is

adopted by reference as part of this comprehensive plan. This LCRD Plan was designed to be in concurrence with the Chelan County Comprehensive Plan.

Malaga Water District

The Malaga Water District service includes the Malaga and Stemilt area. There are several small water systems within its boundaries, the largest being the Three lakes Water District and Stemilt (water) and the Stemilt Irrigation District Domestic system.

The system consists of 3 wells, 7 booster stations, 9 reservoirs and approximately 20 miles of distribution line located along the Malaga-Alcoa Highway, West Malaga Rd., Joe Miller Rd., Hamlin Rd. and Crown Ln. with a spur to the Stemilt Hill Rd. at the Stemilt Growers warehouse.

In 2010, the District absorbed the Stemilt Irrigation District Domestic Water System which increased the number of connections by approximately 200.

There are currently 534 connections on the system. The system current capacity is 1,000 connections. The future projected demand for the system is 1,200 connections through the year 2025. Up to thirteen miles of additional water lines are needed for future projected demand. The Malaga Water District Comprehensive Plan was last updated in 2012. The Malaga Water District Plan is adopted by reference as part of this comprehensive plan.

Major financial and capital needs include at least one reservoir at a cost of approximately \$600,000 with replacement of pipes and other components at a cost of \$400,000. Sources for funding are very difficult to find with the loss of Public Works Trust Fund money.

Three Lakes Water District

The Three Lakes Water District wells are located on Tract B of the Three Lakes Subdivision with a nearby reservoir. The system includes two wells with a looped distribution system and a 100,000-gallon concrete reservoir which provides potable water to the Three Lakes Golf Course and one additional connection outside of the subdivision. The system capacity is 280 connections. Eventual possible build-out for the Three Lakes Subdivision would include a total of 333 connections. To serve this demand, more reservoir storage capacity and additional water permitting would be required through the Washington State Department of Ecology.

Peshastin Water District

The Peshastin Water District owns and operates the water system that serves the community of Peshastin, located along the north side of the Wenatchee River three miles east of Leavenworth.

The Water District includes three active wells, four reservoirs, two of which store 190,000 gallons each, a new tower that stores 300,000 gallons, and an additional reservoir located on Larson Rd that stores 30,000 gallons. There are approximately 4 miles of pipe which feed the system. The Water District currently serves 250 customers, including residential, commercial, industrial, an Elementary school, and a day care center. The system is approved for 500 connections, which is sufficient to serve the projected future demand of 598 connections through the year 2025.

In the summer of 2005, property owners from the Timberline Water User Association approached the Peshastin Water District requesting water to feed their small water system

due to lack of water supply. The District applied for and received grant funding totaling \$108,500 from the Emergency Drought Fund from the Department of Ecology to install a temporary 2" water line across the Peshastin Bridge to feed seven residential properties and a commercial business.

In 2016, the Peshastin Water District completed construction of its fourth water tower reservoir at a cost of \$1.1 million dollars. A building moratorium put into place by the Department of Health required the building of the reservoir to ensure adequate water supply in case of a major fire event. Peshastin should now have sufficient water supply for many years to come.



Figure 1. 2016 Water Towers

The Water District has two employees, a Certified Water Manager and Certified Cross Connection Technician, and a Secretary/Bookkeeper. The District is governed by three water commissioners who are publicly elected to office.

Alpine Water District

The Alpine Water District was formed in late 1999. The customers purchased the water system which was built by the Chelan County Public Utility District (PUD). The system includes a source well and pump near the east end of Lake Wenatchee. Six inch mains extend 13,800 feet from the source along Chiwawa Loop Road to the 100,000 gallon storage tank.

The system serves Alpine Tracts, the YMCA camp, Midway Village residential, and Lake Wenatchee State Park. There are currently 54 metered customers connected to the system. The system is near capacity during the summer months when the State Park, Cove Resort, and Midway Village are in use. The District is pursuing additional water rights with Department of Ecology.

Little Butte Water System

The Little Butte Water System is owned and operated by the Little Butte property Owner's Association. With water rights to pump from Lake Chelan and serving 46 lots on approximately 906 acres located approximately one mile up Chelan Butte Lookout Road the system is composed of a lakeside pump house, filtration plant, a 96,000 gallon reservoir and distribution lines.

Lake Wenatchee Water District

The Lake Wenatchee Water District was created by Chelan County Commissioners in May 2006, by Resolution 2006-65, as a result of a public referendum in favor of forming a public water district. The district facilities include two water reservoirs with approximately 175,000 gallons of capacity; one booster station; and three wells. Chelan County adopts by this reference the Lake Wenatchee Water District Plan, dated February 2011, which addressed 6 and 20 year growth, and includes a Capital Facility Plan.

Stehekin Water Treatment & Distribution

The National Park Service maintains a water treatment and distribution system serving only the Stehekin Landing area used for National Park Service facilities and some private residences. The Group A transient non-community public water system is designed to

chlorinate groundwater from two 40 gpm, 85 foot deep wells and use a 100,000 gallon concrete storage tank (constructed 1974) to gravity-feed the distribution system. Total production averages 4,145,000 gallons per year. There are no plans for expansion of the system as there are no projected increased demands for the system.

Other Water Systems

- Chelan River Irrigation District: Chelan (Serves 280 people)
- Valley Hi Community Club: Peshastin (Serves 219 people)
- Apple Acres Village: Wenatchee (Serves 212 people)
- Ponderosa Community Club Inc: Leavenworth (Serves 182 people)
- Chiwawa Communities Assn: Leavenworth (Serves 150 people)
- Turtlerock Homeowners Association: Wenatchee (Serves 133 people)
- Upper Ski Hill Water Assn: Leavenworth (Serves 102 people)
- Dawn Lee Courts: Cashmere (Serves 100 people)
- Warner Flats Domestic Water Co Inc: Cashmere (Serves 100 people)
- Sunnybank Water System: Chelan (Serves 89 people)
- Whispering Pines Water Assn: Leavenworth (Serves 86 people)
- East Monitor Water Assn: Wenatchee (Serves 80 people)
- Riverbend Mobile Park, LLC: Cashmere (Serves 75 people)
- Holden Village: Chelan (Serves 60 people)
- Chelan Park Ranches Water Assn: Chelan (Serves 52 people)
- Little Butte Water System: Chelan (Serves 48 people)
- River Bend Park Water System: Leavenworth (Serves 47 people)
- Kahler Glen Golf & Ski Resort: (Serves 40 people)
- De Chenne Water System: East Wenatchee (Serves 34 people)
- Lakeview Utilities: Palouse (Serves 28 people)
- Azwell Orchards: Pateros (Serves 28 people)
- Plain Flats Water System: (Serves 26 people)
- Tract C Minneapolis Beach Homeowner: Chelan (Serves 24 people)
- Towns Mobile Home Park: Cashmere (Serves 24 people)

Irrigation Systems

Irrigation water provides water for growing of agricultural crops, maintenance of landscapes and revegetation of native areas. These systems play a vital role in reducing domestic water demand. Water rights for irrigation water in Chelan County are managed by the Washington State Department of Ecology. To search for irrigation providers, the Department of Ecology has provided an online search tool:

<https://fortress.wa.gov/ecy/waterresources/map/WaterResourcesExplorer2.aspx>

Some of the larger irrigation systems are listed below.

Pioneer Water Users Association

The Pioneer irrigation system supplies water for irrigation use only to agricultural and residential customers. The system serves an area between monitor and the City of Wenatchee including some area inside the Wenatchee City Limits. The system's capacity is 15 cubic feet per second (CFS). The system serves 96 customers with no

future expansions anticipated for the system. Planned Improvements include ongoing maintenance.

Icicle Irrigation District

The Icicle Irrigation District provides irrigation water only. The intake for the system is located on Icicle Creek five miles up Icicle Canyon Road from Highway 2 and serves from there to Monitor along both sides of Highway 97. The system serves approximately 425 customers with approximately 800 parcels of land. The capacity of the system is 117.71 CFS set by available water rights. No expansion of the system is anticipated; however habitat improvements and ongoing maintenance are planned for the system.

Lake Chelan Reclamation District

The Lake Chelan Reclamation District (LCRD) was organized on May 8, 1920 under Title 87 RCW and provides irrigation water to 6,600 acres of land along the north shore of Lake Chelan from Green's Landing down-lake to just east of the City of Chelan.

The system provides pressurized water to 687 connections along 73 miles of distribution system with an instantaneous capacity of 106.7 cfs and an annual right of withdrawal of 22,388 acre-feet during the months of March to October each year. System expansions are limited by contract within the LCRD boundary and the system is presently at its acreage capacity. Planned improvements are operations and maintenance oriented.

Peshastin Irrigation District

The Peshastin Irrigation District system serves irrigation use only. The intake for the system is located three miles up Peshastin Creek from the junction of Highway 97 and Highway 2, serving from that point to Pioneer Dr. at Cashmere.

There are approximately 400 customers on the Peshastin Irrigation District system with approximately 800 parcels of land. The capacity of the system is set by water rights at 42 CFS. No expansion to the system is anticipated. Planned improvements to the system include ongoing maintenance.

Spring Hill Irrigation Company

The Springhill Irrigation Company is operated and managed by the Wenatchee Heights Recreation District. The capacity of the system is 300-acre feet (AF) annually set by existing water rights, plus 500 miner's inches of 5th water right from the Stemilt Creek watershed

Recent improvements to the system included 100-year flood condition standard improvements and ongoing maintenance work. During dry years there is a need for additional water in this area.

Wenatchee Heights Water Company

The Wenatchee Heights Water Company is operated and managed by the Wenatchee Heights Reclamation District. It serves approximate 15 customers. The capacity of the system is 600 acre feet (AF) annually. Currently there are no plans for expansion of the system.

Wenatchee Heights Reclamation District

The Wenatchee Heights Reclamation District lies approximately three air miles south of Wenatchee, on a plateau about two thousand feet above Wenatchee, in Sections 34,35,25, and 26, Township 22 N., Range 20 E. The system serves 52 customers within the district and approximately 15 customers outside of the district boundaries.

Approximately 750 acres of land are served by the District.

The capacity of the Wenatchee Heights Reclamation District system is 1500 acre feet annually. In 1994 a request to expand the system was forwarded to the Washington State Department of Ecology. This request is still pending.

Wenatchee Reclamation District

The Wenatchee Reclamation District provides irrigation water diverted from the Wenatchee River at the Dryden Dam. The Distribution system includes a system of canals, flumes and tunnels going from the dam site through Sunnyslope and to the Columbia Lateral, and through the City of Wenatchee in the Highline Canal. The system crosses the Columbia River at the footbridge and proceeds on to East Wenatchee to the top of Ninth Street, with distribution north to 38th street and distribution south to Rock Island.

The Dryden Dam diversion area includes the first 11,500 feet of the distribution system that is operated and maintained by the Chelan County Public Utility District. The Wenatchee Reclamation District's operations begin near Williams Canyon. With a capacity set by water rights limits of 200 CFS the system serves over 9,000 customers and approximately 12,500 acres in Chelan and Douglas Counties.

In 1988 Kyle Rumble completed a report outlining improvements to the system, which have since been completed. There are no anticipated expansions to the system or customer base. Planned Improvements include normal ongoing maintenance.

Greater Wenatchee Irrigation District

The Greater Wenatchee Irrigation District serves 54 Chelan County customers in the Howard Flats area near the Chelan Municipal Airport. The capacity of the system is 5,000 AF annually. There are no plans for expansion of the system. A system plan that was completed in 1986, by CH2M Hill, outlined needed system improvements. Improvements were completed in 1989. Ongoing improvements include maintenance and improvements in telemetry.

Cascade Orchard Irrigation Company, Inc.

The Cascade Orchard Irrigation Company serves approximately 200 customers and 500 acres along the Icicle Valley up to the Fish Hatchery Canal at the intersection with the Wenatchee River. Any expansion to the system would be internal, limited by the boundaries of the plat. An engineering study was begun in 1999 by the firm Geomax, located in Spokane WA. The report recommended continuing upgrading the main canal and to keep it open. It serves as a water barrier for flood control, controlling seepage from uphill). It also provides water for firefighting, recharges wells, and provides a barrier for rattlesnakes. Conservation methods have reduced demand and will enable the system to meet foreseeable demand from growth.

Entiat Irrigation District

The Entiat Irrigation District has 850 shares serving approximately 800 acres in and around the City of Entiat, extending approximately 1 mile up the Entiat River from the city. The system delivers water with a minimum of 40 pounds of pressure, and the board feels that the system is pumping at capacity.

The system delivers only irrigation water. Some conversion from orchard to housing is anticipated. Planned Improvements include piping replacement and updating of the pump house. Computers and valve assemblies are also gradually being replaced.

Isenhart Irrigation District

The Isenhart Irrigation district serves 26 equivalent users with irrigation water east of the City of Chelan and east of Highway 150, on both sides of Highway 97 Alt. The capacity of the system is 4 CFS, including domestic and irrigation usage.

Lower Squilchuck Irrigation District

The Lower Squilchuck Irrigation District serves irrigation to customers along Methow Street south of the City of Wenatchee out to the Lovitt Mining Company Orchards, including the Heath Development. The capacity of the system is 1,100 CFS. No expansion of the system is anticipated, as the system is limited to existing water rights. Recent improvements have included major piping replacement.

Sunnyslope Irrigation Company

The Sunnyslope Irrigation Company serves 48 users in the vicinity of American Fruit, Crestview and Lovell and Knowles Roads in the Sunnyslope area. The capacity of the system is 2,400 GPM and could be expanded to 3,200 GPM if service area were expanded. About one third of the area is currently in orchards, with the remaining likely to be developed into residential use. Future demand will be met with the capacity of the system. Another pump will be added to attain full capacity within 5 to 7 years.

Sleepy Hollow Water System (aka Warm Springs Irrigation)

The Sleepy Hollow Irrigation serves water to Short subdivision # 1755 and 1754, Sleepy Hollow Estates, Phases I and II and one other adjacent property. The system also provides a secondary source of water for fire protection to SS # 1754 and Sleepy Hollow Estates Phase I and II. The water permit is for 2 CFS, 512 AF per year between April 15, and October 15 of each year. There are presently 26 users of the system, representing 70% of the shares. When fully utilized, there will be 48 users, which is the designed capacity of the system.

Lower Stemilt Irrigation District

The Lower Stemilt Irrigation District serves 11 customers in the Stemilt Creek Basin. The capacity of the system is 5,730 GPM with no expansion to the system planned. System improvements include ongoing upgrading of system and normal maintenance.

Chelan Falls Irrigation District

The Chelan Falls Irrigation District serves 30 customers at the south end of Chelan Falls, and along the Columbia River south to the end of the Dovex Property. The system was upgraded in 1995-96 with new piping and was pressurized, operating now at 120 PSI.

The system capacity is 15 CFS by agreement with Chelan County PUD. There are no plans for expansion of the system. Ongoing improvements include normal maintenance.

Wenatchee-Chiwawa Irrigation District

The Wenatchee-Chiwawa Irrigation District serves approximately 1300 acres near the town of Plain in the Plain Valley. The system serves approximately 300 customers and has a capacity of 33.3 CFS withdrawn from the Chiwawa River. There are no plans for expanding the system. Planned improvements to the system include ongoing maintenance

Beehive Irrigation District

The Beehive Irrigation District is located on both sides of Squilchuck road, Northeast of Squilchuck State Park. The district serves 63 irrigation customers owning 223 shares. There are no plans for expansion to the system. Planned improvements to the system include general maintenance.

Sanitary Sewer Systems

On-site septic systems are the anticipated method for treatment of wastewater in the rural portions of Chelan County due to lower population densities and the prohibitive associated costs of providing treatment plant capabilities.

Chelan County PUD has developed a satellite system program to assist utilities with their technical and administrative tasks, minimize extended water outages and other inconveniences associated with emergency conditions. This is to ensure that customers are receiving safe and satisfactory water and wastewater service, and provide a variety of other functions. The PUD has signed a Memorandum of Understanding with Chelan County to provide satellite system management services.

PUD wastewater systems along with other wastewater treatment systems outside of incorporated areas and their associated urban growth areas are included in the following:

City of Chelan Sanitary Sewer System

The City of Chelan operates a sewer collection system and two waste water treatment plants (WWTP). The sewer system receives sewage from city customers as well as the Lake Chelan Reclamation District (LCRD) on the north shore of Lake Chelan and from the Lake Chelan Sewer District on the South Shore.

Lake Chelan Reclamation District (north shore)

The demarcation line between The City sewer service and LCRD sewer service is approximately the down-lake tip of Rocky Point on SR 150. Customers up-lake from this point are served by LCRD and customers down-lake are served by the City of Chelan.

Lake Chelan Sewer District (south shore)

The LCSD is administered by the City of Chelan. All of the LCSD customers are in the County. This system collects sewage from approximately one mile up-lake of Minneapolis Beach back to Chelan along SR 971 and SR 97A.

Lake Chelan Reclamation District Sewer System

Sanitary sewers were first installed in the Manson area in 1946. Primary treatment and disinfection prior to discharge into Manson Bay was performed until 1975. In 1975 the Manson Chelan Sewer Interceptor was constructed and sewage was pumped to the wastewater treatment plant in the City of Chelan with the effluent discharged into the Columbia River. The Lake Chelan Reclamation District took over all sewage collection services in the Manson area in 1979 with responsibilities increased in 1994 when the District took over the Interceptor between Manson and Rocky Point..

The LCRD system serves approximately 1,120 connections with a peak tourist population of 2,564 in the summer months. The existing capacity is 1,585 connections. Connections are projected at 1,350 in the year 2025 with an estimated peak tourist population served of approximately 5,700.

Chelan County Public Utility District Wastewater System – Dryden

The Dryden wastewater system consists of a gravity collection system and community septic tank and drainfield. The system is permitted by the Washington Department of Ecology (Ecology) to discharge a peak day flow of 23,000 gallons. The current peak day flow is approximately 21,000 gpd. The system serves 52 connections. The service area has remained unchanged since the system began operation in 1981.

In August 2009, Ecology published the Wenatchee River Watershed Dissolved Oxygen and pH Total Maximum Daily Load Water Quality Improvement Report (TMDL). The TMDL, in part, requires permitted wastewater facilities substantially reduce phosphorus discharges to the Wenatchee River. As of December 2016, Chelan PUD is continuing discussions with Ecology to develop a cost effective alternative for its Dryden system.

Chelan County Public Utility District Wastewater System - Peshastin

The Peshastin wastewater system serves the community of Peshastin, located along the north side of the Wenatchee River three miles east of Leavenworth. Septic tank effluent from homes and businesses is pumped through a pressurized collection system to a secondary treatment plant. Treated effluent is discharged to the Wenatchee River. The system is permitted by the Washington Department of Ecology (Ecology) to discharge a maximum month flow of 110,000 gallons. The current maximum month flow is approximately 80,000 gpd. The system serves approximately 180 connections. The collection system remains unchanged since the system was placed in service in 1997. The approved service area was expanded in 2009 to the limits of the Peshastin Urban Growth Area. Any extension of the collection system shall be paid by properties requesting service in accordance with Chelan PUD line extension policies.

In August 2009, Ecology published the Wenatchee River Watershed Dissolved Oxygen and pH Total Maximum Daily Load Water Quality Improvement Report (TMDL). The TMDL, in part, requires permitted wastewater facilities substantially reduce phosphorus discharges to the Wenatchee River. As of December 2016, Chelan PUD is designing improvements to its Peshastin treatment system to comply with TMDL requirements. Improvements are anticipated to be completed by the March 2020 deadline identified by Ecology.

Chelan County Public Utility District Wastewater System - Lake Wenatchee

The Lake Wenatchee wastewater system serves properties along the north and south shores of the lake. Approximately 500 parcels have access to the system and under 300 currently receive service. Septic tank effluent from homes and businesses is pumped through a pressurized collection system to the treatment plant. The treatment plant is located near the intersection of Hwy 207 and the Chumstick Hwy. The treatment plant discharges treated effluent to the Wenatchee River during the winter months and to a spray-field during the summer months. The treatment system was upgraded in 2016 and is anticipated to provide adequate capacity to accommodate typical growth for 20 years. Minor extensions to the collection system have been made since the system was placed in service in 1993 including addition of the Washington State Park in 1998. The approved service area remains primarily unchanged.

Stehekin Wastewater Treatment - National Park Service

The National Park Service maintains a sewage treatment plant serving only the Stehekin Landing area used for National Park Service facilities and some private residents. The sewer collection system consists of 12 manholes along a gravity-fed pipe (constructed in 1979-80), and a submersible duplex sewage pump lift station (replaced in 2008) pumps sewage along a force main to the sewage treatment plant. The 25,000 GPD treatment plant employs a factory-assembled skid system with physical-chemical integrated treatment process waste. A drain field provides subsurface disposal of effluent, while bio-solids are dried and transported to the City of Chelan Wastewater Department prior to land application.

The 1984 treatment plant skid and tanks suffer from corrosion, and electro-mechanical control components have become obsolete and difficult to replace. The National Park Service plans to replace the physical-chemical package plant with an integrated fixed film activated sludge (biological) treatment system, effluent filtration, and UV disinfection to meet Treatment Level B effluent limits set by the Department of Health. This \$4.8 million dollar project is currently formulated for funding in 2022 through the National Park Service Line Item Construction Program. There are no plans for expanding capacity of the system as there are no projected increased demands for the system.

Stormwater Controls

The stormwater system for the majority of Chelan County's roads consists primarily of an "open" drainage system, which includes both roadside ditches and culverts conveying runoff to either a natural drainage area or a treatment facility. In the more urbanized areas, a limited number of "closed" drainage systems exist, which typically include a combination of curbs, gutters, catch basins, and below ground piping. These areas include Sunnyslope, Peshastin, Leavenworth, and Manson.

In January 2008, Chelan County adopted a surface and stormwater management utility boundary and program to fund and manage the stormwater needs within the unincorporated areas around the City of Wenatchee. Since then, the County has been collecting and analyzing data to identify stormwater system deficiencies, determining stormwater maintenance needs, and means to improve water quality. This information, combined with the prioritized capital facility projects, have been compiled into the Chelan County's 2012 Comprehensive Stormwater Plan, dated July 2012, that is adopted by this reference.

To avoid potential problems associated with new development and stormwater runoff, it is important to implement county stormwater standards at the time that the development proposals are considered for approval. The County owns and maintains stormwater facilities including 14 dry wells, 5 storage basins, 2,048 culverts, 110,721 feet of open drains, 10 detention areas and other related structures.

Flood Hazard Management Plan

The Chelan County Comprehensive Flood Hazard Management Plan, adopted November 13, 2017 Resolution 2017-102, recommends regional policies, programs, and projects to reduce the risk to people and property from river flooding, alluvial fans and channel migration. This plan complies with state and federal requirements for flood hazard management. It presents a long-term vision for managing flood hazards and recommends actions, the Chelan County and its cities, to reduce flood risks and to protect, restore or enhance riparian and aquatic ecosystems. It identifies resources, information and strategies for reducing risk from flood hazards, and will help guide and coordinate mitigation activities. All citizens and businesses of Chelan County are the ultimate beneficiaries of this plan. The Flood Plan is adopted into the Comprehensive Plan by this reference.

School Districts

Public schools in the County are administered through seven school districts. A portion of the Azwell School District service area crosses into Chelan County; however, there are no facility buildings within Chelan County.

Lake Chelan School District

- Lake Chelan High School/Middle School, 215 Webster St., Chelan; needs to replace HVAC system, roofing repairs, fire systems and replace bleachers
 - 105,000 sq. ft.
 - Enrollment: HS – 450 (includes MAC)
 - Enrollment: MS – 299
- Morgan Owens Elementary School, 407 E Woodin Ave., Chelan; needs additional electrical outlets, upgrade roof, replace cooling tower, improve drainage and replace carpeting and flooring.
 - 60,464 sq. ft.
 - Enrollment: 555
- Lake Chelan School District Office, 303 E. Johnson, Chelan; need to upgrade electrical, plumbing, HVAC, lighting, roofing and exterior
 - 4,107 sq. ft.
- Community Gym, 1063 E. Woodin St., Chelan; need improvements to the roof;
 - 24,995 sq. ft.
 - Bus garage; need to replace roof, electrical, plumbing and HVAC
 - Locker rooms at football field; need to replace stands, building, track and field, lights and irrigation
 - 13,670 sq. ft.

- Glacier Valley Alternative School/Nite Preparatory School, 324 E. Johnson Ave.; need to replace building
 - The special programs building, also known as Glacier, dedicates 40% of the building to 5th grade. Adjacent to this building is another building named Flattop, 100% of which is dedicated to 5th grade.
 - The total square footage dedicated to elementary school is 75,858 sq. ft. for a total of 630 enrolled student for the 2016-17 school year.
 - The special programs building dedicates 3,920 sq. ft. to preschool, and 1,960 to administration.
 - The school district leases approximately 3,500 sq. ft. from the City for CSI (innovative High School).
- Ball Fields, Apple Blossom Road; need to add restrooms and concessions

Manson School District

Future needs for the district include updating of the transportation facility as well as the football field. Manson's enrollment is projected to remain stable.

- Administration Office, 135 S. Hill Street, Manson
 - 1,200 sq. ft.
- Manson Elementary, 950 Totem Pole Road, Manson
 - 41,939 sq. ft.
 - Enrolment: 308
- Manson Junior/Senior High School, 1000 Totem Pole Road, Manson
 - 64,752 sq. ft.
 - Enrolment: 352
 - Football field

Cascade School District

The Cascade School District does not project any significant enrollment increase within the next five to ten years. Winton School was closed and replaced by Beaver Valley School in 2000 to accommodate grades kindergarten through 4th.

- Cascade School District office, located at 330 Evans Street, Leavenworth, WA 98826
- Beaver Valley School, 19265 Beaver Valley Road, Leavenworth, WA 98826
- Peshastin-Dryden Elementary School, 10001 School Rd., Peshastin, WA 98847
 - Grades K-4 Enrollment: 178
- John Osborn Elementary School, 225 Central Ave., Leavenworth, WA 98826
 - Grades K-4, Enrollment: 268
- Icicle River Middle School, 10195 Titus Road, Leavenworth, WA 98826
 - Grades 5-8, Enrollment: 450
- Cascade High School, 10190 Chumstick Hwy, Leavenworth, WA 98826
 - Grades 9-12, Enrollment: 518

Entiat School District

The Entiat School District projects enrollment to be 450 in the year 2006/7. In 3 to 5 years the District anticipates building one new school on the existing 25-acre school site to accommodate this demand.

- Paul Rumberg Elementary School, 2650 Entiat Way
 - 23,163 sq. ft. plus 2,400 sq. ft. in portable classrooms
 - Enrollment: 211
- Entiat Junior/Senior High School, 2650 Entiat Way
 - 23,855 sq. ft. including District office space
 - 3,120 sq. ft.: Elementary and High school offices
 - 9,263 sq. ft.: Multi-purpose room
 - 8,000 sq. ft. Helen Kinzel Gymnasium
 - 484 sq. ft. Concession stand
 - Enrollment: 173
- Bus Garage - 13580 Davis St., Entiat
 - 4,285 sq. ft.

Cashmere School District

The District is currently near capacity with 1,564 students for the 2016-2017 school year. The district is actively pursuing a new school site to accommodate the growing student population. Construction for this facility is estimated at approximately 23.5 million dollars.

- Vale Elementary School, 101 Pioneer Ave., Cashmere
- Cashmere Middle School, 300 Tigner Road, Cashmere
- Cashmere High School, 329 Tigner Road, Cashmere
- Bus Garage, 103 Paton Street, Cashmere
- District Office, 210 S. Division, Cashmere
- Maintenance Office, 103 Paton St., Cashmere
- Additional Property, NNA Tigner Road, Cashmere

Wenatchee School District

- Wenatchee High School; 1101 Millerdale Ave, Wenatchee; 2069 students enrolled (2014) grades ninth through twelfth; building 281,912 square feet on 37.98 acres of land
- Wenatchee Valley Technical Skills Center; 327 East Penny Road, Wenatchee; serves students grades ninth through twelfth; building 58,231 square feet
- Westside High School; 1510 9th Street, Wenatchee; 257 students enrolled (2014) grades ninth through twelfth; building 23,165 square feet on 7.05 acres of land
- Valley Academy of Learning; 1911 North Wenatchee Ave, Wenatchee; 208 students enrolled (2014) grades Kindergarten through tenth; building 17,500 square feet
- Foothills Middle School; 1410 Maple Street, Wenatchee; 609 students enrolled (2014) grades sixth through eighth; building 86,646 square feet on 16.61 acres of land

- Orchard Middle School; 1024 Orchard Ave, Wenatchee 485 students enrolled (2014) grades sixth through eighth; building 78,997 square feet on 10.67 acres of land
- Pioneer Middle School; 1620 Russell Street, Wenatchee; 712 students enrolled (2014) grades sixth through eighth; building 112,630 square feet on 13.89 acres of land
- Columbia Elementary; 600 Alaska Street, Wenatchee; 450 students enrolled (2014) grades Kindergarten through fifth; building 48,509 square feet on 6.41 acres of land
- John Newbery Elementary; 850 North Western Ave, Wenatchee; 513 students enrolled (2014) grades Kindergarten through fifth; building 54,504 square feet on 14.43 acres of land
- Lewis & Clark Elementary; 1130 Princeton Ave, Wenatchee; 450 students enrolled (2014) grades Kindergarten through fifth; building plus two portables 52,093 square feet on 6.62 acres of land
- Lincoln Elementary School; 1224 Methow Street, Wenatchee; 502 students enrolled (2014) grades Kindergarten through fifth; building plus five portables 55,804 square feet on 14.92 acres of land; 31,163 square foot addition planned
- Mission View Elementary; 60 Terminal Ave, Wenatchee; 535 students enrolled (2014) grades Kindergarten through fifth; building 54,774 square feet on 8.66 acres of land
- Sunnyslope Elementary School; 3109 School St., Wenatchee; 305 students enrolled (2014) grades Kindergarten through fifth; building 41,417 square feet on 7.63 acres of land
- Washington Elementary; 1401 Washington Street, Wenatchee; 582 students enrolled (2014) grades Kindergarten through fifth; building 38,216 square feet on 9.02 acres of land
 - Special Education Facility; grades Kindergarten through eighth; building 17,977 square feet
- Castle Rock Early Childhood Learning Center, 112 South Elliott, Wenatchee
 - Needs: Roof repair

The Wenatchee School District indicated that they use a threshold of 500 children for establishing the need for new elementary schools. As the population of the study area increases it is anticipated that a new elementary school will be needed to serve the area. Currently the nearest elementary school, Mission View, is located in the south end of Wenatchee on Terminal Avenue. It is important to note that the Malaga-Stemilt-Squilchuck Study Area includes the Squilchuck Road corridor which, due to the restricted transportation network, would most likely remain within the service area of Mission View School. Approximately 25 acres of land has been acquired for future expansion in the Malaga area.

Stehekin School District

The Stehekin School serves the area surrounding the North end of Lake Chelan. The present school was built in 1988 and can serve up to 30 students. There is no anticipated need for a new school. Future enrollment is anticipated to remain constant, from 5 to 15 pupils.

The Stehekin School District cannot directly fund the education of high school students; however, several options are available to students residing in the Stehekin School District,

including but not limited to homeschooling, satellite schools, or alternative programs. Information is made available in the administration office. Those students choosing to attend a public High School are eligible, when meeting the criteria set by the state and local district, for in-lieu-of transportation funds for board and room as well as a designated number of round trip tickets on the Lady of the Lake.

- Stehekin Public School, Stehekin WA 98852
 - Enrollment: 9 Students K-8

Law Enforcement

The Chelan County Sheriff's Office provides 24-hour Law Enforcement services to the unincorporated areas of the County as well as the incorporated contract cities of Cashmere, Leavenworth, Entiat and Chelan. The City contracts are supported by the following substations:

- Cashmere City Hall
- Chelan County Fire District #3 Building in Leavenworth
- Chelan City Hall

Additionally, Chelan County provides law enforcement services to Cascade School District in Leavenworth, Cashmere School District in Cashmere, Lake Chelan School District in Chelan, and the Manson School District in Manson under contract. Contracts for a School Resource Officer provide designated law enforcement during the school year.

The Regional Law and Justice Building in Wenatchee, opened in 1984, and houses the headquarters of the Sheriff's Office, the Regional Jail, and the County Prosecuting Attorney's Office, and Superior Court offices. In addition to office spaces, law enforcement maintains a fleet of approximately 76 vehicles. In 2005, a 66 bed Annex was constructed to house Work Release and Inmate Worker participants. Total renovations through the years and double-bunking bring the current bed capacity to 335. There is a 42 bed satellite housing area adjacent to the main jail building with 42 beds but that area has been utilized for emergency housing of inmates. Since the 2010 remodel project that improved HVAC, electronic door panels, and cameras, there are several areas of the facility that still need attention.

Future projects include: cell door pass through, improved radio infrastructure, cell intercom upgrade, upgrade to securing visiting and holding cell doors. There have been several repairs to keep the jail elevator functional, as it is past the life expectancy given the 24 hour/7 day of week use. We have had two elevator fails this year and it has impacted jail operations, District Courts, and Superior Courts. During these failures, jail staff has had to move inmates and equipment through public areas, which becomes a public safety issue.

Fire Protection

Fire protection in Chelan County is provided by eight (8) Fire Districts, some operated by full time employees and volunteers, and others with volunteers only.

Fire District 1 – Wenatchee Area

Chelan County Fire District #1, which covers the city of Wenatchee, Sunnyslope and unincorporated areas west and south of Wenatchee, has their main station (Station 10), located at 136 S. Chelan Avenue in Wenatchee.

Number of Personnel: The fire district currently has 36 career firefighters, approximately 50 volunteers, and 30 support volunteers.

A renovation and expansion of Station 13 (1836 S. Mission Street, Wenatchee) is planned for 2016-2017 utilizing a Community Development Block Grant and USDA Rural Development loan. This renovation will allow to house firefighters and to provide better fire protection and emergency medical services to the residents in the Squilchuck and South Wenatchee area.

Being a rural area the study area has some unique fire protection needs. Most of the area is not served with public water. During the summer months the threat of fire in the outlying areas usually results in road closures which restrict access and activities in certain areas. The roads and areas most often affected include: Pitcher Canyon Road, Forest Ridge Road, Wenatchee Heights Road, Stemilt Loop Road, Dago Grade and Halvorson Loop Road.

To support fire protection efforts, Fire District 1 maintains three helicopters and portable response equipment (estimated 2016 value of 1.5 million dollars). In total, the district has 9 brush trucks (estimated 2016 value of 1.3 million dollars); 3 water tenders (estimated 2016 value of 1.2 million dollars); 2 ladder trucks (estimated 2016 value of 1.5 million dollars); 9 type 1 engines (estimated 2016 value of 3.5 million dollars); and 7 fire stations.

Chelan County Fire District #1 provides fire protection to approximately one-third of the Malaga-Stemilt-Squilchuck Area. The rest of the area is not within a public fire district boundary. On federal lands outside of the district boundary fire protection services are coordinated between the District and the U.S. Forest Service pursuant to an Emergency Fire Suppression Agreement.

Chelan County Fire Districts #1, #6 and #8 and the Cashmere Fire Department provide fire protection for the Lower Wenatchee River Valley Area.

Stations:

- Station 10 Location: 136 S. Chelan Avenue, Wenatchee (owned by the City of Wenatchee); career fire station which typically houses a fire engine and a rescue/brush truck. Replacing Station 10 at a new location in downtown Wenatchee is targeted for 2019 with an unknown cost.
- Station 11 Location: 206 Easy Street, Wenatchee (estimated value of 2.1 million dollars); career fire station which typically houses a fire engine, ladder truck and two brush trucks.
- Station 12 Location: 408 N. Western, Wenatchee (estimated value of \$800,000); volunteer station housing a fire engine, tender, and brush truck.
- Station 13 Location: 1836 S. Mission Street, Wenatchee (estimated value of \$200,000); currently a volunteer station with a fire engine, tender, and brush truck. Following the 1.3 million dollar expansion in 2017, the station will house personnel and additional fire apparatus.
- Station #14 Location: 4852 Squilchuck Road, Wenatchee (estimated value of \$225,000); volunteer fire station housing a fire engine and brush truck.
- Station 15 Location: 1420 Maple Street, Wenatchee (owned by the City of Wenatchee); career fire station typically housing a fire engine and ladder truck.

- Station 17 Location: 3760 West Malaga Road, Wenatchee (estimated value of 2.8 million dollars); career fire station typically housing two fire engines, three truck brush trucks, and helicopter. Station 17 serves as the fire districts training center with a burn town, fire district shop, hangar and heliport.

Fire District 3

Fire District 3 provides fire protection for the Icicle and Chumstick Valleys, the City of Leavenworth and surrounding area, including the Cashmere area. The district needs to replace three command vehicles (estimated value of \$150,000), a ladder truck (estimated value of \$200,000) and a tender truck (estimated value of \$90,000) as soon as possible. Other expenses include a new brush truck in 2020 (estimated value of \$50,000), a new brush truck and engine in 2025 (estimated value of \$390,000), a new rescue truck in 2027 (estimated value of \$300,000), a new tender and engine in 2030 (estimated value of \$445,000) and a new engine in 2035 (estimated value of \$300,000).

Number of personnel: The fire district currently has 4 career firefighters and 20 volunteers.

Stations:

- Station 1 Location: 228 Chumstick Rd. (estimated value of 3 million dollars), Leavenworth; career and volunteer fire station which typically houses a two brush trucks, one tender truck, two engine trucks, one ladder truck, one rescue, a utility truck, and three command vehicles (estimated value of 1.1 million dollars).
- Station 2 Location: mile 7.5 Chumstick Rd. (estimated value of \$500,000), Leavenworth; career and volunteer fire station which typically houses one tender truck and one engine (estimated value of \$240,000).

Lake Wenatchee Fire And Rescue (Formerly Known As Fire District 4 & 9)

In 2014, Fire districts 4 and 9 merged to form the Lake Wenatchee Fire and Rescue.

Lake Wenatchee Fire & Rescue serve the populated areas of Plain, Lake Wenatchee, US Hwy 2 corridor from Chiwaukum to Cascade Meadows Church Camp up to White Pine Creek.

Personnel: 2 part-time firefighters and 39 volunteers.

Total cost of all equipment district wide is 3.2 million dollars.

Stations:

- Station 91 Location: 21696 Lake Wenatchee Hwy, Leavenworth; typically houses one cargo trailer, one engine, one pumper, one rescue, and one tender.
- Station 92 Location: 2327 Pine Tree Rd, Leavenworth; typically houses one engine and one pumper.
- Station 93 and shop Location: 19015 Beaver Valley Rd, Leavenworth; typically houses one engine, one pumper, one utility truck, and two tenders.
- Station 94 Location: 21300 Cayuse St, Leavenworth; typically houses one engine, one pumper, one first responder, and one tender.

Fire District 5

Fire District 5 provides fire protection for the Manson area, which encompasses about 19 square miles and shares a border with Fire District 7. The Fire District identified the need to replace Fire Station 51 and update Fire Station 52, which do not meet the minimum safety standards and cannot accommodate the growing needs of the districts. New and updated facilities will allow for personnel staffing the facilities that will produce quicker response times, which is critical when responding to fire or medical emergencies. The District is researching grants and other funding opportunities, including a levy for a bond to be approved by voters.

Personnel: One career firefighter (chief) and 25 volunteers.

Stations:

- Station 51 Location: 250 W. Manson Blvd, Manson (is a rented facility owned by the Lake Chelan Reclamation District; typically houses two engines, one brush, and one aid vehicle.
- Station 52 Location: 2010 Wapato Lake Rd, Manson; typically houses two engines, one brush, one tender, and one utility vehicle.

Fire District 6

Fire District 6 provides fire protection for Monitor, Dryden, Peshastin, Valley Hi, and Cashmere areas. The immediate needs of the district are to replace a brush truck (\$250,000), add HVAC to station 61 (\$10,000), replace and combine stations 62 and 63 (1.5 million dollars), and remodel station 64 (\$250,000). Other projects include a new command vehicle in 2018 (\$35,000), two brush trucks in 2020 (\$175,000 each), new engine in 2021 (\$390,000), new engine in 2023 (\$390,000), new engine in 2025 (\$390,000) and a new engine in 2028 (\$450,000).

Stations:

- Station 61 Location: Monitor (estimated value of \$410,000); typically houses one engine and two brush trucks (estimated value of \$600,000).
- Station 62 Location: Dryden (estimated value of \$342,000); typically houses one engine, one brush truck, and one command vehicle (estimated value of \$450,000).
- Station 63 Location: Peshastin (estimated value of \$282,000); typically houses one engine and one brush truck (estimated value of \$450,000).
- Station 64 Location: Valley Hi (estimated value of \$223,000); typically houses one engine and one brush truck (estimated value of \$300,000).
- Station Location: Cashmere; typically houses one water tender, one brush truck, and one pumper (estimated value of \$720,000).

Fire District 7

Chelan Fire and Rescue (Chelan County Fire Protection District 7) has been in existence since 1926. Chelan Fire and Rescue's jurisdiction is located in Northeast Chelan County, covering 125 square miles around Lake Chelan and surrounding areas. These areas include: The City of Chelan, Chelan Falls, Union Valley, South Lake Shore, 25 Mile Creek, the north side of

Lake Chelan from the City of Chelan to Manson, Chelan Airport, and Howard Flats up to the Chelan/Okanogan County line.

The municipal services provided by Chelan Fire and Rescue, in accordance with the mission and statutes that govern fire protection districts and fire departments, are: Emergency Medical Services (EMS), Basic Life Support (BLS) first response; Fire Prevention/Public Education; Fire Investigation; Fire Suppression (vehicle, residential and commercial); Wildland Fire Fighting; Hazardous Materials Response-Operations; and Technical Rescue/Special Operations (high/low angle, surface water, ice rescue). The Fire District responded to 927 calls for emergency assistance in 2015 and 887 in 2016.

These services are delivered from five fire stations (Station 71, city of Chelan, Station 72, Chelan Falls, Station 73, Union Valley, Station 74 Chelan Airport and Station 75 South Lakeshore area) , one staffed with career personnel 24 hours a day and four staffed with volunteer personnel. The district employs 17 personnel, and 40 plus volunteers who operate six engines, four water tenders, six wildland fire engines, one ladder truck, one medium support vehicle (air/lighting), two command vehicles, a rescue boat and one support vehicle.

Chelan Fire and Rescue has developed an apparatus replacement schedule based upon usage, technology, age, ability and personnel safety. The industrial standard for apparatus service life varies from area to area. The following service life guide helps determine when apparatus need replaced: Fire Engines 20 to 25 years; Ladder Trucks 20 to 25 years, Water Tenders 20 to 25 years, Heavy Support Trucks 15 to 20 years; Brush/Rescue Trucks 10 years; Staff Vehicles 10 years. The following apparatus will be considered for replacement or their service life will be extended: In 2018, Engine 74, 75, 79, Brush 79, Tender 73; in 2019 Engine 72, Ladder 71, Command Vehicle 702; in 2021, Support 71, Command Vehicle 701; in 2022, Engine 73, Rescue 71, Brush 71, 75; in 2025, Brush 72, Brush 79, Tender 74, 75; in 2025 Tender 71, In 2034 Engine 71.

The District is considering replacement of engine 72 in 2018; engine 73 in 2021; engine 74 in 2017; engine 75 in 2017; engine 79 in 2016; support truck 71 in 2020; ladder truck 71 in 2018; brush truck 71 in 2021; brush truck 72 in 2024; brush truck 74 based on annual check; brush truck 75 in 2021; brush truck 79H in 2024; rescue truck 71 in 2021; tender 71 in 2031; tender 73 based on annual check; tender 74 in 2030; tender 75 in 2030; marine boat in 2022; truck 701 in 2020; and, truck 703 in 2018.

Projects planned for 2017 are estimated at \$210,000; for 2018 are estimated at \$332,000; for 2019 are estimated at \$462,000; for 2020 are estimated at \$62,000;

Personnel: 11 career firefighters and over 50 volunteers. One of the five fire stations is staffed with career firefighters 24 hours a day.

Stations:

- Station 71 (City of Chelan) Location: 232 East Wapato, Chelan; houses two engine, one ladder, one light rescue, one water tender, one ALS medic, two brush trucks, one support vehicle and one marine vehicle. It is staffed 24 hours a day with a Fire Lieutenant/EMTs, three Firefighter/EMTs, one Ambulance EMT and one Ambulance Paramedic and is support by a home volunteer firefighter program and with 17 volunteers.
- Station 72 (Chelan Falls) Location: 20 Chestnut Street, Chelan Falls; houses one brush truck and one engine. This station is staffed by a home volunteer firefighter program.

- Station 73 (Union Valley) Location: 345 Idyll Spurs Lane, Chelan; houses one water tender and one fire engine. This station is staffed by a home volunteer firefighter program.
- Station 74 (Chelan Airport) Location: 46 Airport Way, Chelan; houses one water tender, one brush truck and two fire engines. This station is staffed by a home volunteer firefighter program.
- Station 75 (South Lakeshore) Location: 12041 South Lakeshore Road, Chelan; houses one fire engine, one brush truck and one water tender. This station is operated by 8 volunteers.

Fire District 8

Fire District 8 provides fire protection to the City of Entiat, the Entiat River Valley and property north and south of the City of Entiat adjacent to the Columbia River, from Tenas George Canyon to Stayman Flats, and the residents of Navarre Coulee.

The District is planning for a future station at Stayman Flats but currently has no estimate on cost or completion date.

Personnel: 40 volunteer firefighters.

Total cost of all equipment District wide is 1.3 million dollars.

Stations:

- Station 1 Location: 2200 Entiat Way, Entiat (estimated value of 1.1 million dollars); typically houses one fire engine, two brush trucks, one rescue truck, one ambulance, and one water tender.
- Station 2 Location: 4674 Entiat River Road, Entiat (estimated value of \$235,000); typically houses one fire engine, one brush truck, and one water tender.
- Station 3 Location: 291 Moe Ridge Road, Ardenvoir (estimated value of \$225,000); typically houses one fire engine/water tender and one brush truck.
- Station 4 Location: 20 miles up the Entiat River Road from Hwy 97 (estimated value of \$55,000), in the Riverwood Subdivision; typically houses one fire engine.

Fire District 10

Fire District 10 provides wildland fire protection for 986 acres of private property and approximately 90 year-round residents in the Stehekin Valley and on Upper Lake Chelan. Through a memorandum of agreement, district volunteers may work with National Park Service, Department of Natural Resources, and other inter-agency personnel in wildland fire protection on federal land. The district does not have structural firefighting capabilities.

Personnel: 5 volunteer firefighters including a volunteer fire chief.

There are no fire station for this fire district; however, there are 3 vehicles – a brush truck and two pumpers – that are parked at the power plant during the winter.

Stehekin Area

The National Park Service provides wildland and structure fire protection for federal lands and federally owned structures in Stehekin. Through a memorandum of agreement the Park

Service provides initial attack response for wildland fire on non-federal land. The Park Service is not equipped or staffed to provide fire protection services for privately owned structures in Stehekin.

Chelan County Properties

Chelan County Public Works maintains several sites throughout the County for road maintenance:

Road Maintenance Properties

Sunnyslope Shop, 210 Easy Street, Wenatchee, 9.62 acres, (approximate value of \$2,877,000) used for:

- Equipment Maintenance Shop
- Wenatchee Road Crew Shop
- Sign Crew Shop
- Sander Storage Shed
- Emergency Services Buildings
- Fuel Storage
- Materials Stockpile
- Salt Storage

Cashmere Shop, 5815 Wescott Drive, Cashmere, 4.12 acres, (approximate value of \$15,000) used for:

- Salt Storage Building
- Sander Storage Shed
- Materials Stockpile
- Fuel Storage
- Metal Building

Leavenworth Shop, 10210 County Shop Road, Leavenworth, 6.13 acres, (approximate value of \$173,000) used for:

- Salt Storage Building
- Sander Storage Shed
- Materials Stockpile
- Fuel Storage

Ardenvoir Shop, 9486 Entiat River Road, Entiat, 2.62 acres, (approximate value of \$181,000) used with special Forest Service Permit for:

- Materials Stockpile, Pit #303
- Fuel Storage

Chelan Shop, 23290 Highway 97A, Chelan, 5.64 acres, (approximate value of \$974,000) used for:

- Salt Storage Building
- Sander Storage Shed
- Materials Stockpile
- Fuel Storage

Squilchuck Sand Storage, located on County ROW near Squilchuck Road and Wenatchee Heights Road, used for:

- Metal Building
- Materials Stockpile

Transfer Stations:

Chelan and Douglas counties participate in region-wide decisions affecting solid waste. Each jurisdiction prepares its own Solid Waste management Plan, including a Hazardous waste element.

Due to separate funding mechanisms, facilities and disposal options are handled separately. Therefore differing solid waste management for each county is functioning separately however close coordination of shared interests continues.

Dryden Transfer Station, 9073 Highway 2, Dryden WA 98821, 18.53 acres, includes the closed Dryden landfill of approximately 9 acres closed in 1987. Facility includes recycling provisions for scrap metal, wood/brush, motor oil, antifreeze, as well as general recyclables such as aluminum, newspaper, cardboard, and plastics #1 & #2. Expansion of this facility includes a second tipping floor to accommodate the estimated 21,000 Tons of garbage. Refuse is hauled to the Greater Wenatchee Regional landfill in a contract till 2022.

Chelan Transfer Station, 23235 State highway 97A, Chelan, WA 98816, 1.79 acres, located adjacent to the City Chelan Recycle Center with recycling provisions for plastics, newspaper, cardboard, paper, aluminum, glass, tin, and computers and televisions. Recycling provisions at the transfer station include brush, scrap metal, motor oil and antifreeze.

Manson Landfill is closed and located 1.5 miles east-northeast of Manson, Washington. It is monitored by the County, as is Dryden Landfill, for quarterly groundwater, cap settling and erosion.

Miscellaneous:

- Sludge Site, Leased to City of Wenatchee, 43.93 acres
- Manson Landfill (Closed), Pit #406, 12.52 acres

Pit Sites:

- Shaw Pit K-116, Pit #102 Stemilt Hill Road, 24.56 acres
- Shugart Flats Gravel, Pit #222, 12.25 acres
- Colockum Pit 101, 2.02 acres
- Boyd Road, 5.12 acres
- Malaga Pit K-129, 5.0 acres, includes a Metal Building and Materials Stockpile
- Arne Sorlie Property, 120' x 500' within County right-of-way
- West Malaga Pit K-104, Pit #104, 15.43 acres, includes Materials Stockpile
- Lepley Pit - Chapman Road, 0.8 acres within County right-of-way
- Washington Creek , Pit – PS-K-50 with 1.9 acres and Pit – PS-K-2116 with 2.7 acres
- Leavenworth Day Pit K-155, Pit #220, 9.2 acres, includes Materials Stockpile

- State Pit PS K 190, Lot 2, Block 2, River Glen Orchards
- Stanley Borrow and Gravel, 1.63 acres
- Property next to Leavenworth shop.
- Plain Pit Site, 7 acres
- Navarre Coulee, Pit #404
- Rose Avenue Site, Pit #407
- Entiat, Pit #300
- Mud Creek, Pit #304

County Buildings:

- West Annex Building, 419-425 Washington Street, Wenatchee, 17,250 sq. ft. 40 bed jail facility, offices and motor pool (approximate value of \$2,620,000)
- Administration Building, 400 Douglas Street, Wenatchee, 17,848 sq. ft. (approximate value of \$2,490,000)
- 410 Building & Offices, 410 Washington Street, Wenatchee (approximate value of \$592,000)
- Courthouse, 350 Orondo Avenue, Wenatchee, 50,625 sq. ft. (approximate value of \$11,951,000)
- Detoxification Center, 325-331 Okanogan Street, Wenatchee, 11,934 sq. ft. – not funded by County (approximate value of \$2,575,000)
- Juvenile Administration, 316 Washington Street, Wenatchee, 27,912 sq. ft. (approximate value of \$6,670,000)
- Juvenile Detention (two buildings), 300 Washington Street, Wenatchee, 39,000 sq. ft., 50 bed facility (approximate value of \$9,900,000)
- Law & Justice Building, 401 Washington Street, Wenatchee, 98,560 sq. ft. includes the 394 bed regional jail facility (approximate value of \$27,817,000)
- Jail Annex Facility, 335 King Street, Wenatchee, 60-beds 8,820 sq. ft. (approximate value of \$839,000)
- Ohme Gardens, a County Park which includes a gift shop, caretaker residence, three maintenance buildings, a restroom, a lodge and a historic home. (approximate value of \$434,000)
- Wenatchee River County Park, which includes an office, Caretakers office, picnic shelter, three restroom buildings, shop and storage building and a water treatment building. (approximate value of \$717,000)
- Fish Ladder, 6875 Hwy 97, under the management of Natural Resource Department (approximate value of \$450,000)
- Expo Fairgrounds, County Fairgrounds which includes multiple public use buildings, maintenance buildings, barns, and storage buildings. (approximate value of \$7,970,000)
- Airplane Hanger, NNA Airport Road, Cashmere (approximate value of \$7,000)

Improvements to these facilities, that have been identified as needed to maintain and improve the services supported by these facilities, are itemized in the Capital Financing Plan included in this Element.

IV. SIX YEAR CAPITAL FINANCING PLAN

Capital facility planning often requires multi-year commitments of financial resources. Capital projects provide the framework to implement the Land Use Element and goals of the County Comprehensive Plan. The following table displays the Capital Financing Plan as required by the Growth Management Act RCW 36.70A.070(3)(d). It provides a six-year plan to finance capital projects based on projected funding.

Financing for some projects may assume outside grants or voter-approved bonds. If probable funding falls short or projects are eliminated, a reassessment of the land use element may be necessary to ensure consistency between the Comprehensive Plan and Capital Facilities.

2018-2023 CHELAN COUNTY CAPITAL IMPROVEMENT PLAN						
YEAR	2018	2019	2020	2021	2022	2023
CASHMERE DRYDEN AIRPORT						
Uses of Funds						
Reconstruct taxi lane	200,000	0	0	0	0	0
Relocate entrance and access gate	50,000	0	0	0	0	0
Runway 7/25 & Taxiway maintenance	250,000	0	0	0	0	0
Design Runway 7/25 project	0	250,000	0	0	150,000	0
Obstruction Removal (trees)	0	100,000	0	100,000	0	0
Property Acquisition	0	100,000	0	200,000	0	0
Above-ground fuel system	0	0	0	0	30,000	
Total Uses of Funds	500,000	450,000	0	300,000	180,000	0
Sources of Funds						
Grant and County Funds	18,750	22,500	0	15,000	37,500	0
WSDOT Aviation	18,750	17,500	0	15,000	7,500	0
Non-primary entitlement (FAA)	462,500	410,000	0	270,000	135,000	0
Total Sources of Funds	500,000	450,000	0	300,000	180,000	0
Variance	0	0	0	0	0	0
COMMISSIONER'S OFFICE						
Uses of Funds						
Tech Bond Debt Service	112,975	66,506	65,329	66,230	66,967	0
Master Plan Debt Service	226,900	231,200	225,200	234,200	225,100	0
Jail Facilities Debt Service	616,173	608,747	610,827	612,203	613,083	613,395
Total Uses of Funds	956,048	906,453	901,356	912,633	905,150	613,395
Sources of Funds						
Chelan County General Fund	112,975	66,506	65,329	66,230	66,967	0
Distressed County Rural Tax Fund	226,900	231,200	225,200	234,200	225,100	0
Criminal Justice Fund	616,173	608,747	610,827	612,203	613,083	613,395
Total Sources of Funds	956,048	906,453	901,356	912,633	905,150	613,395

2018-2023 CHELAN COUNTY CAPITAL IMPROVEMENT PLAN						
YEAR	2018	2019	2020	2021	2022	2023
Variance	0	0	0	0	0	0
Local Option Tax Fund	-	-	-	-		
Uses of Funds						
County Wide Public Projects	248,996	146,578	143,984	145,971	147,594	0
Total Uses of Funds	248,996	146,578	143,984	145,971	147,594	0
Sources of Funds						
Local Option Tax	248,996	146,578	143,984	145,971	147,594	0
Total Sources of Funds	248,996	146,578	143,984	145,971	147,594	0
Variance	0	0	0	0	0	0
COUNTY EXPO CENTER						
Uses of Funds						
Fairgrounds Redevelopment Bonds	156,357	92,044	90,415	91,662	92,682	
Building Upgrades	160,000					
Carnival Lot Improvements			250,000			
Centennial Pavilion Parking Lot		125,000				
RV Park Improvement	35,000					
Grandstand/restrooms/concessions	100,000					
Beef Barn	130,000	30,000	30,000			
Total Uses of Funds	581,357	247,044	370,415	91,662	92,682	0
Sources of Funds						
Rural Distressed County Funds	156,357	92,044	90,415	91,662	92,682	
Capital Improvement Reet 2 Fund	325,000	155,000	235,000			
Grants, Loans, Donations			45,000			
Expo and Fair Revenues	100,000					
Total Sources of Funds	581,357	247,044	370,415	91,662	92,682	0
Variance	0	0	0	0	0	0
MAINTENANCE DEPARTMENT						
Uses of Funds						
Facilities Signage (Courthouse)	15,000					
Carpet (Courthouse)	18,000	12000	25,000			
Marble Restoration (Courthouse)	40,000	22000				
Level 5 Remodel (Courthouse)	475,000					
Jail Facilities Improvement (Law & Justice)	285,000	225,000	225,000			
Elevator Modernization (Law & Justice)	250,000	250,000	250,000			
HVAC Unit Replacement (410 Washington)		18,500				

2018-2023 CHELAN COUNTY CAPITAL IMPROVEMENT PLAN						
YEAR	2018	2019	2020	2021	2022	2023
Security Systems Upgrade (Juvenile Detention)		988,800				
HVAC Upgrade/Replacement (West Annex)			32,600			
ADA Upgrades (West Annex)			150,000			
Total Uses of Funds	1,083,000	1,516,300	682,600	0	0	0
Sources of Funds						
Capital Improvement Reet 1 Fund	578,000	784,400	445,100			
Distressed County Rural Tax Fund						
Energy Incentives (PUD)						
Grant Funding (Department of Commerce)						
Criminal Justice Fund	505,000	731,900	237,500			
Total Sources of Funds	1,083,000	1,516,300	682,600	0	0	0
Variance	0	0	0	0	0	0
OHME GARDENS						
Uses of Funds						
Irrigation Pump Station	40,000					
Parking Lot Lighting	50,000					
Building Interior Renovation	25,000					
Restroom/Event Multi-Purpose Room		125,000				
New Visitor & Interpretive Center Building			335,000	335,000		
Total Uses of Funds	115,000	125,000	335,000	335,000	0	0
Sources of Funds						
Capital Improvement Reet 2 Fund	115,000					
Tourism Grant, Other Grants, Donations		60,000				
Donations, Grants, Fund Raising		65,000	55,000	110,000		
Capital Improvement Reet 1 Fund			280,000	225,000		
Total Sources of Funds	115,000	125,000	335,000	335,000	0	0
Variance	0	0	0	0	0	0
PUBLIC WORKS						
Uses of Funds						
Construct Hazardous Waste Facility		160,000	200,000	100,000		
Vegecide Truck Wash Facility	15,000		50,000			
Wenatchee District Shop Replacement		125,000	2,500,000			
Road Rehabilitation	500,000	500,000	500,000	500,000	500,000	500,000

2018-2023 CHELAN COUNTY CAPITAL IMPROVEMENT PLAN						
YEAR	2018	2019	2020	2021	2022	2023
Road District Sheds: Accessibility, Shop Lighting & Electrical Efficiency Upgrades		150,000	150,000			
Total Uses of Funds	515,000	935,000	3,400,000	600,000	500,000	500,000
Sources of Funds						
County Road Fund	15,000	150,000	1,200,000			
Solid Waste Fund		160,000	200,000	100,000		
Distressed County Rural Tax Fund		125,000	1,500,000			
Capital Improvement Reet 2 Fund	500,000	500,000	500,000	500,000	500,000	500,000
Total Sources of Funds	515,000	935,000	3,400,000	600,000	500,000	500,000
Variance	0	0	0	0	0	0
SHERIFF						
Uses of Funds						
Emergency Operations Center	2,500,000					
Total Uses of Funds	2,500,000	0	0	0	0	0
Sources of Funds						
Capital Improvement Reet 1 Fund	500,000					
Grants, Loans, Donations	2,000,000					
Total Sources of Funds	2,500,000	0	0	0	0	0
Variance	0	0	0	0	0	0

V. GOALS AND POLICIES:

LEVELS OF SERVICE

Levels of Service GOAL CF 1: Provide and maintain acceptable levels of public facilities and services.

Rationale: The provision and maintenance of public facilities and services should be consistent with the needs of the community they serve.

Policy CF 1.1: As the need arises, encourage and participate in the establishment of a regional forum to address area wide public facility and service and utility needs.

Rationale: Similar public facilities and services are provided by several entities that share mutual responsibilities and concerns. Coordination among agencies and districts, including consolidation of services if appropriate, would lead to increased efficiency and effectiveness in meeting needs on an area wide basis.

Policy CF 1.2: Ensure that any available public services and facilities are adequately planned and designed to protect the public health, safety and welfare.

Rationale: Inadequate public services and facilities may pose a risk to the public.

Policy CF 1.3: Implement development regulations for the provision of public facilities and services that are flexible and receptive to innovations and advances in technology.

Rationale: It is important for local permitting agencies to keep their standards and permitting requirements current and applicable with advances in the provision of public facilities and services.

Policy CF 1.4: Adequate public facilities and services to serve development shall be available when the impacts of development occur, or within a specified time thereafter, without decreasing established minimum levels of service.

Rationale: Establishing and maintaining locally desired levels of service for public facilities and services will help to ensure that facility and service needs are met.

Policy CF 1.5 Water Systems: Ensure water plans are consistent with the County's Comprehensive plan and the Growth Management Act.

Rationale: Effective comprehensive planning requires consistency among plan elements and plans.

Policy CF 1.6 Water Systems: Support and encourage water conservation measures by local purveyors and educate users on methods to conserve water.

Rationale: Water is a limited resource. Coordination of water use on a watershed basis is encouraged.

Policy CF 1.7 Water Systems: Ensure that individual and public water systems are permitted through the Chelan-Douglas Health District, the Department of Health and the Department of Ecology for appropriate separation requirements and environmental impacts.

Rationale: Seeking domestic water without respect to existing septic/drain field systems, wells and stormwater systems to reduce potential of contamination of the domestic water or negatively impacting existing wells.

Policy CF 1.8 Water Systems: Standards shall be reviewed to ensure appropriate treatment and disposal of stormwater to protect domestic water sources from degradation.

Rationale: Storm water discharges are necessary but must be accomplished in an environmentally safe manner.

Policy CF 1.9 Sanitary Sewer Systems: Proactively plan for the development and maintenance of waste treatment and disposal systems to support long-term future development in the County.

Rationale: Obtaining funding and site approval for sanitary waste treatment and solid waste disposal facilities is typically a lengthy process. Projected growth of the area and distance of potential service from existing facilities should be periodically re-evaluated to ensure that these critical needs will be met in the long term.

Policy CF 1.10 Sanitary Sewer Systems: Plan all wastewater conveyance and treatment systems to be environmentally safe, to meet all federal, state and county legal requirements, and to support the orderly development of the County.

Rationale: Conscientious management in the conveyance and treatment of wastewater can help to prevent environmental impacts.

Policy CF 1.11 Sanitary Sewer Systems: Provide referrals to service purveyors during the development review process.

Rationale: Providing these entities referrals will help to ensure that adequate provisions for necessary services are provided.

Policy CF 1.12 Solid Waste: Coordinate with other jurisdictions in the development of recycling programs to reduce waste and to protect the environment.

Rationale: Staff works closely with all regions of the state, particularly the central and eastern counties. Forming a coalition for a voice of continued state support allows all the Chelan County to provide innovative approaches to solid waste disposal.

Policy CF 1.13 Solid Waste: Support a multi-jurisdictional approach to disposal of moderate-risk hazardous waste.

Rationale: This policy urges governmental entities in the region to give a high priority to instituting a medium hazardous waste collection program for appropriate disposal at a designated facility.

Policy CF 1.14 Solid Waste: Provide opportunities for the community to regularly and efficiently dispose of household moderate-risk waste and agricultural hazardous waste material.

Rationale: Funding of hazardous waste disposal is critical due to the nature of the material and dangerous handling requirements. Continuous funding assistance is needed by the State, due to the taxes collected on hazardous waste for prevention. Ongoing outreach to the state continues for the needs to fund the collection of hazardous waste. Currently, a facility is under construction and plans for operations where hazardous waste is prevented from contaminating our environment. This policy is intended to stress the importance of providing opportunities for disposal of household hazardous waste and agricultural industry generated hazardous waste.

Policy CF 1.15 Solid Waste: Maintain and update the Chelan Solid Waste Management Plan.

Rationale: Solid Waste management planning and implementation is individual to the County and its source of funding. Programs will be coordinated with other jurisdictions for the success, efficiency and necessity to solve regional waste disposal problems.

Policy CF 1.16 Storm-water Systems: Maintain up-to-date stormwater plans and regulations.

Rationale: Appropriate standards for stormwater runoff for development are necessary to protect public and private resources.

Policy CF 1.17 Schools: Coordinate with school districts on major development proposals and long-term growth trends to evaluate potential impacts of growth and implement appropriate measures to offset these impacts, such as impact fees or permit conditions.

Rationale: A quality school system is vital to the future of the County. Facilities and services should be up-to-date and consider long-term trends.

Policy CF 1.18 Park and Recreation Facilities: Encourage the continued maintenance and expansion of parks and recreation facilities to meet the needs of area residents and visitors.

Rationale: Access to parks, recreation facilities, and open spaces, contributes to a higher quality of life for area residents and makes the County a more enjoyable place to live and visit.

Policy CF 1.19 Law Enforcement: Ensure the Chelan County Sheriff's Office is able to provide adequate law enforcement services to the County by providing sufficient quantity and quality of facilities, equipment and manpower, as available within the budget.

Rationale: The Sheriff's Office needs to be maintained and improved to meet law enforcement needs, as the County continues to develop.

Policy CF 1.20 Fire Protection: Ensure that development conforms to all applicable requirements of the International Fire Code or alternatives as approved and administered by the Chelan County Fire Marshall.

Rationale: Provisions must be made for the protection of life and property from fire.

Policy CF 1.21 Fire Protection: Ensure the County Fire Districts are able to provide adequate fire protection to their service areas in terms of quantity and quality of facilities, equipment and manpower, as available within the budget.

Rationale: The fire districts need to be maintained and improved to meet fire protection service needs, as the County continues to develop.

Policy CF 1.22 Fire Protection: Develop a program of fire inspections for all structures, open to the public or used for overnight accommodations.

Rationale: Older buildings or buildings which have undergone a change in use need to be inspected for fire risk and corrective actions taken as necessary. Newer buildings, although presumably inspected during the permit process, should be reviewed on a periodic basis.

Policy CF 1.23 Fire Protection: Maintain mutual aid agreements between city, county, state and federal agencies to provide coordinated fire protection to best serve the residents.

Rationale: A large part of the County is not within a fire protection district. It is essential to the public safety in the County that fire protection be coordinated between all available fire suppression agencies.

Policy CF 1.24 Health Care: Encourage the continued availability of responsive, public and private health care programs and facilities to meet present and future needs.

Rationale: Health care planning needs to adjust to the population it serves. The senior citizen population (65 years and older) is increasing annually. Health care planning must adjust to these changes and the expected growth of the area.

Policy CF 1.25 Health Care: Encourage the continued support of volunteer ambulance services.

Rationale: Volunteer ambulance service plays an important part of the emergency/life safety response in the County.

Policy CF 1.26 Public Buildings and Facilities: Locate and build public facilities so that they are accessible to all segments of the population, including pedestrians and those with special needs.

Rationale: Public facility planning should consider convenient transportation and pedestrian access, and access for those with special needs.

Policy CF 1.27 Public Buildings and Facilities: Encourage the use of energy conservation design strategies in new construction and the rehabilitation of public facility structures.

Rationale: Energy conservation design strategies for public facilities will help to conserve resources and maintain budgets within anticipated available funding capacities.

PROVISIONS FOR ADEQUATE FACILITIES AND SERVICES IN CONJUNCTION WITH LAND USE

GOAL CF 2: Plan and provide for adequate public facilities and services to serve the County's planned land use patterns.

Rationale: Without the support of necessary public facilities and services, desired land use patterns outlined in the comprehensive plan may not be achieved.

Policy CF 2.1: Where feasible, secure easements to loop sewer and water systems along a logical alignment in preparation for future development.

Rationale: Looped sewer and water systems provide for a more efficient and cost effective provision of services.

Policy CF 2.2: Plan for land use patterns that are conducive to efficiently extending future public facilities and services, which will minimize construction costs.

Rationale: Concentrating development within urban growth areas where adequate public facilities and services exist will allow those facilities and services to be provided in a more efficient manner.

Policy CF 2.3: Size capital facilities to meet anticipated growth in the service area.

Rationale: Capital facilities plans should consider the anticipated growth of service areas to assure that new facilities do not become obsolete due to under-sizing which could result in untimely expansion.

Policy CF 2.4: In rural areas, design public facilities and services to be compatible with the rural and scenic character of the County.

Rationale: Maintaining the rural characteristics of the planning area should be a strong consideration when reviewing the design and location of public facilities and services.

Policy CF 2.5: Extend necessary public facilities and services may be provided for the redevelopment, in-fill and development of existing commercial, mixed use, residential, shoreline and industrial sites outside of urban growth areas consistent with the GMA.

Rationale: The Growth Management Act allows for the provision of necessary public facilities and services for intensely developed rural areas.

Policy CF 2.6: Extend urban governmental services to rural areas when necessary to protect basic public health and safety and the environment, consistent with the Growth Management Act.

Rationale: The Growth Management Act (RCW 36.70A.070(5)(d)) permits for the provision of urban governmental services in rural areas where it is necessary to protect basic public health and safety, and the environment.

Goal CF 3: Ensure that funding for necessary public facilities and services is identified and that the mechanisms for the collection of fees or revenue are established.

Rationale: Adequate funding for public facilities and services and the mechanisms to attain needed funding should be identified in order to ensure that necessary public facilities and services can be provided for.

Policy CF 3.1: Provide and maintain a six year plan that will finance needed capital facilities within projected funding capacities and which identifies funding sources for such purposes.

Rationale: The Growth Management Act requires local jurisdictions planning under the act to provide a six-year financing plan that identifies sources of funding for needed capital facilities

Policy CF 3.2: Where appropriate, employ innovative financing strategies for capital improvements, to minimize financial costs to taxpayers and equitably assign costs between existing and new development.

Rationale: Using a variety of alternatives for financing capital improvements will provide a more fair distribution of costs to County residents.

Policy CF 3.3: Establish a process for inter-jurisdictional analysis of annexation-related impacts. On a case by case basis, coordinate with cities to minimize potential economic impacts of annexation activities by implementing development agreements or contracts that:

1. Compensate the County for loss of tax revenue, from annexation of significant industrial and commercial areas during the affected budget cycle; and/or
2. Compensate the city for the cost of providing services and maintenance of infrastructure to newly annexed areas during the period prior to the change in dispensation of full tax revenue. This may include contracting with the County to provide services to newly annexed areas during this interim period.

Rationale: Developing agreements between the County and cities would minimize the potential impacts of annexation activities in the future.

Policy CF 3.4: Impact fees, as provided for under RCW 82.02, shall be considered as a means to assure that new development pays its share of the cost of improvements associated with new growth and equitably contributes to the overall financing of capital improvements.

Rationale: Impact fees directly assign a proportionate share of the cost of development to those who will benefit from capital improvements.

Policy CF 3.5: Capital facilities planning should establish shared funding responsibilities among and between local governments, utility purveyors, special purpose districts and the private sector.

Rationale: Coordination of capital facility planning would provide for more efficient, and therefore less costly infrastructure improvements.

Policy CF 3.6: Encourage the multiple use of public facilities.

Rationale: Public facilities designed for multiple use and/or seasons can be more cost effective and provide additional service to residents and visitors.

Policy CF 3.7: Development should carry a proportionate share of the cost for extending and increasing the capacity of needed public facilities and services, in the absence of impact fees.

Rationale: Existing users should not be responsible for costs associated with collection and distribution systems to serve new development. On the other hand, new

development should not bear the total cost of new treatment or production facilities that benefit existing users.

Policy CF 3.8: The land use element and desired levels of service should be reassessed if available funding falls short of meeting existing needs. The land use element, capital facilities element, and the financing plan within the capital facilities element should also be coordinated and consistent.

Rationale: This will help to ensure that growth and needed public facilities and services are provided for in an efficient and sustainable manner.

GOAL CF 4: The County shall provide a means for the siting of essential public facilities.

Rationale: Essential public facilities include those facilities that are typically difficult to site, such as airports, state education facilities and state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities and in-patient facilities including substance abuse facilities, mental health facilities, secure transitional facilities, group homes and other facilities as defined by RCW. The comprehensive plan must make provisions for the siting of essential public facilities (RCW 36.70A.200).

Policy CF 4.1: Essential public facilities identified by the County, by regional agreement, or by the Office of Financial Management should be subject to the following siting process. A review of possible essential public facilities shall occur at least every six years. When essential public facilities are identified and proposed the local government(s) will:

1. Appoint an advisory County-Wide Project Analysis and Site Evaluation Committee composed of citizen members selected to represent a broad range of interest groups. It will be this committee's responsibility to develop specific siting criteria for the proposed project and to identify, analyze, and rank potential project sites. In addition the committee shall establish a reasonable time frame for completion of the task.
2. Ensure public involvement through the use of timely press releases, newspaper notices, public information meetings and public hearings.
3. Notify adjacent jurisdictions of the proposed project and solicit review and comment on the recommendations made by the Advisory Project Analysis and Site Evaluation Committee.

Rationale: This process will ensure that there is a process established for the siting of essential public facilities and that there is an equitable distribution of these types of uses.

Policy CF 4.2: As identified essential public facilities are addressed, standards should be generated to ensure reasonable compatibility with other land uses is achieved.

Rationale: Development of siting standards for essential public facilities will help to insure that they are appropriately sited and that the impacts to surrounding land uses will be mitigated.

Policy CF 4.3: Essential public facilities should not locate in Resource Lands or Critical Areas, unless necessary and where compatible.

Rationale: Resource Lands and Critical Areas are not the appropriate areas for the siting of most essential public facilities.

Chapter 7 UTILITY ELEMENT

I. INTRODUCTION

The Utilities Element has been developed in accordance with the Growth Management Act RCW 36.70A.070 and WAC 365-195-320 to address utility services in the County. The Utilities Element is primarily intended to support coordination of land use planning and infrastructure planning between the County, local jurisdictions and utility purveyors such as natural gas, electrical service, and telecommunications.

The Utilities Element has also been developed in accordance with the county-wide planning policies and has been integrated with all other planning elements to ensure consistency throughout the comprehensive plan. The Utilities Element specifically considers the general location, proposed location, and capacity of all existing and proposed utilities.

It is intended for this plan to provide a brief description of the different public and private utility purveyors that operate in Chelan County, and to encourage these individual purveyors to consider the goals and policies of this comprehensive plan when contemplating capital improvements to their systems. Because the County acts as a coordinator for population growth and related development, this plan encourages these utility purveyors to maintain close communication with the County in regard to the capacity of their systems and to coordinate and review the development of their plans. The goals and policies contained within this Element shall also be recognized in the formation and use of development regulations for the County.

II. INVENTORY AND ANALYSIS

The inventory presented in this Element provides information useful to the planning process. It does not include all of the data or information that was gathered, but has presented the relevant information in an organized and useful format. Many public and private agencies are involved in regulating, coordination, production, delivery and supply of utility services. This section of the Element identifies those providers and offers information on the locations of where the services are provided.

Telecommunication Services

Local telephone service has been provided to the County by GTE Northwest since 1952. There are various facilities located throughout the County and the cities within Chelan County. According to GTE, the delivery of telecommunication services sometimes does not coincide with the exact location of customers. Many of the telecommunication facilities, including overhead and underground delivery lines, are co-located with those of the electrical power provider. In the Stehekin Study Area, the National Park Service provides a satellite operated, coinless public telephone at the Stehekin Landing.

Cellular telephone service has been provided in Chelan County since 1991. Facilities related to cellular telephone service include low-powered transmitting antennas and a central computer called a telephone switching office. The mobile nature of the service requires the installation of transmitting antennas strategically placed to transmit the signal from the mobile unit to the switching center.

With the movement to digital technology from analog technology, cellular tower siting is required to be located at lower elevation levels. The Wireless Telecommunications federal regulations have changed to

address small cell technology which can be placed on existing power poles to increase coverage for cellular services and internet.

These advances in the telecommunications industry will continue to transform service delivery in Chelan County. As the County grows and technological advances are made, telecommunication facilities will be upgraded to ensure adequate service levels.

Natural Gas

The Northwest Pipeline Corporation owns and operates an interstate natural gas pipeline system which comes from the southeastern portion of the County near Alcoa. The line generally follows the alignment of the Colockum Road/Malaga-Alcoa Highway.

In the Malaga-Stemilt-Squilchuck Study Area natural gas is currently available along the transmission line that runs near the Malaga-Alcoa Highway and within the old town-site of Malaga. No homes in the old town-site are connected to the line, although; along the highway several homes are connected to the line. Fire District #1 also has natural gas extended to their fire station on West Malaga Road.

Cascade Natural Gas provides service 1,652 customers within the Wenatchee and Sunnyslope/Olds Station areas with a 6 inch line that crosses the Wenatchee River at the railroad bridge. A line located along Easy Street serves residential customers in the Sunnyslope area. The system was updated in 1997 and a new line installed providing service up to the Tree Top plant located on Highway 97A.

Extension of service into new areas is on a demand basis. Cascade Natural Gas will provide the extension of the service and will enter into an agreement with the requesting party for reimbursement of the improvement. As additional customers connect to the extended line the initiating party is reimbursed. Expansion of the natural gas system i.e., the location, capacity, and timing, will depend greatly on opportunities for expansion and on how quickly the County grows. In addition, any route taken to provide service will depend on right-of way permitting, environmental impact, and the opportunities to install gas mains with new development, highway improvements or other utilities.

Propane delivery is provided to a number of customers in the County: Empire Gas, Amerigas, Ag Supply and Wenatchee Petroleum. Growth of this fuel as an alternative to electricity will depend on the ability of the PUD to provide electrical service and the specific needs of the customers.

Electrical Utilities

All public electric power in the County is provided by the Chelan County Public Utility District #1 (PUD), a special purpose public agency. The District is governed by an elected board of commissioners. The District is a publicly owned municipal corporation of the State of Washington. The PUD, as a public utility, is required to provide service to everyone in its service area. As of June 1999, the number of active meters is 37,614 and this number is expected to reach approximately 67,000 in a 20 year time period. The PUD is authorized to provide electric service to their owners at cost and without profit. According to the PUD, there currently is capacity to meet existing demand for both the incorporated areas of the County as well as the rural areas.

In 1998, the District hired the firm, Electrical Consultants, Inc. to conduct a long-range transmission planning study. The scope of the study included system planning and major station facilities. The study looked at contractual agreements and obligations, load forecasts and basic planning and design criteria. Some of the anticipated problems the study identified are low transmission system voltages in the Stevens Pass area, Chelan Union Valley area, and Sunnyslope area under certain operating conditions in the future. In addition, it is anticipated that several transformers and line sections will be overloaded

with a projected annual load growth rate of 3.9%. This plan and subsequent updates are hereby adopted by reference.

The Districts goal is to provide uninterrupted electrical service within their service area. To satisfy this goal, the PUD has in place electrical sub-stations at the following locations:

- | | | | |
|------------------|------------------|--------------------|--------------------|
| 1. Wapato | 10. Rocky Reach | 18. Mission | 23. Plain |
| 2. Manson | 11. Malaga | (Cashmere) | 24. Lake |
| 3. Union Valley | 12. Kawecki | 19. Sunset | Wenatchee |
| 4. Chelan | (Malaga) | (Cashmere) | 25. Winton Mill |
| 5. Chelan Falls | 13. Valhalla | 20. Peshastin/Dryd | 26. Coles Corner |
| Switchyard | McKenzie | en | 27. Berne (Stevens |
| 6. Winesap | (Malaga) | 21. Anderson | Pass) |
| 7. Entiat | 14. Alcoa | Canyon | 28. Summit |
| 8. Entiat Valley | 15. Squilchuck | Switchyard | (Stevens Pass) |
| 9. Rocky Reach | 16. Olds Station | (Peshastin) | |
| Switchyard | 17. Sunnyslope | 22. Leavenworth | |

As of August 1999, the following capital improvement projects are tentatively in the District's 20 year Long Range Plan:

1. Lake Crossing Substation – located in Manson to meet the projected load growth demand. (Tentative completion date 2012)
2. Boyd Switching Station – Located in the Chelan Boyd District area to meet the projected load growth demand and also to mitigate the projected low transmission system voltage. (Tentative construction date 2008)
3. South Shore Substation – Located on the Chelan Highway, near the Hawk's Meadow area to meet the projected load growth demand and minimize the projected low distribution system voltage. (To be completed in 2007)
4. South Wenatchee Substation – Located along Crawford St. to meet projected load growth demand. (To be completed as needed)
5. Castlerock Substation – Located at the western end of Castlerock St. in Wenatchee to meet the projected load growth demand. (To be completed in 2007)
6. Monitor Switching Station – Located on Easy Street, approximately ½ mile east of Boswell's Furniture to meet the projected 10% load growth demand in the Sunnyslope area and also to mitigate the projected low transmission system voltage. (To be completed in 2003)
7. Old Mill Substation – Located at the old Peshastin Mill site to meet the projected load growth demand. (To be completed as needed)
8. Transmission Line Construction Projects – Short transmission lines to be built to serve all future substations mentioned above.

These substations and switching stations will be built on existing PUD property or property acquired by leasing or purchase. The capital cost and maintenance expense of establishing new substations will be borne by the PUD.

The Stehekin Study Area has a hydroelectric plant which is augmented by three diesel generators. The electric plant is located on Company Creek and only supplies the Stehekin Valley.

Normal base load is carried by the 200 kw hydro plant. When peak loads exceed the capacity of the hydro unit, an auto start relay starts a diesel driven 75 kw induction generator. The system is not on the Northwest Power Grid; it is a totally independent system.

The Stehekin power system has two synchronous diesel generators in addition to the one induction unit. There is a total capacity of 775kw with the hydroelectric and generators combined. In the winter when temperatures drop toward zero, the stream flow in Company Creek also drops and the hydro intake begins to ice up. When this condition occurs, the output of the hydro declines and is eventually taken out of service. This condition usually occurs every winter, with the duration of the outages varying. The National Park Service maintains an emergency backup system for federally owned facilities at Stehekin Landing.

III. GOALS AND POLICIES

GOAL UE1: Enhance the efficiency and quality of service from utility providers through the coordination of utility, land use, and transportation planning.

Policy UE 1.1: Encourage effective and timely coordination of all public and private utility construction activities, including trenching.

Rationale: Coordination of utility trenching activities will allow less costly and less frequent right-of-way repairs and fewer inconveniences to the public.

Policy UE 1.2: Encourage system design practices intended to minimize the number and duration of interruptions to customer service.

Rationale: Minimizing interruptions is beneficial to the public.

Policy UE 1.3: Promote the consolidation of utility facilities where feasible.

Rationale: Appropriate consolidation will reduce the overall costs and inconveniences to the public. Examples of facilities that could be shared are: towers, poles, antennas, substation sites, trenches, and easements.

Policy UE 1.4: Coordinate County and local jurisdiction's roadway projects with planned utility expansions, improvements, or extensions where shared sites or rights-of-way may be appropriate. Similarly, encourage utility purveyors to coordinate their utility expansions, extensions or improvements where shared sites or rights-of-ways may be appropriate.

Rationale: Coordination will allow consideration for the appropriate locations of utilities and timing of utility installations.

Policy UE 1.6: Development regulations shall provide for adequate utility rights-of-ways or easements concurrent with development.

Rationale: Assurance of adequate right of way or easements helps to ensure that necessary services for development are provided.

GOAL UE 2: Provide utilities in a manner which maintains the visual qualities of the County.

Policy UE 2.1: Require the under grounding of all new and existing electrical distribution and communication lines for development, where reasonably feasible.

Rationale: Utilities placed underground help protect the safety of the citizens, may reduce maintenance costs, and maintain a less cluttered environment.

Policy UE 2.3: Require the placement of cellular communication facilities in a manner which minimizes adverse impacts to surrounding land uses.

Rationale: Compatibility with adjacent land uses shall be considered when reviewing such facilities.

Policy UE 2.4: Ensure that all maintenance, repair, installation, and replacement activities for utility facilities are consistent with the County's critical area regulations.

Rationale: Where placement of utility facilities within critical areas is necessary, development shall be consistent with the requirements of the County's critical area regulations.

Policy UE 2.5: Development regulations shall provide for adequate buffering and screening of utility facilities where such facilities may have a negative visual impact on surrounding land uses or where public access to such facilities should be limited for safety concerns.

GOAL UE 3: Ensure that adequate public utilities are provided to meet the projected and desired land use patterns within the County.

Policy UE 3.1: Encourage energy conservation and the use of cost-effective alternative energy sources, such as solar and wind power.

Rationale: Energy conservation is essential as the County accommodates more people. The utilization of other energy sources should be explored and implemented where feasible.

Policy UE 3.2: Incentivize the use of energy conservation design strategies in new construction and rehabilitation of existing residential, commercial, industrial and public facility structures.

Rationale: As the County develops, the demand for energy will grow. Conservation is vital to continue serving the County and maintain productive and livable lifestyles.

Policy UE 3.3: The capacity of extended utilities should be adequate to meet anticipated growth in the County.

Rationale: Utilities should consider the anticipated growth of the County to assure that new facilities do not become obsolete.

Policy UE 3.4: Implement development regulations for provision of utilities that are flexible and receptive to innovations and advances in technology.

Rationale: As the utility industry advances in technology it is important for local permitting agencies to keep their standards and permitting requirements current and applicable.

Policy UE 3.5: Stehekin Area: Enhance the County's hydroelectric power generation capabilities through improvements to system efficiency, maintenance of hydroelectric facilities, and protection of facilities from erosion and flooding.

Chapter 8 ECONOMIC DEVELOPMENT ELEMENT

I. Introduction

The Economic Element is an optional element in the Comprehensive Plan. The County recognizes the importance of economic development in maintaining the stability of the local economy and quality of life. Industries in Chelan County serve diverse markets and needs that include local, regional, state, national and international markets.

The purpose of the Economic Element is to set goals and establish policies that encourage and support effective economic development efforts and promote economic vitality for the future of Chelan County.

*Growth Management Act
Economic Goal: Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.*

II. General Economic and Income Profile

Employment by Sector

Due to the close proximity of the regions two largest cities – Wenatchee (Chelan County) and East Wenatchee (Douglas County), both Chelan and Douglas Counties are interlinked for employment, housing and retail. The largest four employment sectors for Chelan County are agriculture (forestry, fishing), health services; local government and retail trade¹.

Table 7.1 Top Employment Sectors in 2014

Sector	Number of jobs	Share of employment
1. Agriculture, forestry and fishing	9,962	24.1%
2. Health services	5,602	13.5%
3. Local government	4,766	11.5%
4. Retail trade	4,379	10.6%
5. Accommodation and food services	4,097	9.9%
Total covered employment	41,345	100%
All other industries	12,539	30.3%

Douglas County is similar with agriculture (forestry, fishing) at 28.6%, local government at 15.3%, retail trade at 12.0% and health services at 7.7%.²

Unemployment

Unemployment in the region is consistently higher than the state average. This is most likely due to the seasonal nature of the biggest employer, agriculture.

¹ Office of Financial Management

² Office of Financial Management

Table 7.2 Unemployment Percentages

	2005	2010	2015
Chelan County	5.7%	9.3%	5.9%
Douglas County	5.4%	9.7%	6.3%
Washington State	4.90%	6.40%	4.70%

Source: Chelan Douglas Trends

Income levels

As noted in the Housing Element, median household income measures all sources of income – wage/salary, investments, rents, pensions, transfer payments. The median household income is the value at which 50% of households in Chelan are below and 50% are above. Households are different from families, since they may contain unrelated people living together or single inhabitants in a dwelling. Household income in 2014 was estimated to be \$50,825 for Chelan County as compared to \$60,153 for Washington State³.

Average Annual Wage by Industry

The total covered payroll in 2014 in Chelan County was approximately \$1.48 billion. The average annual wage was \$35,912 or 65.3 percent of the state average of \$55,003.⁴

Table 7.3 Top Five Industries by Payroll in 2014

Chelan County Sector	Countywide Payroll	Percent of Payrolls
1. Health services	\$304,232,620	20.5%
2. Local government	\$234,376,378	15.8%
3. Agriculture, forestry and fishing	\$228,904,393	15.4%
4. Retail trade	\$115,390,841	7.8%
5. Wholesale trade	\$103,679,515	7.0%
Total covered payrolls	\$1,484,761,635	100%
All other industries	\$498,177,888	33.6%

Source: Employment Security Department

Although agriculture was clearly the top job provider in Chelan County in 2014, with 24.1 percent of total covered employment; private health services provided a \$304.2 million payroll, ranking this industry first out of 22 industries/categories in wages and accounting for 20.5 percent of all earned wage income countywide. More than one out of every five dollars earned in Chelan County, is earned in health services (i.e., at a doctor/dentist's office, in a hospital, nursing home, vocational rehab facility, etc.).⁵

Cost of Living Index for Selected Cities

Data collected for each of the Cities within Chelan County indicates that Chelan County Cities are more expensive to live in than Washington State and the US average. The index measures relative price levels for consumer goods and services in those participating areas; it does not

³ Office of Financial Management

⁴ Employment Security Department Overview

⁵ Employment Security Department

measure inflation of price changes over time. A ‘cost of living index’ above 100 means that community is more expensive than the US average; below 100 means that community is less expensive than the US average.

Table 7.4: Cost of Living

Washington State	92
City of Cashmere	111.90
City of Chelan	115
City of Entiat	106.9
City of Leavenworth	124.10
City of Wenatchee	106.20

Source: bestplaces.net February 2017

III. Goals & Policies

Goal ED 1: Encourage efforts to diversify the existing economic base to focus on long-term sustainable economic development throughout the County.

Rationale: The diversification of the economic base through sustainable economic development can help provide expanded job opportunities as well as a healthy, stable and growing economy. Diversification will reduce negative impacts during shifts in industries.

Policy ED 1.1: Seek to attract businesses and industries that complement and build upon existing business and industry.

Rationale: Building upon relationships with existing business and industries can diversify the economic base and strengthen positions for existing businesses and industries.

Policy ED 1.2: Incentivize development that creates local re-investment funds and provides jobs in the local community.

Rationale: Diversification and expansion of the County’s economic base will expand job opportunities and bring additional resources for the growth and development of the County.

Policy ED 1.3: Maintain the County’s rural economic base by permitting limited development in rural areas of industrial and natural resource land uses that are not suitable for urban areas, provided critical areas and surrounding land uses are protected.

Rationale: Some industrial and natural resource based uses due to their nature are not appropriate to be located in urban growth areas but can be located within remote rural locations within the limits set by rural governmental services, and the protection of the rural character and critical areas. Said uses can play an important role in support of other industries and businesses in the County.

Goal ED 2: Encourage the retention and growth of recreational and tourist based industries consistent with the comprehensive plan.

Goal Rationale: Recreation and tourism play a significant role in the County’s economy. Opportunities exist to strengthen and build upon the many tourist and recreational amenities and the locational advantages the County has to offer.

Policy ED 2.1: Promote local tourism activities by developing brochures and media advertisements, and supporting local and self-contained events.

Rationale: Marketing of recreational and tourist amenities supports year-round tourism and the relocation of businesses to this area.

Goal ED 3: Accommodate and support efforts to diversify the agricultural economy.

Goal Rationale: Agriculture plays a significant role in the economic base of the County. Diversity of the agricultural economy strengthens the County's economic base.

Policy ED 3.1: Strengthen and diversify the agricultural economy by promoting value-added agricultural activities.

Rationale: The development of value-added agricultural activities can strengthen both the agricultural and tourism components of the County's economy.

GOAL ED 4: Local economic development efforts should promote the advantages of working and living in Chelan County, such as availability of work, job security and stability, access to recreational and cultural activities, educational opportunities, quality health care, and affordable housing.

Goal Rationale: Quality of life factors play a role in attracting and retaining employees and businesses.

Policy ED 4.1: Promote and maintain open space, recreation, and cultural and heritage resources that are attractive to both local residents and visitors.

Rationale: These amenities and activities are key to the high quality of life enjoyed by County residents and are important in the retention and recruitment of business and industries.

Policy ED 4.2: Encourage economic development efforts that invite broad community participation and address the needs, concerns, rights and resources of a diversity of cultural groups.

Policy ED 4.3: Foster a diverse private-sector job base that supports attractive wages and facilitates the retention and expansion of existing businesses.

Rationale: The aim is to retain college graduates from the area in addition to decreasing unemployment and under employment.

Policy ED 4.4: Support partnerships which expand vocational, post-secondary and higher education programs to promote a highly skilled, educated and a technically trained work force.

Rationale: A technically skilled local labor force will help attract and retain industries paying family wage jobs.

Policy ED 4.5: Support a full range of human and social services necessary to encourage a strong local economy.

Rationale: Adequate human and social services are necessary to meet community needs and contribute to a complete list of services that industries and businesses seek for their employees when locating in an area.

Policy ED 4.6: Ensure an adequate housing supply for all income levels in a variety of housing types.

Rationale: Adequate, affordable housing plays an important role in retaining and attracting business and industry.

Goal ED 5: Implement a regional and multi-jurisdictional approach to economic development.

Goal Rationale: A regional approach and a consolidation of efforts are key to the success of economic development for the County.

Policy ED 5.1: Coordinate with the Chelan County Port District in the evaluation and ranking of economic development projects.

Rationale: The Chelan County Port District is a resource to use in making economic development decisions for the economic diversification of the County's economy.

Policy ED 5.2: Promote economic development policies that discourage inter-jurisdictional competition for sales tax revenues.

Rationale: Competition within the region is an inefficient use of limited resources. Economic goals may have a higher chance of success through coordinated and consolidated efforts.

Policy ED 5.3: Pursue improvements to the region's air and land transportation systems to improve year-round accessibility.

Rationale: The region would benefit from improved transportation systems that provide greater accessibility to the region.

Policy ED 5.4: Coordinate with adjacent jurisdictions to create an environment that is supportive and attractive to the internet/information technology industries.

Rationale: Chelan County will benefit from regional collaboration for the attraction of high technology industries of both large or small scale.

Policy ED 5.5: Coordinate with the region's cities to develop a process for siting major industrial developments outside urban growth areas, pursuant to RCW 36.70A.365

Rationale: The potential for the siting of major industrial development consistent with RCW 36.70A.365 and the comprehensive plan should not be precluded.

Goal ED 6: Establish a regulatory climate favorable for economic development.

Goal Rationale: Many factors make up a positive economic climate. Economic development requires policies of positive and predictable support and encouragement for private investment.

Policy ED 6.1: Support the retention of redevelopment of existing industrial areas by economic development agencies.

Rationale: Industrial development and retention of existing industrial activities helps diversify the economy within the rural areas.

Policy ED 6.2: Support development of tourism and recreational uses on both public and private lands.

Rationale: Because of its extraordinary geography, the County has many areas with potential for recreational and tourism development. Identification of specific sites requires the assistance the County.

Policy ED 6.3: Streamline the permitting process and provide the public with excellent customer service.

Rationale: A streamlined permitting process with a customer service approach towards the public helps to provide a positive environment for economic development and a greater degree of certainty in the permitting process.

Policy ED 6.4: Evaluate economic development implications as part of land use planning, transportation planning, infrastructure planning, and environmental planning projects and in the determination of urban growth boundaries.

Rationale: Consideration of economic development in the process of planning for growth and development is necessary to build sustainable, healthy communities.

Policy ED 6.5: Support economic development by providing adequate levels of infrastructure and promoting technological advancements in public service and facility systems.

Rationale: This will enable the County to meet the demands of growth as these facilities and services are needed.

Chapter 9 PARKS AND RECREATION ELEMENT

I. INTRODUCTION

The State Legislature passed the Growth Management Act (GMA) in 1990 as a response to growing concerns related to rapid population growth. One of the original 13 goals of the GMA is to “Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.” This is the County’s first update to the original Comprehensive Parks and Recreation Plan which was created in 2007. An updated Parks and Recreation Element is of the County’s Comprehensive Plan (RCW 32.70A.070(8)) is required to be eligible for Washington State Recreation and Conservation Office (RCO) funding.

PLANNING AREA

Snow covered mountains, glacier fed waterways, expansive forests, and orchards intermingled among sagebrush covered hills are Chelan County’s backdrop. This world class setting provides a wealth of recreation opportunities for residents as well as visitors from around the world. Hiking, skiing, camping, fishing, boating, and biking are just a sampling of the many activities defining the County. The Cascade Scenic Byway follows the northern route through the Cascade Mountains and the southern shore of Lake Chelan, providing access to many of these recreation opportunities. The loop follows US Highway 97 and US Highway 2, the primary travel routes to and through Chelan County.

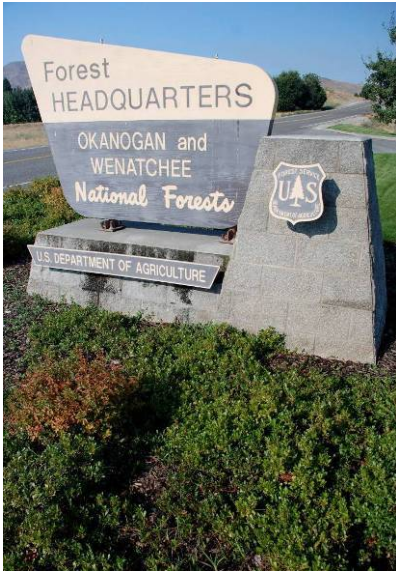


Figure 1 The US Forest Service is a major presence in Chelan County, where 87% of all land is owned by public agencies.

Chelan County encompasses a land area of over 2,920 square miles in north central Washington State. This ranks it 3rd in area size among the state’s counties. The County’s northwestern border is shared with Skagit County. The crest of the Cascade Mountains defines its western borders with Snohomish and King Counties. Its northeast border is shared with Okanogan County. The eastern border is the Columbia River which is shared with Douglas County. Kittitas County is to the south.

The vast majority of the County (approximately 87percent) is publicly owned. Much (80 percent) of this public land is part of the Wenatchee National Forest. The County’s additional public lands are managed by an assortment of federal, state, and local agencies.

HISTORY

The region was historically inhabited by the Chelan and Wenatchi Native American tribes, who were included in the Consolidated Tribes and Bands of the Yakama Nation when the Yakama Nation Treaty was signed in 1855. A few small areas near Lake Chelan were allotted to the tribe. Most Wenatchis and Chelans settled on the Colville Reservation.

European settlers came to the Wenatchee Valley in the 1870s and 1880s, approaching via a series of switchbacks over a mountain pass. Development arrived with the Great Northern Railway that accessed the Wenatchee Valley by a tunnel through the Cascade Mountains near Stevens Pass. Wenatchee incorporated in 1892, soon after the first train passed through the area.

Chelan County was created out of Okanogan and Kittitas Counties in 1899 with Wenatchee as the county seat. Railroads played a major role in the growth of the area, bringing both supplies and settlers. This growth required water, and

irrigation canals became the center of agricultural success in Chelan County. The ability to form public utility districts in 1930 allowed residents to own power companies. In the same time period, the United States started building irrigation and flood control dams on the Columbia. In 1937 the Bonneville Power Administration was created to distribute electricity to publicly owned utilities. That same year the Chelan County PUD formed. Since then, the PUD has acquired and operates multiple dams in Chelan County.

Leavenworth, a community in Chelan County, was struggling economically in the 1960's and decided to pursue a Bavarian theme. Leavenworth continued to grow as a tourist destination, while Wenatchee and Lake Chelan continued to focus on apple orchards. Wenatchee became known as the "Apple Capital".

The existing diversity of fruit crops has been enhanced by blueberries and wine grape crops. The wine economy is bringing more tourists to Chelan County, adding to those who already visit the area for its abundant public open spaces and dramatic geography.



Figure 2 At 9,511ft, Bonanza Peak is the highest point in Chelan County.

GEOGRAPHY AND CLIMATE

Habitat types are extremely varied in Chelan County and are somewhat typical of other areas east of the Cascade Mountains. Habitat types include wetlands along the Columbia River and Lake Chelan shorelines, the shrub-steppe habitat located throughout the County's canyons and foothills, dry ponderosa forests, and the meadows located in the high alpine zones. Animal Species that can be found in the area include mule deer, elk, black bears, coyotes and cougars, along with numerous small mammals and birds. Native trees include western red cedar; Douglas and grand firs; ponderosa and white pines; big leaf, Douglas and vine maples; dogwoods, alders and cottonwoods, with other vegetation below or beyond the tree level consisting of grasses, sagebrush and shrubs.



Figure 3 Peshastin Pinnacles State Park was preserved as a climbing destination.

Elevations in Chelan County range from just under 600 feet above sea level along the Columbia River to several peaks above 9,000ft, including Bonanza Peak, the County's highest peak at 9,511 feet. Bonanza Peak also holds the distinction of being the highest non-volcanic peak in the state and the entire Cascade Range. There are a number of sub-ranges of the Cascade Range in Chelan County including the Chelan Mountains, Entiat Mountains, Chiwaukum Mountains, Sawtooth Range and the Stuart Range. There are ample opportunities for developed recreation and primitive recreation throughout many of these ranges.

This diverse area has a varied climate with characteristics between those of the milder, moister Puget Sound, and the drier central Washington climate with greater temperature swings from hot summers to cold winters. Temperature and precipitation vary widely depending on the elevation and proximity to the Cascade Crest. Precipitation averages in the

County generally decrease with greater distance inland. Lake Chelan helps moderate temperatures to make the area such a successful growing region.

Rivers, and the valleys they create, are some of the most defining features of Chelan County. The Wenatchee River, Entiat River and Chelan River are the County's significant tributaries to the Columbia River. Each of these watersheds originate high in the Cascade Mountains and flow in a southeasterly direction until their confluences with the Columbia. All of these bodies and their tributaries provide drinking water, and are critical for irrigation, recreation, and fish and wildlife habitat.

The Chelan River Basin is dominated by Lake Chelan. At over 50 miles long and reaching depths of almost 1,500 feet, this glacially formed lake is the largest natural lake of any measure in Washington. The Stehekin River originates in North Cascades National Park and contributes a majority of the lake's inflow. Other notable tributary streams include Railroad Creek and Twenty Five Mile Creek. The outflow of the lake is controlled through the Lake Chelan Dam, a Chelan PUD operated hydroelectric dam and penstock system which is located near the mouth of the Chelan River.

The Entiat River forms just below Mount Fernow's Entiat Glacier and gathers water from primary tributaries, the North Fork Entiat River and the Mad River in addition to multiple smaller streams before its confluence with the Columbia in the city of Entiat. The Entiat basin is the smallest of the three major watersheds in Chelan County.

The Wenatchee River drains most of southern Chelan County and is the largest watershed in the County. The headwaters of the Wenatchee River originate high in the mountains as the Little Wenatchee and White Rivers before becoming the Wenatchee River downstream of Lake Wenatchee. The Chiwawa River, White River, Little Wenatchee River, Nason Creek and Icicle Creek are the primary tributaries and the source of over 90% of the river's average flow. The Wenatchee discharges into the Columbia River at Wenatchee Confluence State Park in the City of Wenatchee.

In addition to Lake Chelan and Lake Wenatchee, there are dozens of additional lakes of various sizes throughout the Chelan County that support a variety of recreation uses. A majority of these are alpine lakes located within one the many federally designated wilderness areas across the County.

DEMOGRAPHICS AND ECONOMY

The population of Chelan County is steadily growing. The County population of about 40,000 in 1960 has nearly doubled in size over the last 50 years, reaching a population of 75,910 in 2016. Over the next 20 years, the County's population is expected to increase by about 11,000, reaching a population of around 87,300. This growth equates to increased demands for services countywide.

	1960	1970	1980	1990	2000	2010*	2015*	2016*
Population	40,744	41,103	45,061	52,250	66,616	72,453	75,030	75,910
Cities	22,856	23,249	24,270	29,490	37,378	41,955	43,450	43,835
Not Cities	17,888	17,854	20,791	22,760	29,238	30,498	31,580	32,075
All County Percent Change	-	.9	8.8	13.8	21.6	8.1	4.8	1.2
Cities Percent Change	-	1.7	4.2	17.7	21.1	10.9	3.4	0.9
Not Cities Percent Change	-	-0.2	14.1	8.7	22.2	4.1	3.4	1.5

Sources: United States Census, *OFM, and the Port of Chelan

According to the 2010 Census there were 27,827 households in Chelan County with an average household size of 2.57 people. The ethnic make-up of the County was 79.3% Caucasian, 25.8% Hispanic, and 2.2% other ethnicities, with 7.3% of the total population having 2 or more ethnic origins. The median age was 39.3 years. Chelan County's median household income was \$48,674, with a per capita income of \$24,378.

There were approximately 35,465 housing units with 27,827 occupied (21.5 percent vacant) in 2010. Of the occupied housing units 17,684 (63.5 percent) were owner occupied and 10,143 (36.5 percent) were renter occupied. Twenty-four percent of the total housing units were built after 1990. The median monthly housing cost for homeowners was \$1,028 and for renters was \$674.

PARKS AND RECREATION TRENDS

Emerging trends within park and recreation planning relate to Chelan County and should be looked at to help identify future demand and needs. The following trends were highlighted by the Recreation and Conservation Office (RCO) and include both state and national surveys as well as research. Those trends are relevant in Chelan County as well and affect recreation opportunities within the County. People are busy and have to weigh the time available for work, live, and play. Key trends to consider include:

- Increasing population: The County is growing rapidly, with more growth in urban areas than rural areas
- Aging population: Older and retired populations continue to grow within the county with many expected to stay active likely demanding more recreation opportunities
- Ethnic diversity: The growing population in Chelan County is diverse with non-native speaking residents that should be considered in marketing and services
- Changing lifestyles: More generations and changing work patterns are creating off peak demand on facilities and less structure and more options for multi-generational activities
- Physical activity: An increased interest in physical activity has emerged as obesity rises in children and adults throughout the country
- Infill development: Areas that are urban are being filled in and higher density housing development is increasing demand for more urban facilities and connectivity to rural opportunities
- Convenient recreation: People are getting busier and costs for travel are increasing causing an increase and interest in recreating closer to home and work
- Women's participation: Since Title IX there has been greater equality in scholastics sports and interest has continued to increase
- Recreation preference: An increase in trail activity and winter recreation interests have increased including indoor winter activities and an interest in emerging activities like community gardens, mountain biking, and disk golf.



Figure 4 Chelan County is a premier destination for all types of trail users.

An assessment of recreation activity and demand was completed by RCO in 2012. In keeping with the 2002 findings, the assessment showed that low cost, less strenuous, and close to home recreational activities had the highest participation rates. These activities include walking, jogging, nature-based activities, and picnicking/BBQing. Specialized activities requiring expensive equipment or significant travel had the lowest participation rates.

Percent of residents participating in any of the activities in the category.

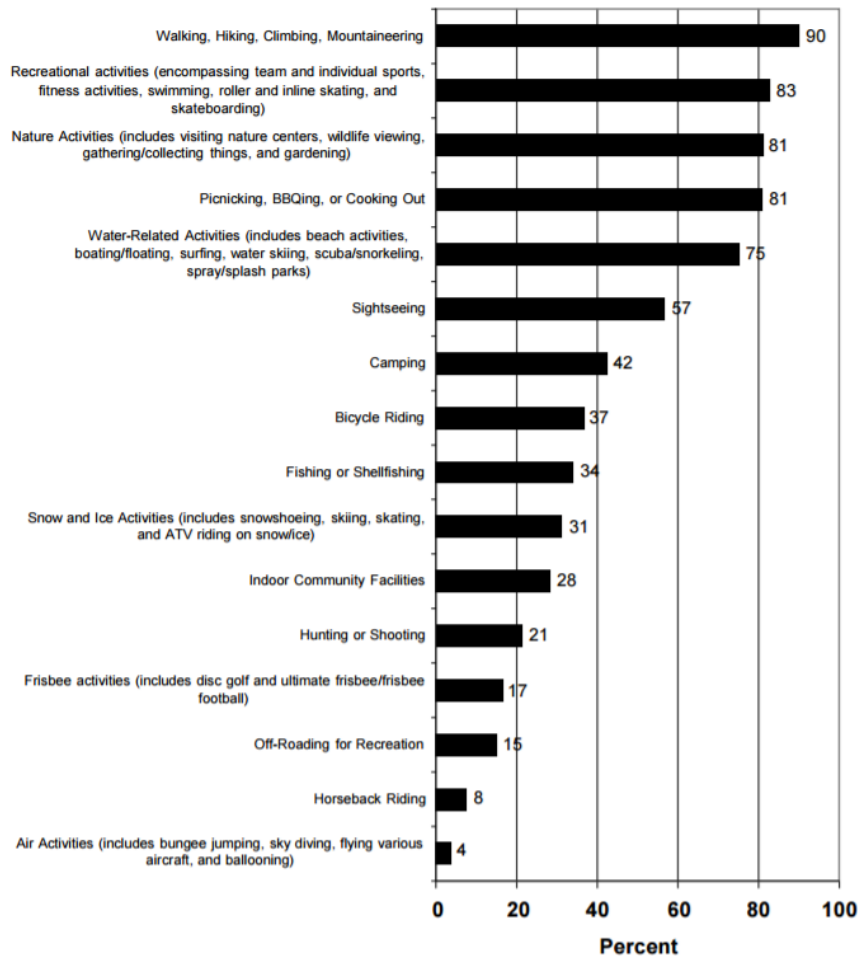


Figure 5 The 2013 State Comprehensive Outdoor Recreation Plan survey regarding residents' participation rates in specific activities.

At the statewide level, walking and hiking have the highest participation rates. Sport related activities come in at a close second. The public's interest in trail related activities continues to surge which, in all likelihood, will create a greater demand for more opportunities and increased access to trail related resources.

Chelan County is a destination for the many recreation opportunities provided in the Federal, State, and Chelan PUD managed lands. Most likely, the County will continue to see higher participation rates for activities like walking, hiking and other outdoor activities than the state or national average participation rates for these activities. Chelan is also growing in population and this population will desire more nearby activities and opportunities to connect to the County's multiple recreation offerings.

II. PLANNING PROCESS

GUIDELINES AND REQUIREMENTS

RCO is a major source of park grant funding and provides specific planning guidelines for eligibility. RCO park planning requirements differ from the GMA but are compatible with it. This document complies with both.

The guidelines as specified by the RCO ask for the inclusion of several elements within a comprehensive parks and recreation plan.

- Community **goals** are broad statements of intent based on an overall vision.
- **Policies** implement goals, directing day-to-day agency behavior in a manner designed to achieve objectives.
- An **inventory** of the planning area and community reveals its identity and strengths within the context of the County's geography, along with the current parks and conditions including facilities, lands, programs, and the policy environment impacting parks and recreation activities.
- **Public involvement** provides opportunity for input in plan development and adoption.
- **Demand and need analysis** defines priorities for acquisition, development, preservation, enhancement, management and other park system management strategies based on public input and inventory.
- Projects for acquisition, development and renovation are the basis of the **Capital Improvement Program** including a projected timeline, budget and funding sources for each over at least a six-year period.
- The final step is **adoption**, which creates the final approval of the plan and process required to apply for grants.



Figure 6 The public workshops allowed people to share ideas and concerns about the future of parks and recreation.

This plan's structure reflects RCO's recommendations and is consistent with GMA's requirements.

PARTNERS

The County is only one provider of parks and recreation services in Chelan County. The five incorporated jurisdictions, the Public Utility District, the Port of Chelan County, the US Forest Service, Washington State Parks and many others act in partnership to meet the public's park and recreation needs. Some partnerships have been formalized into permanent or ad hoc relationships to create regionally-oriented parks and recreation plans.

PARTICIPATION

The public had opportunities to participate in the planning process, both by attending meetings and by submitting written comment through the plan's preparation. Public notice was given for two workshops and one public hearing. Key recreation partners were identified and given advance notice through email. Events were advertised through KOHO radio, the County's Natural Resource Department website, Go Lake Chelan, as well as in the Wenatchee World. Public comments were submitted through the Chelan County Planning Department.

Date	Topic	Venue
December 13, 2016	Plan Update Workshop	Chelan Council Chambers-6:30-8:30 PM
December 14, 2016	Plan Update Workshop	Cashmere Riverside Center 6:30-8:30 PM
June 2017	Draft parks plan public hearing with Planning Commission	Board Chambers-7:00-8:00 PM

Recreation partners were invited to participate in the plan's preparation. Those participating are noted in the table below and represent diverse stakeholders across the spectrum of parks and recreation activities in Chelan County.

Participating Groups

Wenatchee Outdoors	Greater Wenatchee Bicycle Advisory Board	Lake Chelan Trails Alliance
Chelan/Douglas Health District	Leavenworth Disc Golf Club	Washington Department of Natural Resources
City of Chelan	Manson Parks District	Complete the Loop Coalition
Chelan County	Malaga Community Council	Wenatchee Row & Paddle Club
Chelan Co Fairgrounds	Wenatchee Whitewater	Residents
Chelan Public Utility District	Wenatchee Fly Fishers	Chelan Chamber of Commerce
Chelan Douglas Land Trust	Wenatchee Sportsmen's Association	Evergreen Mountain Bike Alliance
Audubon Society	Orchardists	Whitewater Rafting Outfitters

Other parks and recreation providers were invited to participate and should also be involved in future planning exercises and/or the implementation of this plan.

Future Stakeholders, Partners or Participants

US Forest Service	Lake Chelan Sportsman's Club	City of Leavenworth
Port of Chelan	Ohme Gardens	City of Cashmere
Wineries	Backcountry horsemen	Dryden
Outdoor retailers	Appleatchee Riders Club	City of Entiat
Nordic Ski organizations	Wenatchee Valley College	Peshastin
YMCA	Snowmobile groups	Wenatchee Sports Council
Residents	Run Wenatchee	Trust for Public Land
Seniors	Farm/Agriculture interests	Youth sports leagues
NCW Hispanic Chamber of Commerce	Leavenworth Winter Sports Club	Washington Department of Fish and Wildlife

Past planning activities that included public participation contributed to this plan as well. The **Chelan County Comprehensive Plan** (comprehensively updated in 2007) and information produced through that process is refined and supplemented in this plan and element. Participation in that process included a telephone survey of county residents, project newsletters, articles for the Chelan County Conservation District Newsletter, and the formation of multiple citizen advisory committees. Public meetings were held with the advisory committees to present goals and policies developed for the Land Use Element, some of which have been incorporated into this plan.

The **Wenatchee Watershed Vision** is a document released in 2007 by the Trust for Public Land (TPL) providing strategies and tools that Chelan County can use to implement parks and recreation planning goals. The document is a resource that includes key issues facing the region, short term and longer-term actions, and a summary of a Conservation Finance Feasibility Study with recommended options for financing parks facilities. The document also includes a documented public process. That process included interviews with more than 19 organizations



Figure 7 Workshops provided opportunities to draw and write about the parks system

within Chelan County along with review sessions involving over 30 individuals representing diverse professions.

Some examples of other plans and processes that are ongoing and influence recreation in Chelan County include:

- ❑ Wenatchee Foothills Community Strategy, 2009 brought together Chelan-Douglas Land Trust, Trust for Public Lands, Chelan County, and City of Wenatchee in forming a conservation strategy that balances new growth with recreation, wildlife protection, and land conservation in the Wenatchee Foothills.
- ❑ Lake Chelan Open Space Vision, 2016 led by the City of Chelan, Lake Chelan Trails Alliance, Trust for Public Land, and Chelan-Douglas Land Trust to plan for a sustainable future of access, habitat conservation, and development of the open spaces of the Lake Chelan Valley
- ❑ Our Valley What's Next, 2015, a coalition of local businesses led a community based process to identify ways to improve quality of life and sustainability in the Wenatchee Valley and its communities. The effort resulted in the Our Valley Our Future Action Plan 2017-2021. The action plan includes 149 specific actions and 7 major "game changer" projects. One of these "game changers" describes a regional trails authority, a concept that is revisited in this document.
- ❑ Wenatchee Chamber of Commerce Outdoor Recreation Survey, 2016, undertaken to gain an understanding of the value of outdoor recreation to the community and to visitors, and what benefits will improving outdoor recreation bring to the Wenatchee Valley.
- ❑ Stemilt-Squilchuck Community Vision Document, 2008, a joint effort by Chelan County, Trust for Public Land, and the Stemilt Partnership to develop a community vision and landscape strategy for the Stemilt-Squilchuck watershed, with a focus on protecting wildlife, water resources, and recreation.
- ❑ Upper Wenatchee Community Lands Plan, 2016, a collaborative effort between Chelan-Douglas Land Trust, Trust for Public Land, and Chelan County to help guide future land use with the watershed.
- ❑ Current update of Chelan County Shoreline Public Access Plan, an appendix of the Chelan County Shoreline Master Program in draft form as of 2016.
- ❑ Ecoregional Assessment for the East Cascades Region-The Nature Conservancy identified priorities for conservation.
- ❑ Wenatchee Watershed Management Plan- Chelan County addressed water quantity and instream water flow, water quality, and habitat, producing a detailed implementation plan in 2008.
- ❑ North Cascade Initiative- The Wilderness Society commissioned a collaborative effort for assessing preservation opportunities on wilderness lands in North-Central Washington, with one area focusing on enhancing wilderness recreation, completed in 2010.
- ❑ Malaga Planning Area Vision Plan-Community Council led planning document with goals for future direction of community.

- ❑ Sunnyslope Long-Range Plan, 2007- The Chelan County and City of Wenatchee document guides decisions over the next 20-years with policy on recreation and connectivity in the Sunnyslope subarea.
- ❑ Municipal and District Parks and Recreation Planning- Ongoing community input informs the local parks and recreation planning efforts and are incorporated in this plan by reference.

December Workshops

Chelan County's Natural Resource Department arranged for two public workshops in December 2016. The first was held at the Chelan City Council Chambers on December 13. The second event was held the following evening, December 14, at the Riverside Event Center in Cashmere. These two workshops were essentially the same, offering the same exercises to public participants in different areas of the County.



Figure 8 Although there is only one park owned by Chelan County, there are many recreation opportunities available provided by others public agencies.

In addition, County staff made exercises available to attendees of the Backcountry Film Festival on December 14. Staff encouraged attendees to complete the workshop worksheets on their own and return to the County by December 31.

The workshops consisted of three segments: Presentation, Vision Gap exercise, and a Projects and Teammates exercise. The presentation welcomed participants and explored the relevance of parks, recreation and

open space (PROS) planning. It focused on the importance of an applicable and directive vision, setting a series of planning targets for a 10-15 year planning horizon. The presentation also discussed the planning requirements set by RCO.

The Vision Gap exercise organized participants into small groups, oriented around worksheets with ten PROS topics areas, to discuss and identify how they feel the current parks, recreation, and open space conditions currently meet the County's needs. The groups were then asked to discuss what they envision or hope to see in the future for each of the categories on their worksheets; the calculated difference between the perceived current conditions and the hoped-for conditions constituted the "gap." They also considered how they may want to expend resources to "close the gap" between today's conditions and their vision for PROS in 10-15 years. This allowed participants to calibrate their degree of dissatisfaction and the distance from the target objective.

The second phase of Vision Gap exercise asked participants to assign relative weight to each of the topics, which is was essentially a budgeting process. This weight indicated priority, providing guidance on how they would prefer the County dedicate its "time, talent, and treasure" to close the gap for each topic area. Participants were aware that this was more than

an allocation of capital funds. It indicates the amount of energy, something that will likely be a combination of money, focus, and facilitation.

The Projects and Teammates exercise kept participants working within their same small groups to identify projects they felt are a “must-do.” They then located those projects on a countywide map and identified the potential partners needed to make that project a success. This provides insight into those geographic regions that will be a primary focus, and it reinforces the participant commitment to involve other parks and recreation interest in defining, programming, and implementing specific recommendations.

III. VISION AND ISSUES

Chelan County has developed a vision that speaks to the history and strong outdoor interests that residents and visitors expect from a place with such diverse terrain.

“Chelan County provides a mix of parks, recreation and open space that complements community character, creates diverse opportunities for residents and visitors, and preserves ecological functions.”

Key parks issues derived from community participation include (in no particular order):

- ☐ More year-round parks and recreation facilities are needed.
- ☐ There is one county park, and land prices are increasing, making it difficult to acquire additional land.
- ☐ Frustration regarding lack of priority given to residents for Enchantment Permit Area lotteries.
- ☐ Many entities provide parks and recreation opportunities, but there is no overall guidance on what is needed.
- ☐ There is a definite lack of collaboration between agencies within to the County.
- ☐ Lower density residential development has less demand per acre than higher density residential areas.
- ☐ Lower density areas do not always have an opportunity for organized sports.
- ☐ Critical areas (RCW 36.70A.170) are not identified for parks planning.
- ☐ Patrolling for illegal activities on state owned lands is difficult because there is a lack of funding for additional law enforcement.
- ☐ The County needs more inter-connectivity for trails in the area, especially near urban areas.
- ☐ More education is needed to reduce user conflicts in recreation areas.
- ☐ Funding is not currently available for maintenance or acquisition of County owned park land
- ☐ There is a lack of publicly accessible trails near Chelan.

- ❑ The region is growing quickly, reducing or limiting access and connectivity to traditional routes and connections.
- ❑ There is not enough communication among agencies and stakeholders.
- ❑ There is no public multi-sport complex/recreation center with indoor pool in the County.
- ❑ Not enough developed public access to the County's lake and river shorelines.
- ❑ More opportunities needed to walk dogs off leash near urban areas.
- ❑ Lower density development threatens open space and the ability to provide access to recreational areas.

IV. DEMAND AND NEED ASSESSMENT

Inventory of Countywide Parks and Recreation Opportunities

The many recreation opportunities within Chelan County include boating and water sports, rafting, kayaking, fishing, mountain biking, backpacking, mountaineering, rock climbing, golf, hiking, hunting, camping, motorized trail sports, horseback riding, sightseeing, bird watching, snowboarding, cross-country skiing, downhill skiing, and fossil, rock and mushroom collecting. Many regional facilities are inventoried within the incorporated city comprehensive plans and are not listed in detail here.

Some parts of the County have few opportunities for traditional community sports activities such as baseball and soccer. Facilities for these types of activities tend to be located in more urbanized locations.

The County operates the Expo Center, manages the Ohme Garden State Park and owns the Wenatchee River County Park, located in the Monitor area. That park includes 17 developed acres adjacent to the Wenatchee River, and includes full service camp- sites for recreational vehicles and a State of Washington temporary farm worker camp and is managed through a contract.

Chelan County PUD has developed 14 parks to provide recreational opportunities along the Columbia River and Lake Chelan as required as part of dam licensing. Five of those parks are in Douglas County (Rock Island, Lincoln Park, Orondo, Daroga, Beebe Bridge).



Figure 9 Chelan PUD has park opportunities in Chelan and Douglas County. Source Chelan PUD

The Manson Park District manages five parks within the planning area: Manson Bay Park, Old Mill Park, Singleton Park, Willow Point Park, and Wapato Lake Campground.

Washington State agencies provide many recreation options including dispersed recreation on Department of Fish and Wildlife land and Department of Natural Resource land, and seven State Park facilities including Chelan County operated Ohme Garden.

The private Appleatchee Riders club offers riding facilities and has also purchased a former mine property that is now protected as the Dry Gulch Preserve and provides valuable wildlife habitat, open space, and trails for users. The Leavenworth Winter Sports Club provides many winter recreation opportunities including cross-country ski trails, a rope-tow accessed downhill ski area with a historic 90 meter ski jump and a smaller modern ski jump. Evergreen Mountain Bike Alliance has partnered with the US Forest Service to implement a multi-use, non-motorized trail network centered around the Leavenworth Ski Hill area.

Chelan County Parks			
Management	Name	Acres	Amenities
Chelan County	Wenatchee River County Park	17	Adjacent to the Wenatchee River with 43 full service camp sites for RVs
Chelan County	Chelan County Expo Center	33	140RV hook-ups with sewer, horse barn with 42 inside stalls and 40 outside stalls, grandstand with 1,200 seating, arena, buildings (24,000 sq ft for Pavilion with full commercial kitchen, auditorium with 6,500 sq ft) multiple smaller buildings

Chelan County PUD			
Management	Name	Acres	Amenities
Entiat Park and Recreation Department	Entiat Park	40	Camping (26 tent sites and 31 RV sites with complete hookups), 2-lane boat launch , boat trailer parking, swimming, restrooms, showers, RV dump station, playground equipment, 2 picnic shelters, picnic areas
WA State Parks and Recreation Commission	Wenatchee Confluence State Park	197	Camping (59 tent/RV sites: 51 with electricity, water and sewer, 8 standard), baseball/soccer field, 2-lane boat launch, boat trailer parking, swimming, restrooms, showers, picnic shelter, volleyball, tennis, playground equipment, Wenatchee River pedestrian bridge, 4.5 miles of trail, wildlife area, interpretive graphics, RV dump station.
PUD	Chelan Falls Park	33	Two-lane boat launch, short-term boat moorage, parking, day-use facilities, picnic shelters, restrooms, showers, shoreline trail, tennis court, playground equipment, sports fields, horseshoe pits, swimming area.
PUD	Chelan Falls Powerhouse Park	20	Boat ramp, boat dock, day-use facilities, picnic shelter, restrooms, playground equipment, swimming area.
PUD	Chelan Riverwalk Park	12	One-mile scenic river loop trail, boat launch, short-term moorage, boat

Chelan County PUD			
Management	Name	Acres	Amenities
			trailer parking, grass playfield, restrooms, picnic areas, picnic shelter.
PUD	Entiat Park	–	Campsites, picnic shelters, restrooms, boat launch, interpretive trail
PUD	Rocky Reach Dam Park	38	Extensive, award-winning landscaping, picnic areas, picnic shelter, playground equipment, horseshoe pits, Visitor Center, fish viewing room, historical galleries, restrooms.
PUD	Walla Walla Point Park	70	Fourplex soccer/softball complex, swimming, 1.2 miles of trail, tennis, volleyball, horseshoe pits, playground equipment, restrooms, picnic shelters, special event area, ADA fishing pier platform.
PUD	Wenatchee Riverfront Park	31	1.1 miles of shoreline trail, "special event" mini-railroad, ice rink, 2-lane boat launch, short-term moorage, boat trailer parking, restrooms.

Local Parks			
Management	Name	Acres	Amenities
Chelan	Chelan Ball field Complex	12	Kent Hardball/Softball Field, Rainier Softball Field with 2 batting cages, horseshoe pits, food concession, restroom, and a playground.
Chelan	Ruth Pingrey Centennial Park	0.5	
Chelan	Don Morse Park	40	18 hole natural green grass putting course, toy rentals, snack bar, volleyball courts, skate park, tennis and basketball courts, playground and picnic shelters with electric, water, and BBQ areas.
Chelan	Lakeshore Marina/RV	5	100 slip with or without power, pump out station, launch, 163 full hook up sites for RV's (water, electric, sewer &

Local Parks			
Management	Name	Acres	Amenities
			cable), including 22 sites with 16 x16 tent pads, picnic tables, dump station and ADA accessible restrooms and showers.
Chelan	Lakeside Park	10	17,500 sq. ft. of beach front swim area, seasonal boat launch, volleyball & basketball courts, play equipment, picnic tables and ADA accessible restrooms and 2 hour transient boat tie up.
Cashmere	Ardeta Park	0.06	Small park in the city center where the Christmas tree is located
Cashmere	Cottage Avenue Park	0.67	Climbing structure, swings, and picnic tables
Cashmere	Natatorium Park	N/A	Outdoor heated swimming pool
Cashmere	Railroad park	0.02	Picnic tables, trees, grass
Cashmere	Cashmere Riverside Park	13.8	Two restroom buildings, skate park, bmx pump track, horseshoe pits, children's play area, multiple use soccer/ softball fields, access ramp for rafters, parking, and picnic area. A paved walking trail runs the full length of the park and along the dike from Aplets Way to N. Douglas Street.
Cashmere	River Street Park	0.49	Small neighborhood park where the old City Hall was located
Cashmere	Simpson Park	4.27	Small playground, and picnic tables, softball field
Dryden	Dryden School Memorial Park	N/A	
Entiat	Columbia Breaks Fire Interpretive Center	17.5	Amphitheater, Forest Service lookouts, and ½ mile trail
Entiat	Kiwanis Park	4.5	Kiwanis 2 baseball/softball fields
Entiat	Rainbow Gardens	0.5	Beautification area
Wenatchee River Institute	Barn Beach Reserve	5.36	Natural area, Upper Valley Museum, trails, interpretive signs, Wenatchee River Institute and Red Barn educational buildings
Leavenworth	Blackbird Island	14.12	Trails, interpretive signs, groomed ski

Local Parks			
Management	Name	Acres	Amenities
			trails
Leavenworth	Enchantment Park	39.46	Two softball fields, a junior baseball field (one field doubles as a youth soccer field), playground, BBQ, trails with interpretive signs, boat put-in, groomed ski trails, skate park. Restrooms and changing rooms are adjacent to the fields, along with parking that accommodates a large number of vehicles and up to 3 busses, including ADA parking
Leavenworth	Front Street Park	1.75	Lawns, shade trees, restrooms, gazebo, interpretive kiosk, and alpine gardens downtown
Leavenworth	Fish Hatchery	N/A	Visitor's center, interpretive signs, picnic area, trails, and tours of fish hatchery infrastructure, as well as groomed cross-country ski trails in winter managed by the Leavenworth Winter Sports Club.
Leavenworth	Frankie's Wayside	.5	Benches, shade trees, water fountain
Leavenworth	Leavenworth Golf Course	102.5	18-hole public golf course, groomed ski trails
Leavenworth	Lions Club Park	1.76	Picnic tables, picnic shelter, adjoining City Hall and City pool
Leavenworth	Pump Track	N/A	Public bathrooms, asphalt pump track located in Enchantment Park
Leavenworth	Leavenworth Ski Hill	N/A	2 rope tows and tube hill, lodge with public bathrooms, and groomed cross-country ski trails managed by Leavenworth Winter Sports Club, as well as a new mountain bike trail system built by Evergreen Mountain Bike Alliance.
Leavenworth	Trout Unlimited Park (City Boat Launch)	1.6	Boat launch, parking, trails.
Leavenworth	Waterfront Park	17	Natural area connected to the Wenatchee River with passive recreation areas, trails, picnic areas, amphitheater, restrooms, groomed ski trails, and children's play areas

Local Parks			
Management	Name	Acres	Amenities
Manson Park and Rec District	Manson Bay Park/Marina	6	Lake overview, swimming, picnic area, restrooms, 3 boat docks, 32-slip marina, winter-only boat launch, boat sanitary pump-out facility
Manson Park and Rec District	Old Mill Park	20	4-lane boat launch, short-term moorage, picnic area, restrooms, marine dump station, boat trailer parking.
Manson Park and Rec District	Old Swim Hole	N/A	Grassy area, designated swim area
Manson Park and Rec District	Singleton Park	10	Softball and baseball fields, restrooms, gazebo, soccer field, basketball courts and universally accessible paths and parking, and playground improvements are planned for the near future
Manson Park and Rec District	Wapato Lake	6	The site has a forty-site campground for tent camping and small RVs, 2 boat docks, a gazebo, restroom facilities and a boat ramp that has previously been maintained by the State Department of Wildlife.
Manson Park and Rec District	Willow Point Park	1.85	Designated swim area, playground, 3 barbecues and 5 picnic tables
Peshastin	Kiwanis Park	N/A	
Wenatchee	Centennial Park	0.4	Picnic area, bandshell, restrooms
Wenatchee	Chase Park	0.5	Picnic area & playground
Wenatchee	Hale Park	4.97	Dog off-leash recreation area, parking, picnic area. Restrooms, skate park, play area and picnic shelter area slated for 2018.
Wenatchee	Lincoln Park	18.8	Ball fields, bandshell, restrooms, picnic shelter, & Rotary playground
Wenatchee	Locomotive Park	12	Gateway into the City of Wenatchee, with a historic locomotive display, picnic tables, and parking
Wenatchee	Memorial Park	2.9	Passive open space, fountain, historical display, rose garden
Wenatchee	Kiwanis-Methow Park	1.2	Wading pool, play equipment, basketball court

Local Parks			
Management	Name	Acres	Amenities
Private (Wenatchee)	Morris Park	N/A	Located on Cherry Street in Wenatchee, Morris Little League Park features four fully-functional baseball diamonds complete with scoreboards, outfield fences, dugouts, grandstands and a concession stand.
Wenatchee	Okanogan Street Property	.29	Undeveloped park space
Wenatchee	Pennsylvania Park	1	Play equipment, wading pool, ball field, restrooms
Wenatchee	Pioneer	7.7	City pool, restrooms, picnic area, play equipment and skateboard park
Wenatchee	Rainbow	2	Gateway into the City of Wenatchee
Wenatchee	Rotary Park	8	Group and individual picnic shelters, restrooms, basketball court, disk golf course, horseshoe pits, splash pad, flag plaza, parking, restrooms, paved loop trail
Wenatchee	Saddle Rock Gateway	4.83	Parking, electric vehicle charging station, restrooms, picnic shelter, amphitheater, interpretive areas, bike racks, and drinking fountain
Wenatchee	Skyline Drive Overlook	.3	Parking area with views of the Wenatchee Valley
Wenatchee	Washington Park	4.1	Picnic shelter, restrooms, wading pool, play equipment
Wenatchee School District	Wenatchi Park	8.1	Soccer, baseball & softball fields, open space
Chelan-Douglas Land Trust, Chelan PUD, City of Wenatchee, and private landowners	Wenatchee Foothills Trails	1,928	Natural space with pristine shrub/steppe habitat and many miles of non-motorized trails in the Sage Hills Trails, Horse Lake Reserve, Castle Rock Natural Area, Saddle Rock Trails, Jacobson Preserve, Foothills North, and Dry Gulch areas. Several parking areas have restrooms, picnic areas, and interpretive signs. These areas provide superb, easily accessible outdoor recreation opportunities in the Wenatchee Valley.

Local Parks			
Management	Name	Acres	Amenities
Wenatchee	Wenatchee Ice Arena	1	Replaced in 2008 with Semi-public events center
Wenatchee School District	Lewis and Clark Park	11	
Wenatchee School District	Recreation Park	9.11	
Wenatchee School District	Triangle Park	0.18	
Wenatchee School District	Western Hills Park	5	Soccer and softball fields, play equipment

Management	Name	Acres	Amenities
State Agency			
Washington State Parks & Recreation Commission	25-mile Creek	235	An inland waters camping park on the forested south shore of Lake Chelan. The park separates the mountains from the lake and is surrounded by spectacular scenery. With its modern marina, the park affords visitors excellent boating access to the upper reaches of Lake Chelan.
WA Fish and Wildlife	Chelan Butte Wildlife Area	8,200	Mostly dry grassland with some shrubs and riparian zones where most of the wildlife is. There is small game habitat favorable for upland birds including chukar, quail, grouse, and mourning doves
WA Fish and Wildlife	Swakane and Entiat Wildlife Areas	19,200	Mostly valley bottom near the Columbia River with numerous steep drainages that have perennial and intermittent streams. Major habitat types include sage steppe, ponderosa pine and several riparian draws.
Washington State Parks & Recreation Commission	Lake Chelan State Park	127	Lake Chelan State Park is a camping park on the forested south shore of Lake Chelan. The park has 6,000 feet of shoreline, lakeside views and expansive lawns for strolling and playing.

Management State Agency	Name	Acres	Amenities
Washington State Parks & Recreation Commission	Lake Wenatchee State Park	489	A camping park with 12,623 feet of waterfront on glacier-fed Lake Wenatchee and the Wenatchee River. The park is bisected by the Wenatchee River, creating two distinct areas – South Park, with areas for camping, swimming and horseback riding; and North Park, in a less developed, forested section, a quarter-mile walk from the lake. The park is a natural wildlife area, and visitors should be aware of the presence of bears and other natural dangers.
Washington State Parks	Wenatchee Confluence State Park	200	Park consists of two distinct areas. Facilities include camping, picnic shelters, boat launch and docking, swim area, multi-purpose play area, tennis courts, restrooms, and a trail system including interpretive signs and parking at various points.
Chelan County	Ohme Garden State Park	9	Fee-garden
Washington State Parks & Recreation Commission	Peshastin Pinnacles State Park	34	A popular location for rock climbing, one and a half miles of trails and sandstone slabs and spires. Spires are as high as 200 feet.
Washington State Parks & Recreation Commission	Squilchuck State Park	288	A camping park covered with forests of fir and ponderosa pine. The park sits at an elevation of 4,000 feet. A new system of mountain bike trails built and maintained by Evergreen Mountain Bike Alliance adds to the recreation opportunities of the park.

Federal Land			
Management	Name	Acres	Amenities
National Park Service	North Cascades National Park		The North Cascades National Park Complex encompasses North Cascades National Park, Ross Lake and Lake Chelan National Recreation Areas. North Cascades National Park contains

Federal Land			
Management	Name	Acres	Amenities
			some of the most dramatic alpine scenery in the country and is especially popular with backpackers and climbers. A vast undeveloped wilderness allows visitors to experience nature with minimal human-caused intrusions. The southernmost portion of the Park's southern unit lies within Chelan County; the entirety of this section of park is designated as federal wilderness.
National Park Service	Lake Chelan National Recreation Area		The Lake Chelan National Recreation Area surrounds the northern end of Lake Chelan and the community of Stehekin. There are no roads to the Recreation Area and access is limited to foot, boat, or plane. Some of the possible experiences include accessible trails to world class mountaineering, hiking, camping, wildlife viewing, relaxation, boating and fishing.
Forest Service	Mt. Baker Snoqualmie National Forest		Includes parts of Alpine Lakes, Henry M Jackson, and Glacier Peak Wilderness Areas
	Wenatchee-Okanogan National Forest		3000 miles of recreation trails of varying length and difficulty on the forest. There are low-elevation trails in the sage-covered fringes of the forest, trails in the timbered zones, and high country trails traversing alpine terrain. Almost half of these trails are within designated Wilderness. Several "barrier-free" trails have also been developed adjacent to recreation sites to provide access to those with physical challenges.

There are many recreation opportunities on Federal lands throughout the County. The County includes portions of North Cascades National Park and all of Lake Chelan National Recreation Area which are managed by the National Park Service. There are also several developed campgrounds on National Park Service lands in the vicinity of Stehekin, including:

High Bridge

Tumwater

Shady

Purple Point

Weaver Point

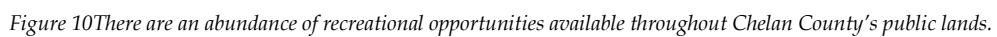
Harlequin

Okanogan-Wenatchee National Forest manages four federally protected Wilderness Areas that have boundaries within the County: Glacier Peak, Henry M Jackson, Alpine Lakes, and Lake Chelan-Sawtooth Wilderness Areas. There are multiple recreational opportunities available on US Forest Service property including hiking, mountain biking and motorized trails, drive-in and remote campgrounds, and day use and trailhead facilities. There are approximately 70 developed Forest Service Campgrounds in Chelan County.

Antilon Lake	Grouse Mtn. Springs	Handy Springs
Junior Point	Cascade Creek	South Navarre
Windy Camp	Fields Point Landing	Fish Lake
Domke Lake	Domke Falls	Stuart
Hatchery	Moore Point	Prince Creek
Bygone Byways	Big Creek	Corral Creek
Deer Point	Fox Creek	Lake Creek
Silver Falls	North Fork	Spruce Grove
Three Creek,	Cottonwood	Pine Flat
Graham Harbor Creek	Lucerne	Mitchell Creek
Refrigerator Harbor	Safety Harbor	Eight Mile
Bridge Creek	Johnny Creek	Ida Creek
Chatter Creek	Rock Island	Black Pine Creek
Tumwater	Alder Creek	Goose Creek
Meadow Creek	Deep Creek	Deer Camp
Grouse Creek	Finner Creek	Riverbend
Chiwawa Horse Camp	Schafer Creek	Nineteen Mile
Alpine Meadows	Phelps Creek	Nason Creek
Glacier View	Soda Springs	Little Wenatchee Ford
Theseus Creek	Napeequa Crossing	Grasshopper Meadows
White River Falls	Fish Pond	Rock Creek
Atkinson Flats	Graham Harbor	Grouse Mountain
Holden	Ramona Park	Swiftwater
White Pine		

The School Districts in Chelan County provide many sport fields and indoor venues but public access is limited by school activities. Facilities often are not available to the general public when needed.

School District	Number of Schools	Students
Cashmere School District 222	3 Schools	1,556
Lake Chelan School District 129	5 Schools	1,459
Entiat School District 127	2 Schools	341
Cascade School District 228	6 Schools	1,336
Manson School District 19	2 Schools	671
Stehekin School District	1 School	8
Wenatchee School District 246	16 Schools	7,931
Private Schools	7 Schools	838



Assessment

In order to have level of service standards, it is necessary to measure the amount and quality of parks and recreation within Chelan County. These standards should measure the community's basic recreation needs and expectations. Chelan County does not have adopted standards for parks and recreation at the County level, but there are multiple planning entities that have different facility needs and have adopted levels of service. Cities and service providers have defined what urban levels of service should be within municipal boundaries and adjoining urban growth areas. This has especially been the case for the Wenatchee planning area. There are many opportunities for recreation within the county, but there are no measurements for the quality or location of those parks and recreation opportunities. Based on public participation for this plan and other planning events throughout the region, there are indications that the County should focus it parks and recreation on creating connectivity to existing opportunities, developing partnerships, and coordinating the process at the regional scale for the many planning activities that are cross-jurisdictional. Access and connections to the many federally owned lands are a vital aspect of the overall park and recreation system.



Figure 11 Demand for additional bicycling facilities is increasing in the County.

V. Goals and Policies

Goals and policies are amended from the comprehensive plan to reflect the public's suggestions during the second workshop and to ensure that parks and recreation policies represent the most current thoughts regarding facilities and services. Many areas of Chelan County rely heavily on the tourist industry, which is directly reliant on recreational opportunities and the natural beauty of the area. Both residents and tourists benefit from the recreational opportunities and the natural amenities of the County.



Figure 12 Goals and policies establish the community direction to measure demands and needs.

***Chelan County's Vision:
"Chelan County provides a mix of parks, recreation and open space that complements community character, creates diverse opportunities for residents and visitors, and preserves ecological functions."***

Open space is an important component of the natural environment and supports natural systems, aesthetic, recreational and economic resources in the rural landscape. Open space land in Chelan County is minimally developed land including critical areas, parks and recreational land, wildlife corridors, historic sites, resource lands and conservation areas. Specific sites could be identified as an important part of the parks, recreation and open space system based on public

interest or on the need to ensure the integrity of overall open space corridors. Identification, mapping and additional research will continue over time to identify and support parks, recreation and open space corridors.

Community safety in urban, wildland-urban interface, and in natural undeveloped areas is an important consideration in community recreation planning. With the growth of outdoor recreation and incorporation of natural ecosystems into recreation planning and development, awareness of natural hazards should be considered in the early planning stages. Wildfire in particular is recognized as one of Chelan County's greatest natural hazards. Wildfire plays an important role in the landscape east of the Cascade crest, and should be factored in to any recreation expansion in Chelan County. Recognizing the role and presence of fire in our area can help guide recreation planning strategies that are resilient to wildfire and can help reduce community risks from wildfire.

The following list of goals and associated policies should guide recreation and parks management and future development.

Goal PR 1 – Encourage open space and public land use for the enjoyment of County residents and visitors.

Policies	
1.1	Encourage the use of innovative techniques for the provision and retention of open space, such as the public benefit rating system, open space tax program, purchase or transfer of development rights,, and land trusts consistent with private ownerships rights.
1.2	Encourage compatible multiple uses of public lands that support open space and recreational use in the County.
1.3	Promote access to public lands with significant recreation potential, including coordination with adjacent private landowners, while respecting the rights of private property owners.
1.4	Identify areas where natural hazards, including wildfire hazard, warrant consideration in protecting land from further development. Consider acquisition of hazard prone lands for recreational opportunities that can act as buffers.
1.5	Identify and map open space corridors (RCW 36.70A.160) including land for recreation, wildlife habitat, trails, and connections of critical areas (RCW 36.70A.030).
1.6	Review identified open space corridors for opportunities to acquire land or easements by donation or purchase.

Goal 2 – Encourage development and maintenance of recreational facilities and opportunities to meet the needs of residents and visitors.

Policies

2.1	Park plans developed by public agencies should adhere to the following guidelines: A. Evaluate the need for new park facilities using the Recreation and Conservation Funding Board format; B. Site neighborhood parks for accessibility and the enhancement of neighborhood; C. Evaluate need for waterfront access and waterfront-dependent activities, activity fields (soccer, etc.), special purpose facilities (sky park, skate park, etc.), indoor facilities, community centers, and trails. D. Address funding mechanisms for construction, maintenance and operation.
2.2	Where appropriate, design park and recreation facilities for year-round operation and support the maintenance and expansion of four-season recreation and cultural events.
2.3	Encourage public access to shoreline areas in the development and maintenance of park and recreation opportunities, where consistent with the protection of critical areas and private property rights.
2.4	Implement a coordinated park planning process between Chelan County and other public and private entities to provide and maintain open space and recreational opportunities for making the most effective use of publicly owned land and floodplain areas, and existing park and recreation facilities to meet the open space and recreation needs of current and future residents and visitors.
2.5	State and publicly owned tourist/recreation destinations should provide adequate sanitary facilities with a plan for maintenance.
2.6	Private and public park and recreation systems should provide a variety of open space, park and recreation facilities, and services to benefit the broadest range of age, social and economic groups and those with special needs and abilities.
2.7	Parks and recreation development should facilitate environmental and natural hazard education opportunities.

Goal 3 - Park and recreation planning and development should consider impacts to surrounding land uses, critical areas, and significant natural, scenic, historic, or cultural features.

Policies	
3.1	Consider compatibility with adjacent land uses and adequacy of infrastructure in the development or expansion of recreational facilities.
3.2	Preserve areas that are environmentally sensitive or have historic, cultural or scenic value, in the development of park and recreation facilities and opportunities.
3.3	Site and design parks and recreation facilities so that they take advantage of significant natural features, environmentally sensitive areas, and historic and cultural resources.
3.4	Consider aesthetic quality as an important element in the design and development of recreational opportunities and facilities.
3.5	Consider natural hazard mitigation opportunities in the siting and design of parks and recreation facilities.
3.6	Manage parks and open space with ecosystem based fire management practices where appropriate.

Goal 4 – Increase recreation service availability and efficiency through coordination of federal, state, local and private recreation planning.

Policies	
4.1	Where consistent with the goals and policies of this plan, support park and recreation plans from the Manson Parks and Recreation District, cities within Chelan County, Chelan County P.U.D., Washington State, U.S.F.S., National Park Service, the Lake Chelan Valley Public Trails Comprehensive Plan, and other community initiatives.
4.2	Encourage early and continued public input in the development of recreational plans and offer input on recreation plans prepared by other agencies, when appropriate.
4.3	The County should coordinate with private and public park and recreation purveyors to determine the actual recreation demand and scope of needed facilities for the County.

Goal 5 – Support active communities through park and trail use and development.

Policies

- | | |
|-----|--|
| 5.1 | Encourage physical activity through park and trail design and community awareness and education. |
|-----|--|

Goal 6 - Provide and maintain acceptable levels of public facilities and services.

Policies

- | | |
|-----|--|
| 6.1 | Implement a maintenance plan to guide continued maintenance of public parks and recreation facilities. |
| 6.2 | Encourage the expansion of parks and recreation facilities to meet the needs of area residents and visitors. |
| 6.3 | Support the adopted levels of service standards (LOS) in cities, urban growth areas, and established park districts. |

VI. Implementation

Parks and recreation play a major role in Chelan County. Implementing this plan will take time, money and dedication, but the results will be a stronger parks and recreation system and continued support and growth of that system. Leadership is a vital aspect of cohesively implementing a parks and recreation plan. Chelan County is the best entity to fill this leadership role. The parks and recreation plan identifies three key areas for leadership including:

- ❑ coordinating the process at the regional scale,
- ❑ creating connectivity with existing opportunities,
- ❑ developing partnerships.

Focusing in on these key areas will facilitate the process for implementing the following projects and processes.

One theme that has become apparent during the community workshops is a focus on collaboration to achieve common recreation goals. This theme has taken shape in two different contexts: 1) a desire to see



Figure 14 Creation of new recreation opportunities requires an increasing amount of collaboration between public agencies and volunteer organizations.

greater collaboration between agencies and local government, and 2) an increase in organized recreation advocacy groups such as the Complete the Loop Coalition, a local volunteer group that advocates funding and development of public trails in the Wenatchee Valley. This new focus marks a shift in community involvement around recreation development, and opens pathways for collaboration between the public and the agencies.

The number one dissatisfaction discussed at the community workshops held in Chelan and Cashmere in December 2016 was the lack of coordination between agencies. The public sees a major gap in the type of collaboration that will need to occur to allow for the type of trail connectivity that is a high priority for recreation development in Chelan County. The 2007 Recreation Element update states that Chelan County is the best suited to lead the effort to coordinate implementation of recreation plan goals at a regional scale and develop partnerships to further cooperation and create connectivity with existing opportunities.

Organized recreation advocacy groups, such as the Lake Chelan Trails Alliance and Central Washington Evergreen Mountain Bike Alliance, are gaining momentum by engaging agencies and other stakeholders to promote recreation development in the open spaces of Chelan County. Many of these efforts have been met with measurable success, such as the agreement between Evergreen Mountain Bike Alliance and the US Forest Service to implement development of a series of mountain bike trails in the vicinity of the Leavenworth Ski Hill. Other advocacy groups, such as FIDO (Friends Improving Dog Opportunities), are working towards improving recreational opportunities within city limits. Formation of a Wenatchee Valley Trails Alliance (TREAD) is currently underway, showing great promise of an organized approach to planning for trail development and connectivity. These groups are increasingly important driver in recreation development in Chelan County, and will be key players in implementing some of the recreation concepts discussed at the community workshops. They will also hold agencies and local governments accountable for collaboration when the rubber hits the road. In a county with no Parks and Recreation department and a population very interested in recreation, these advocacy groups will play a major role in recreation planning and development. This role should be recognized and appreciated by the County and other land management agencies, and the focus on collaboration that was highlighted at the community meetings will be crucial to successful recreation planning and implementation in Chelan County.

Parks and Recreation Projects

Participants at the public and stakeholder workshops identified a number of parks and recreation project ideas that they believed helped address community need and demand. In many cases, the projects were targeted to improve or expand existing recreational facilities. The vast majority of the identified projects, however, were for trails.

The focus of this plan is to help the County stitch together Chelan County's parks and recreation fabric. The County's role is more oriented to facilitating recreation by reinforcing the parks and recreation efforts sponsored by cities and other agencies responsible for providing parks and recreation services. The projects included in this plan reflect this role, emphasizing the need for trails that link parks and recreation facilities to each other and the provision of additional planning and feasibility services to help ascertain what



Figure 15 Trails are an integral component of the County's recreational landscape.

types of projects should be located where. A few examples of concepts and frameworks that can support the County in this facilitation role include the following:

County Parks and Recreation Structure and Staffing - As the County currently has no Parks and Recreation department, an idea posed at the Chelan community workshop entailed a part-or-full time County recreation coordinator to help facilitate agency and public cooperation and guide multi-jurisdictional projects through the planning and implementation process.

Comprehensive Trails Plan – Of the projects mentioned by participants, many were trails projects. They are in different stages of readiness, however, with only a few actually prepared to receive funding for either land conservation or development. The number and range of trails projects included on the overall project list underscore the importance of having an integrated trails system serving Chelan County. A trails plan is a crucial step in determining the linkages the trails will provide, exploring alignment, design, cost, phasing and relative priority. A comprehensive trails plan would dovetail with the trails and forest access plans prepared by Washington State Parks and the US Forest Service, ensuring that trails outside of state and federal lands connect with the larger recreational systems within them and should also involve Washington Department of Transportation, Chelan Port District, production agriculture interests, and the municipalities. This process would include and reference the Lake Chelan Valley Trails Master Plan.

Shoreline Public Access Plan - With the 2017 update, the Shoreline Master Program will be incorporated into the County Comprehensive Plan. The Public Access Plan, which was completed for the Shoreline Master Program, will be integral in future recreation planning efforts on or near County shorelines. The Chelan County Noxious Weed Board also provides a reminder of the link between recreation and the spread of invasive species. All water craft should be inspected before entering the waters of Chelan County, and wash/decontamination stations should be provided at boat launches and ports of entry. All invasive species should be reported to the Washington State Invasive Species Council or the Chelan County Noxious Weed Board. All ORVs should also inspect equipment before and after use for noxious weeds that may be attached to the vehicle.

The following list of projects includes planning efforts, feasibility studies and construction projects gathered from public workshops and past plans, presenting a range of work that needs to be undertaken to fulfill the intent of this parks and recreation plan. The projects have been categorized by project area, with those project areas prioritized in the following section.

- ❑ Number 2 Canyon-A proposal to expand and improve existing trails for hikers, bikers and equestrians on US Forest Service land in the Horse Lake Mountain area, west of Wenatchee's Number 2 Canyon. Potential for an additional 30+ miles of trails, road improvements, and trailhead facilities are currently being assessed.

- ❑ Lakeside Trail – Phases of this Chelan area trail are under construction with additional funding for development needed. This trail, when completed, will extend from Lakeside Park, along the southern shore of Lake Chelan, through downtown and up the north shore to the City limits.
- ❑ Upper Columbia River Water Trail- A series of access points and campsites facilitating one-day to multi-day trips on the river.
- ❑ Lake Chelan Water Trail- A series of access points and campsites facilitating one-day to multi-day trips on the lake.
- ❑ Wenatchee Valley Scenic Bikeway- Nicknamed “The Fruit Loop,” this is an effort to officially designate a bike route through the Wenatchee Valley from the Columbia River to Leavenworth.
- ❑ Squilchuck to Number Two Canyon trail connector, and Number Two Canyon to Maiden Lane trail connector (also in the City of Wenatchee Comprehensive Plan)
- ❑ Wenatchee River Water Trail- A series of access points and day use sites facilitating one-day trips on the river.
- ❑ Ski Hill Loop Trails- An increasing series of trails created by a partnership between the USFS and EMBA to establish additional riding opportunities in the Leavenworth area.
- ❑ Nordic Ski Trails- Possibility of a winter non-motorized recreation area in Stemilt basin, and groomed Nordic trails at Mission Ridge.
- ❑ Riverside Trail- A proposal to link the newly acquired Peshastin Mill site to the town of Leavenworth via an abandoned railroad grade. The railroad property is privately owned, but some owners have expressed a willingness to provide easement.
- ❑ Leavenworth National Fish Hatchery- Nordic trail system that is underutilized in summer- possible location for disc golf course
- ❑ Rattlesnake Hill Park- Potential bike/hike natural area with separate hiking/mountain biking trails and lookout/viewpoint on summit
- ❑ Washington Department of Fish and Wildlife (WDFW) river access improvements at Drunkards Drop, Rodeo Hole, and Turkey Shoot rapids



Figure 16 Projects could include identifying a countywide bicycle network

- ❑ Dryden WA Dept. of Transportation property- potential park, river access and whitewater play feature.

Additional suggestions received through written comment during the February 15- April 1 2017 public comment period include, in no particular order:

- ❑ Feasibility study for a whitewater park.
- ❑ Expansion of Wenatchee Row and Paddle Club boathouse facilities on the Columbia River at Ninth Street in Wenatchee
- ❑ Additional sports playing fields in Cashmere
- ❑ Outdoor splash park in Cashmere
- ❑ Pedestrian bridge parallel to Icicle Bridge on Icicle Road
- ❑ Better public access/launch for boaters and tubers on the Icicle/Wenatchee in Leavenworth, with parking, restrooms, bank stabilization
- ❑ Designated foot/horse traffic (non-mountain bike) trail at Leavenworth Ski Hill
- ❑ Bike path along Chumstick Highway, from Leavenworth to Plain
- ❑ Year-round swimming pool and recreation center in Leavenworth
- ❑ Ice Rink in Leavenworth
- ❑ Year-round soccer field complex in Leavenworth
- ❑ Downtown Leavenworth to Leavenworth National Fish Hatchery non-motorized trail or enhanced pedestrian shoulder on Icicle Road or East Leavenworth
- ❑ Leavenworth to Plain non-motorized trail for biking, running, XC skiing
- ❑ Signage/parking for climbing access in the Icicle Canyon
- ❑ Continued expansion of mountain biking trails in Chelan County
- ❑ Indoor climbing gym in Leavenworth
- ❑ Outdoor splash park in Leavenworth
- ❑ Safe bike travel paths on Hwy. 2 bridges between Wenatchee and Leavenworth



Figure 17 This portion of the Wenatchee River may become part of the Wenatchee Water Trail

Note: There was very strong support at the public workshop and in written public comments for a whitewater park on the Wenatchee River. The desire is to create a year-round wave or “play feature” on the Wenatchee River (or other suitable location) for whitewater paddlers. Participants noted the potential economic benefits associated with other whitewater parks in other communities in the Country.

Recreation planning efforts proposed and/or already occurring around Chelan County were discussed at public workshops, and include the following:

Stemilt-Squilchuck Recreation Plan- A broad coalition of agriculture, wildlife, recreation, development, and conservation interests, known as the Stemilt partnership, was formed in 2007 in response to a proposed private development of 2,500 acres of public land in the Stemilt Basin. The Partnership and Chelan County were successful in stopping the sale and in the process developed the Stemilt-Squilchuck Community Vision as a landscape strategy for the entire watershed. This document focused on the protection of three pillars of the community: water, wildlife, and recreation.

The Partnership and the County, with the assistance of state and private funds, were able to acquire an additional 4,000 acres of private timberland in the basin for public management in 2014. This acquisition further demonstrated the region's dedication to preserve water and wildlife. The County is currently working with the Partnership, public agencies, recreation community, and other stakeholders to address recreation which is the third pillar of the Vision Document. The goal is to create a recreation plan that will help identify and create a sustainable and diverse recreation strategy for the area.

Wenatchee Foothills Trail Plan- The Chelan-Douglas Land Trust initiated this plan in collaboration with the City of Wenatchee, Chelan County, Chelan PUD, and Washington Department of Natural Resources to sustainably protect natural and recreational resources in over 10,000 acres of public lands in the foothills directly adjacent to Wenatchee. The plan calls for the realignment of unsustainable trails, closure of two-track corridors, formalized trail access points, and trailhead development, all in balance with significant conservation and weed management efforts.

Dog Park Feasibility Study- Participants noted the lack of off-leash dog parks outside of Wenatchee. Having an area to legally walk dogs off-leash in the Foothills was also mentioned as a need in the community.

Malaga Community Park Improvements –Malaga has fulfilled a long term goal by creating a public park for its residents. A combination of public and private funds has helped to create the 2.5 park on the Malaga Alcoa Highway. While some features of the park are completed, assistance is still needed to develop and improve future facilities at the park.

Disc Golf Course- Participants discussed the potential for a disc golf course in the County. Proponents of disc golf courses tout the relative lack of expense in developing and maintaining a course. These courses can often utilize an area of land that is unsuitable for other sports development.



Figure 18 Public boat launches on Lake Chelan are provided by both local and state agencies.

Manson Bay Waterfront Revitalization Project

– Manson Parks and Recreation District is focusing on creating more water access, additional seating areas and green space, a trail connecting waterfront parks, and additional parking along the Manson waterfront. Phase 2 of this project will focus on expanding and redesigning the current Manson Marina, to meet a demand for increased moorage at the facility. The District is in the early stages of exploring opportunities to improve and expand the current facilities at the popular park on Lake Chelan.

Singleton Park Drainage – Manson Parks and

Recreation District is interested in reviewing drainage issues to improve access and use of the baseball and soccer fields.

Willow Point Park – Manson Parks and Recreation District is interested in addressing on-going erosion along the Lake Chelan shoreline.

Number 2 Canyon Road Improvement-The US Forest Service is working on a proposal that would develop parking, restrooms for an additional 30+ miles of trails on land near Wenatchee’s Number 2 Canyon. A short section of unpaved County road provides the primary access to the proposed area; this section of road is in poor condition and is rarely maintained. Improving the County portion of the road was cited by workshop participants as a priority for ensuring the project is successful.

Paddle Sports Access on the Columbia River -There was interest in increasing access for human-powered boating activities on the Columbia. This included the wish for additional boat storage buildings as well as improved dock facilities.

Designated Countywide Bicycle Routes- Formal designation of bicycling routes in the County can provide improved opportunities for both cyclists and motorists on public roadways. Numerous participants noted a desire for improving bicycle safety within the County. Better signage, safety improvements, and reduced interaction with motorists were cited as benefits of the proposal. Proponents cited the region’s beauty and central location as draws for bicycle tourism. As a current example, the Upper Valley Trails Plan focuses on non-motorized multi-use trails linking residential/urban areas in the Leavenworth area.

Upper Wenatchee Community Lands Exchange-Suggestions to acquire and convert private land to public ownership when the opportunities become available were listed as a priority for attendees. The suggestions noted the potential to purchase timberland currently owned by Weyerhaeuser in the Upper Wenatchee Valley.

Lake Chelan “20 Trails” Network- The Lake Chelan Trails Alliance is a community organization whose mission is to lead the community in planning, building, promoting, and enjoying trails in the Lake Chelan Valley. The Alliance endeavors to create a “Top 20 Trails” network throughout the lower Lake Chelan basin. Trails will be a mixture of upland and urban in character. Assistance with all aspects of planning and implementation are needed to attain the intended goal.

Concept Prioritization

Recreation improvement projects identified through community workshops and a public comment period were prioritized using the following criteria:

Criteria 1: Community priority – based on quantity of comments received during workshops and through written public comment period

Criteria 2: Level of potential use – proportion of the population that may use the resource, seasonality of resource, and accessibility of resource to general population including underserved community members

Criteria 3: Potential for economic development – benefits to the regional economy

Criteria 4: Funding potential and partnership potential – is there collaboration and/or a funding source identified (implies readiness to proceed with project)

Criteria 5: Basic need for implementation - community safety, health benefits, diversity of resources, and protection of community/natural resources

The concepts listed above were grouped by likeness into categories of projects, to keep a level playing field in a diverse set of concepts. For example, rather than compare a trail concept with a recreation center concept or a feasibility concept, trail concepts are compared to other trail concepts. The following categories were determined to encompass all of the publicly provided concepts:

- Trails/paths
- Infrastructure
- Feasibility/planning

Using the prioritization criteria and keeping within the assigned categories, the projects were organized into Tiers. Rather than identifying a ranking starting with #1 and moving down, tiers allow multiple high ranking projects to occupy a high prioritization whereas assigning specific ranking numbers inevitably brings subjectivity into the process. The prioritization of project concepts is illustrated in the tables below.

(Red indicates high priority; Orange indicates moderate priority; Yellow indicates long-term priority)

Trails/Paths						
Concept	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Tier
Chelan Lakeside Trail	Yellow	Orange	Orange	Red	Orange	1
Upper Columbia Water Trail	Yellow	Yellow	Yellow	Yellow	Yellow	3
Lake Chelan Water Trail	Yellow	Yellow	Orange	Yellow	Yellow	3
Wenatchee River Water Trail	Orange	Orange	Orange	Orange	Yellow	2
Wenatchee Valley Scenic Bikeway	Red	Red	Orange	Red	Red	1
Leavenworth-Plain Bike Path	Orange	Orange	Orange	Yellow	Red	1
Number Two Canyon Road Improvement and Trail System	Orange	Orange	Orange	Red	Yellow	1

Rattlesnake Hill Trails Leavenworth						3
Nordic Ski Trails- Stemilt/Squilchuck						2
Riverside Trail Peshastin-Leavenworth						3
Hiker/Equestrian Only Trail at Ski Hill						3

Infrastructure						
Concept	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Tier
Indoor Pool/Rec Center Leavenworth						1
Paddle Sports Facilities Improvement on Columbia River, Wenatchee						3
Boat/Tube Launch Facilities Leavenworth						1
Indoor/Outdoor Soccer Complex Leavenworth						3
Ice Rink Leavenworth						2
Manson Bay Waterfront Revitalization						2
Outdoor Sports Facilities Cashmere						3
Water Splash Park Cashmere						3
Climbing Area Signage/Parking Leavenworth						2
Disc Golf Course						2
Indoor Climbing Gym Leavenworth						2
Water Splash Park Leavenworth						3

Feasibility Study/Planning						
Concept	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Tier
Whitewater Park Feasibility Study						1
Dog Park Feasibility Study						2
Wenatchee-Leavenworth Non-Motorized Path						1
Regional Trails Organization						1
County Parks and Rec Structure and Staffing						2

Capital Improvement Program

The Capital Improvement Program (CIP) outlines projects with the relative priority organized by Tier. The projects included in this improvement plan are the priority improvements in Chelan County parks and recreation for the next six years. The estimated costs are rated rather than assigned a dollar amount, as cost estimates can change over time. The cost rating is as follows: Low = Under \$50,000; Medium = \$50,000-\$500,000; and High = Over \$500,000. Long term maintenance must also be considered when assessing the financial impact of the following recreation concepts. The estimated costs are outlined with the year, if known, for financing as required. Year 1 is 2018, and Year 6 is 2023, covering the 6 year span of this plan. The following projects are illustrative of projects expressed by the community as important to parks and recreation improvements in Chelan County.

Tier 1 Projects					
Project Name	Project Category	Facility Type	Cost Category	Year	Potential Funding
No. 2 Canyon Road Improvement and Trail System	Trail/Path	TB, TP, ORV	Medium	1-3	RCO, EMBA, USFS, Local
Wenatchee Valley Scenic Bikeway	Trail/Path	TB	High	3-6	County, WSDOT, Local
Chelan Lakeside Trail	Trail/Path	TP, EQ, WF	Medium	1-2	RCO, USFS, Local
Leavenworth-Plain Bike Path	Trail/Path	TB	Medium	2-3	WSDOT, Local
Indoor Pool/Rec Center Leavenworth	Infrastructure	SI, BB	High	3-4	County, City
Boat/Tube Launch Facilities Leavenworth	Infrastructure	WF, B	Medium	1-2	County, City, RCO
Whitewater Park Feasibility Study	Planning/Feasibility	B, WF	Medium	1-2	RCO, Local
Regional Trails Organization	Planning/Feasibility	TP, TB, EQ, ORV, OS	Medium	1-6	Local, RCO
Wenatchee-Leavenworth Non-Motorized Path	Planning/Feasibility	TB, TP	Medium	1-2	County, City, Local

Tier 2 Projects					
Project Name	Project Category	Facility Type	Cost Category	Year	Potential Funding
Wenatchee River Water Trail	Trail/Path	B, WF	Medium	1-3	Local, WDFW, RCO
Nordic Ski Trail Stemilt-Squilchuck	Trail/Path	W	Medium	2-4	RCO, WDFW, Mission Ridge
Ice Rink Leavenworth	Infrastructure	W	High		County, City
Manson Bay Waterfront Revitalization	Infrastructure	B, WF	High	1-2	County, City
Climbing Area Signage/Parking Leavenworth	Infrastructure	TP	Low	1	Local, Donation

Disc Golf Course	Infrastructure	TP	Low	1	Local
Indoor Climbing Gym Leavenworth	Infrastructure	BB	Medium		City, Local
Dog Park Feasibility Study	Planning/Feasibility	NPK, TP	Low	1	City, Local
County Parks and Recreation Structure and Staffing	Planning/Feasibility	AM	Medium	1-6	County

Tier 3 Projects					
Project Name	Project Category	Facility Type	Cost Category		Potential Funding
Upper Columbia Water Trail	Trail/Path	B, WF	Medium		State, RCO
Lake Chelan Water Trail	Trail/Path	B, WF	Medium		USFS, RCO
Rattlesnake Hill Trail System Leavenworth	Trail/Path	TP	Medium		City, Local
Riverside Trail Peshastin to Leavenworth	Trail/Path	TP, TB	Medium		Local, Donation
Hiker/equestrian Only Trail at Ski Hill	Trail/Path	TP, EQ	Low-Medium		EMBA, City
Paddle Sports Facility Improvement on Columbia River in Wenatchee	Infrastructure	B, WF	Low-Medium	1	City, Local
Indoor/Outdoor Soccer Complex Leavenworth	Infrastructure	FS	High		City
Outdoor Sports Facilities Cashmere	Infrastructure	PF, BS, FS	Medium		City
Water Splash Park Cashmere	Infrastructure	SO	Medium		City
Water Splash Park Leavenworth	Infrastructure	SO	Medium		City

Ongoing planning and implementation efforts mentioned earlier in the plan should also be recognized as Capital Improvement Projects, and eligible for continued financial input. Many of the planning efforts mentioned in this plan update will provide the structure needed for implementation of many of the concepts put forth by the community.

The CIP lists the funding options and project as categorized using:

Funding Sources

L – Local Funds

B – General Obligation Bonds

U – Unknown

D – Donation

R – Revenue Bonds

M- Matching Grant

O – Other Bonds

RCO- Recreation and Conservation Office, encompasses the following programs:

Project Categories

Trail/path

Infrastructure

Planning/Feasibility

LWCF- Land and Water Conservation Fund
 WWRP- Washington Wildlife and Recreation Program
 RCFB – Recreation and Conservation Funding Board
 WSPC – WA State Parks Commission

The CIP also includes all facility types that apply for each project with the primary use listed first. Facility types specify what funding can be considered and include:

Facility Type	Symbol	Facility Type	Symbol
Aquarium	A	Open Space, Greenway	OS
Administration, Maintenance	AM	ORV Facility, Trail	ORV
Boating Facilities	B	Picnic, Day Use	P
Basketball, Other Courts	BB	Play Equipment	PE
Botanical Garden	BG	Open Play Field	PF
Baseball, Softball Fields	BS	Swimming Beach	SB
Camping Facility	C	Swimming, Indoor Pool	SI
Community, Senior Center	CC	Swimming, Outdoor	SO
Equestrian Facility/Trail	EQ	Tennis Court	T
Fishing Area	F	Trail, Bicycle	TB
Football/Soccer Fields	FS	Trail, Pedestrian	TP
Golf Course	G	Winter Sports Facility	W
Interpretive/Nature Study	I	Waterfront/Beach Access	WF
Neighborhood Park	NPK	Zoo	Z

Funding Sources

In order to implement parks and recreation planning for Chelan County, it will be necessary to identify funding sources. Revenue can be obtained from a combination of taxes, license and permit fees, state and federal grants, user service charges, fines and forfeits, miscellaneous interest earnings and sales, and pass-through federal revenue sharing monies. Major funding sources for park and recreation facilities can include property taxes, general obligation bonds, real estate excise taxes, grants and pass-through monies, and park mitigation fees. Some of these options could be implemented by the County, while others would involve partnerships. Some sources have specific application and qualification requirements that the County will need to meet prior to receiving available grants or loans.

Capital Improvement Fund - Money allocated from the County's General Fund to finance major capital projects.

Certificates of Participation - A lease-purchase approach in which the County sells Certificates of Participation (COPs) to a lending institution. The County then pays the loan off from revenue produced by the facility or from its general operating budget. The lending institution holds title to the property until the COPs are repaid. This procedure does not require a vote of the public.

Conservation Futures Levy – The County can levy, by resolution, up to \$.0625 per \$1,000 assessed valuation for the acquisition of open space land, farm and agricultural land, and timber land (RCW 84.34). This money may only be used for acquiring rights and interests (easements) in real property.

Fee in Lieu of Parks and Open Space – A voluntary option for developers (RCW 82.02.020)

General Fund--General funds allocated to the Park and Recreation Budget.

General Obligation Bond - Property tax for the sale of construction bonds.

- ❑ Unlimited - The tax assessment can be levied up to 30 years with a bound council hired. Requires a 60% majority approval of 40% of the voters who voted at the last election.
- ❑ Limited Tax (Councilmanic) Bonds - Bonds that can be issued by the County Commissioners. Does not require a vote of the people but must be paid out of the annual operating budget.

Park Impact Fees - Development fees imposed on new development based on a set share of the impact.

Park and Recreation Districts and Service Areas - With citizen interest, the County could explore the possibility of creating more Parks and Recreation Districts/Service Areas for park needs. Districts are independently managed and could meet some of the need for urban facilities.

Park Revenue - Revenue from park operations used to pay for capital improvements.

Real Estate Excise Tax (REET) RCW 82.46--Levied on all real estate sales measured by the full selling price, including the amount of any liens, mortgages, and other debts given to secure the purchase.

- ❑ First 0.25 percent projects identified in the capital facilities element and housing relocation assistance
- ❑ Second 0.25 percent REET 2 - An additional excise tax on each sale of real property at a rate not exceeding 0.25 percent of the selling price restricted to projects in a capital facilities plan.
- ❑ 0.50 Percent REET *in lieu* of Optional Sales Tax - the County may use this for any governmental purpose in unincorporated areas.
- ❑ 1.0 percent REET-The County may submit a ballot proposition to the voters for an added REET on each sale of real property at a rate not to exceed 1 percent of the selling price for acquisition and maintenance of Conservation Areas.

Revenue Bonds- Revenue from the operation of the facility pays for the capital cost and debt service. Does not require a vote of people unless required by local ordinance.

Special Levy - A property tax for construction and/or operation levied for a set number of years. It is usually short term, 1-3 years. A special levy requires a 60% voter approval.

State Recreation and Conservation Board Administered Funding (RCO)

Aquatic Land Enhancement Fund (ALEA) - This program, funded by the State Department of Natural Resources, can finance acquisition, restoration, or improvement of aquatic lands for public purposes, and to provide interpretation and access to those lands and waters with 50 percent in matching resources required.

Boating Facilities Program (BFP) – Grants to acquire, develop, and renovate boating facilities

like boat ramps, guest moorage, and support facilities

Boating Infrastructure Grant (BIG) - Grants to help with guest boating facilities for 26 feet and larger boats (25 percent match).

Firearm and Archery Range Recreation (FARR) – Aiming at acquiring, developing, and renovating firearm ranges and archery training and practice facilities with a 33-50 percent match required.

Land and Water Conservation Fund (LWCF) - Grants to buy land and develop outdoor facilities for parks, trails, and wildlife lands. Grants require a 50percent match

National Recreational Trails Program (N RTP) – Federal funding through the RFCB to maintain backcountry trails and facilities with a required 20 percent match. Examples of eligible projects include maintenance and rerouting of trails, trailside and trailhead facilities, environmental education, and trail safety programs.

Non-highway and Off-Road Vehicle Activities (NOVA) – To develop and manage opportunities for backcountry trails and non-highway roads, grants can be used for planning, capital improvements, maintenance, operation, land acquisition, education, and law enforcement.

Washington Wildlife and Recreation Program (WWRP) – Acquisition and development parks, water access, trails. Funding is also available for critical wildlife habitat, natural areas, urban wildlife habitat, farmland preservation and protection of riparian areas with at least a 50 percent match.

Youth Athletic Facilities (YAF) – Grants to acquire, develop, maintain, and improve youth and community athletic facilities with a 50 percent match required.

State Bicycle Funds - Money from a portion of state gas taxes is distributed to each city for bicycle trail development. The amount is usually small and often used to help finance trails along existing streets.

Non-Monetary Options

Density Bonus and Clustering - Consider density bonuses for open space and critical areas preservation or affordable housing. Clustering could focus on conserving resource lands and promoting larger open space areas consistent with rural character.

Dedication Requirement - A typical requirement of subdivisions.

Development Agreements - SEPA mitigation agreements including deferral of improvements or future dedication of land not subject to the five-year limitation in RCW 82.02.020.

Conservation Easements - a legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect its conservation values.

Conservation easements can use a purchase or transfer of development rights program or donations.

Current Use Assessment - The Washington Open Space Taxation Act (RCW 84.34) allows property owners to have their open space, farm and agricultural, and timber lands valued at their current use helping to preserve private land in open space, farm and timber use.

Partnerships - Cooperative partnerships with agencies and citizen groups could be pursued by the county. The state and federal governments including the state Department of Natural Resources (DNR). DNR seeks better managed land through consolidation of land holdings using trades or sales. The county should continue to work with DNR and other state and federal agencies to identify opportunities to meet county open space needs.

Purchase of Development Rights -A process where the development rights of a specific parcel of desired open space land is purchased. A funding source, such as a bond, would need to be identified for a purchase of development rights program.

Transfer of Development Rights – A process where development rights of a specified parcel is transferred to a second parcel of land more suitable for development. The second parcel is then permitted a higher level of development. If the two parcels are owned by two different landowners, the increased value of the second parcel is given to the owner of the first parcel.

Volunteer Efforts - Volunteers can be quite effective in terms of contributing cash, materials or labor. Playgrounds, community gardens, and farmers markets have been developed through volunteer efforts. Adopt-A-Trail and Adopt-A-Greenway programs are examples of volunteer programs successfully implemented elsewhere.

Chapter 10 SHORELINE ELEMENT

I. Introduction

The Growth Management Act considers the goals and policies of a Shoreline Master Program (SMP) developed under the Shoreline Management Act to be an element of the Comprehensive Plan, and the Shoreline Master Program development regulations to be a component of a jurisdiction's GMA development regulations.

This Element will be revised upon the complete adoption by both Chelan County and the State of Washington Department of Ecology.

Chapter 11 TRANSPORTATION ELEMENT

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EXECUTIVE SUMMARY

Chelan County, named for the Salish word for “deep water,” is a county rich in history and natural beauty. Over the past century, the county has grown into one of Washington’s most attractive destinations and places to live. This Transportation Element aims to provide a 20-year vision for Chelan County’s transportation system, which respects the region’s history and character and supports anticipated growth through 2037.

The overall vision for Chelan County’s Transportation Element is to provide a safe, balanced, and efficient multi-modal transportation system that serves anticipated local and regional growth. Guidance from county staff, the Board of County Commissioners, the Chelan-Douglas Transportation Council, stakeholders, and citizens helped identify six goals, which serve as the foundation for this plan:

- **Maintain existing transportation facilities** in a state-of-good-repair to ensure their continued function, which is critical to achieving all of the county’s mobility goals
- Create a transportation network that can be **shared safely by all users** and that provides sufficient access for emergency response
- Plan for a system that is **financially viable**, including consideration of lifecycle costs in infrastructure investments and leveraging outside funds wherever possible to maximize community benefits
- Provide a transportation system that **complements existing and planned land uses**, supports farm-to-market and recreational tourism needs, and balances economic development with existing users
- **Avoid and minimize negative environmental and societal impacts** from the transportation system and enhance the natural and social environment when possible
- **Coordinate with a broad range of groups** (including local, state, and regional agencies, key stakeholders, businesses, and the public) to develop and operate the transportation system.



Lake Chelan

The Transportation Element sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Chelan County achieve its vision. This document includes seven chapters:

- **Chapter 1 – Introduction:**
Describes the purpose of the Transportation Element and the planning requirements it needs to address. Also provides an overview of Chelan County’s position in the state and related planning efforts.
- **Chapter 2 – Conditions and Trends:**
Describes conditions for all travel modes in the existing transportation system. This chapter also identifies challenges and trends that may affect Chelan County’s transportation network in the future.
- **Chapter 3 – Maintaining Our System:**
Describes how the county operates and maintains its transportation system, including ongoing programmatic activities and expenditures. This chapter discusses best practices in good state of repair.
- **Chapter 4 – Transportation Goals and Policies:**
Explains the county’s vision for transportation and the goals and policies that serve as the basis for this Transportation Element.
- **Chapter 5 – Future Transportation Vision:**
Details how to accommodate each travel mode and establishes the county’s qualitative level of service standards.
- **Chapter 6 – Capital Plan:**
Provides the 20-year capital plan based on the community’s values expressed in the transportation goals and layered network.
- **Chapter 7 – Implementing the Transportation Element:**
Evaluates Chelan County’s financial conditions over the next 20 years and provides guidance on plan implementation.

To serve as a useful document for all residents and staff of the county, this Transportation Element focuses on the county’s vision and the projects and programs intended to meet that vision. Technical and supporting information are available in the **Appendices**.



Eagle Creek Road, Chelan County

CHAPTER 1: INTRODUCTION

Chelan County, named for the Salish word for “deep water,” is a county rich in history and natural beauty. Aided by tourist destinations like Lake Chelan and the city of Leavenworth and economic drivers like the fruit industry, the county has grown over the past century into one of Washington’s most attractive destinations and places to live.

This Element aims to provide a 20-year vision for Chelan County’s transportation system, which respects the community’s history and character and supports anticipated growth through 2037.

I. PURPOSE

The overall vision for Chelan County’s Transportation Element is to provide a safe, balanced, and efficient multi-modal transportation system that serves anticipated growth. Guidance from county staff, the Board of County Commissioners, stakeholders, and citizens helped identify several key priorities:

- **Maintain existing transportation facilities** in a state-of-good-repair to ensure their continued function, which is critical to achieving all of the county’s mobility goals
- Create a transportation network that can be **shared safely by all users** and that provides sufficient access for emergency response
- Plan for a system that is **financially viable**, including consideration of lifecycle costs in infrastructure investments and leveraging outside funds wherever possible to maximize community benefits
- Provide a transportation system that **complements existing and planned land uses**, supports farm-to-market and recreational tourism needs, and balances economic development with existing users

- **Avoid and minimize negative environmental and societal impacts** from the transportation system and enhance the natural and social environment when possible
- **Coordinate with a broad range of groups** (including local, state, and regional agencies, key stakeholders, businesses, and the public) to develop and operate the transportation system.

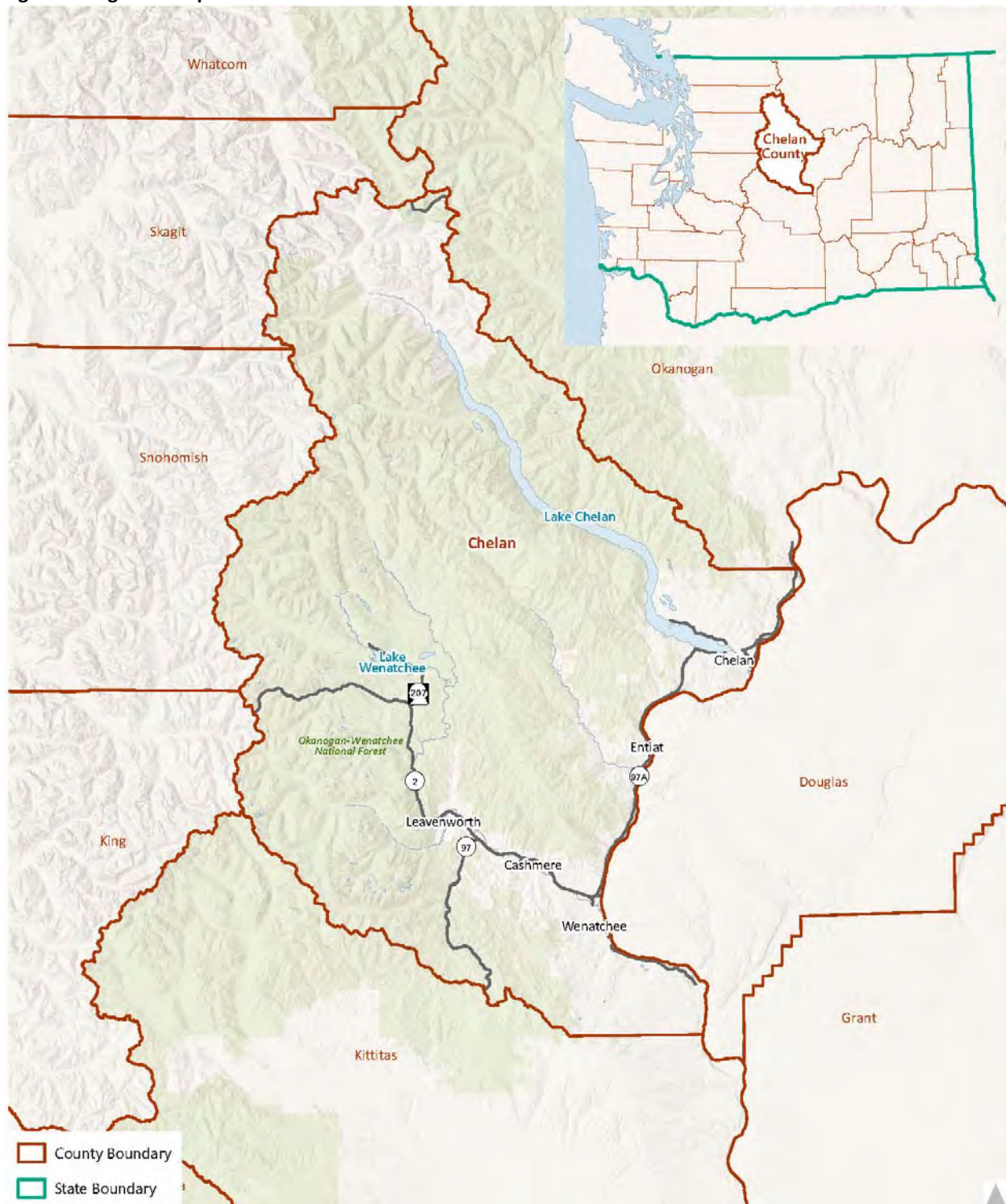
The Transportation Element sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Chelan County achieve its vision.

II. PLANNING REQUIREMENTS

Chelan County’s regional location plays a role in the demands put on its transportation system. The county encompasses Lake Chelan, Leavenworth’s Bavarian village, several major forests and mountains, many farm-to-market connections, and many other destinations. The county is bordered by the Columbia River to the east and the Cascades to the west. US 2 connects Chelan County to King County in the west and Douglas County in the east while US 97 links Chelan County to Kittitas County in the south and Okanogan to the north.

Figure 1 shows the location of Chelan County in its statewide and regional setting.

Figure 1. Regional Map



The County must coordinate its transportation planning with a variety of jurisdictions, agencies and stakeholder groups.

Coordinated with:

- City of Cashmere
- City of Chelan
- Chelan County Public Utility District
- Chelan-Douglas Transportation Council
- City of Entiat
- City of Leavenworth
- Community Council of Peshastin
- Greater Wenatchee Bicycle Advisory Board
- Lake Wenatchee Fire and Rescue
- LINK Transit
- Malaga Community Council
- Manson Community Council
- Monitor Rural Community
- U.S. Forest Service
- Wenatchee
- WSDOT

GROWTH MANAGEMENT ACT

Washington State's Growth Management Act of 1990 requires communities to prepare a transportation element that ties directly to the county's comprehensive plan, land use decisions and financial planning. This Transportation Element Update fulfills that mandate.

Additionally, given the status of US 2 as a major transportation corridor that travels through Chelan County, this plan aims to coordinate with the Washington State Department of Transportation (WSDOT) and adjacent counties to ensure that these state facilities can adequately serve the region's needs.

OTHER PLANS

As part of this planning process, several local, regional, state plans, and documents that influence transportation planning in Chelan County were reviewed. This section summarizes some of the key regional plans reviewed.

TRANSPORTATION 2040 - CHELAN AND DOUGLAS COUNTIES

The 2040 Regional Transportation Plan, prepared by the Chelan-Douglas Transportation Council, lays out the long term goals for growth management, economic, and transportation issues.

The plan identifies six key priorities for transportation in the region:

1. **Public Involvement** – Develop awareness of community preferences and stakeholder concerns, and build community support for plans and proposals
2. **Intergovernmental Coordination** – Align policy objectives with land use, economic development and transportation, promote regional strategies to increase transportation funding, and develop actionable plans to address urban, rural, and small city transportation needs
3. **Transportation Safety** – Improve safety for vehicle drivers, transit riders, bicyclists, and pedestrians
4. **Access and Mobility** – Develop actionable plans for maintaining adopted performance standards for vehicle drivers, transit riders, bicyclists, and pedestrians, and integrate multimodal improvements whenever possible with roadway maintenance and improvements. Improve freight access and mobility
5. **Financial Stewardship** – To increase roadway capacity and safety, apply technology, manage access to major roadways, maximize the use of non-single occupancy vehicle modes, and balance future investments in roadways and other modal infrastructure. Ensure that financial resources allocated to

transportation improvements maximize community benefits

6. **Environmental Stewardship** – Avoid and minimize negative environmental and societal impacts from transportation improvements. Enhance the natural and social environment when possible

DOUGLAS COUNTY COMPREHENSIVE PLAN TRANSPORTATION ELEMENT

Douglas County borders Chelan County directly to the east and since Wenatchee and East Wenatchee are so close in proximity, the work force, business markets, and residents often cross county boundaries. Its transportation element is important to consider when developing Chelan County's own element.

The land use pattern in the Transportation Element determines the demand for travel to, from and through various locations. Therefore, the transportation element has been integrated with other elements of the plan to ensure consistency.



Chelan County

ADDITIONAL PLANS

Other local plans and documents that were reviewed include:

- Cashmere Area Transportation Study
- Chelan County Six Year Transportation Improvement Program
- Chelan County 2009 Transportation Element
- Chelan Douglas Transportation Council 2016-2019 Regional Transportation Improvement Program
- City of Cashmere Comprehensive Transportation Plan
- City of Wenatchee Comprehensive Plan Transportation Element
- Entiat Shoreline Public Access Plan
- Greater Wenatchee Bicycle Master Plan
- Malaga Vision Plan
- Manson Subarea Plan
- Monitor Rural Community Vision Statement
- North Wenatchee Transportation Master Plan
- Peshastin Urban Growth Area Comprehensive Plan
- Revised Schedule A to Forest Development Road Cooperative Agreement between Chelan County and U.S. Forest Service Memorandum
- Urban Valley Regional Trails Plan
- Wenatchee Valley Urbanized Area Freight Study

III. ROLE OF THE TRANSPORTATION ELEMENT

The Transportation Element provides a framework that outlines the policies, projects, and programs necessary to implement Chelan County's vision of future mobility. The Transportation Element also projects the financial environment for transportation investments out to 2037.

In essence, the Transportation Element informs the prioritization of projects by identifying the types of investments the county should make to support future travel trends. The plan also evaluates how these projects coincide with the community's values and financial resources.



North Wenatchee Avenue, Wenatchee



Cottage Avenue, Cashmere

IV. PLAN ORGANIZATION

This Transportation Element includes six chapters in addition to the Introduction (**Chapter 1**):

- **Chapter 2 – Conditions and Trends:**
Describes conditions for all travel modes in the existing transportation system. This chapter also identifies current challenges and trends that will affect Chelan County's transportation network in the future.
- **Chapter 3 – Maintaining Our System:**
Describes how the county operates and maintains its transportation system, including ongoing programmatic activities and expenditures on into the future. This chapter discusses best practices in good state of repair.
- **Chapter 4 – Transportation Goals and Policies:** Explains Chelan County's vision for transportation as well as the goals and policies that form the basis for the Transportation Element.
- **Chapter 5 – Transportation Vision:**
Details how to accommodate each travel mode and establishes the county's qualitative transportation level of service standards.
- **Chapter 6 – Capital Plan:**
Provides the 20 year transportation investment list which reflects on the community values expressed in the transportation goals and layered network.
- **Chapter 7 – Implementing the Transportation Element:**
Evaluates the county's financial conditions over the next 20 years and provides guidance on plan implementation.

CHAPTER 2: CONDITIONS AND TRENDS

I. EXISTING CONDITIONS

This chapter describes how people use Chelan County's transportation network today and how that may change over the next 20 years as the region grows. The way people travel is influenced by the land use, travel corridors, and key destinations where people live, work, play, shop, and recreate.

LAND USES AND KEY DESTINATIONS

The places where people live, work, and play are impacted by how a county and its communities guide where development occurs. The Land Use Element of this Comprehensive Plan provides the guidance mentioned here. It is important to consider land use when planning for transportation because it provides insight into areas where more people may concentrate their travel. **Figures 2-4** show some of the many key destinations throughout the county. These figures include recreational, educational, and employment locations.

The incorporated cities in Chelan County are Cashmere, the City of Chelan, Entiat, Leavenworth, and Wenatchee. Wenatchee is the largest of these cities and the hub of commercial activity, with the cities of Chelan and Leavenworth acting as the centers of recreational tourism. Even within these denser communities, the majority of housing is detached single family.

Agricultural and industrial developments are located throughout Chelan County which include farms, orchards, and fruit packing warehouses, particularly along the US 2 and SR 97 corridors. Large swaths of the southwest and northwest portions of the county are highly mountainous, with the Okanogan-Wenatchee National Forest and the Lake Chelan National Recreation Area comprising large areas of public land.

It is important to consider that areas of commercial, industrial, and dense residential land use within the cities, urban growth areas (UGAs), and local areas of more intense rural development (LAMIRDs) tend to have more concentrated trips and can be supportive of alternative modes of travel such as transit, walking, and biking, whereas more rural areas tend to have dispersed trip patterns that are often best accommodated by car or truck. In the following pages, some of the county's key destinations and land uses are described and mapped.

Chelan / Manson Vicinity

Many residents and visitors alike enjoy the lake and adjacent parks to recreate outdoors in the Chelan / Manson vicinity which serves as a gateway to the Lake Chelan National Recreation Area. Various parks, piers, and boat launches provide access to the lake. The parks along the lake generate significant amounts of vehicle traffic in addition to the non-motorized uses at the parks themselves. South Lakeshore Road and SR 150 (along the north shore) serves as a cycling route for residents and visitors in addition to being an active motorway.

In addition to being a popular tourist and recreation destination with numerous vineyards and wineries, the City of Chelan is also a key employment center. Some major employers are situated in eastern Chelan, which include: Trout Blue Chelan, Chelan Fruit, and Manson Growers.

This area also contains two of the four airports in the county: The Chelan Municipal and Stehekin State airports. Chelan Municipal Airport is classified as a local service airport and generates the highest amount of daily airplane traffic in the county.¹ This airport provides service for amphibious floatplanes that land on

¹ Washington State Airports. Airport Facilities and Services Report.

and take-off from Lake Chelan. The airport is located approximately five miles northeast of the City of Chelan.



Lake Chelan (Source: Lake Chelan Chamber of Commerce)

The Stehekin Airfield is five miles northwest of Stehekin on the northern edge of Lake Chelan. It provides access for private landowners and recreational users. The airfield provides an alternative mode of access to Stehekin for residents or visitors. It is also used as a staging area for fire-fighting and for emergency evacuations.

In addition, commercial water transportation in this area includes passenger boats, commercial barges and small boat service on Lake Chelan. For the communities of Stehekin, Lucerne, and Holden, barges provide the only means of transportation of large goods, fuel, building supplies, and vehicles.

Entiat Vicinity

Entiat is located along the Columbia River and acts as an eastern gateway to the Wenatchee National Forest. It is situated along SR 97A and lies between the cities of Chelan and Wenatchee.

Between SR 97A and the Columbia River waterfront is a rail line operated by the Cascade and Columbia River Railroad. Discussions with

the city indicate that increased rail traffic could impact future waterfront access in Entiat.

Entiat serves as one of the many recreational destinations in the county for visitors and residents with a developing recreational and commercial waterfront area near the Entiat City Park and many opportunities for boating and fishing. Entiat River Road provides access into the Wenatchee National Forest for biking, hiking, hunting, camping, horseback riding, and fishing.



Entiat Park, Entiat (Source: Daily Journal of Commerce)

Figure 2. Key Destinations (Chelan, Manson, and Entiat Vicinity)



Wenatchee/Sunnyslope Vicinity

The City of Wenatchee is the largest city in Chelan County. This city is a regional hub for employment, freight, residential, and commercial activity. The city borders the Columbia River, also the Chelan/Douglas County line. Access to East Wenatchee crossing the Columbia River is either on US 2/97 or SR 285 making it a key gateway to inter-county movement and transportation.

The Sunnyslope Subarea is a large unincorporated community north of the Wenatchee River and US 2/97. Easy Street is classified as an Urban Minor Arterial and serves as primary access to the Sunnyslope Subarea. Easy Street intersects US 2/97 generally southeast near Olds Station and further west near the community of Monitor. Railroads through the area provide opportunities for regional freight and passenger movement. The Columbia Station in downtown Wenatchee serves as one of two Amtrak stations in the county along its Empire Builder route as well as a transit center for the region's LINK Transit bus service.

Currently, no scheduled commercial passenger service is provided at airports located within Chelan County; however, Pangborn Memorial Airport in Douglas County provides that service to Chelan County and its cities.

Additionally, Wenatchee serves as the county seat and hosts the WSDOT regional office and Chelan-Douglas Transportation Council.

Wenatchee is home to recreational areas that range from local parks to regional ones such as Confluence State Park. There are also many trails and non-motorized facilities for bicyclists and pedestrians. Also, the Mission Ridge Ski Resort is located about 10 miles southwest of Wenatchee.

The area also consists of retail and employment centers from McDougall & Sons, Stemilt Growers, and Starr Ranch Growers to larger retail centers such as Walmart, Home Depot, Target and other commercial areas that serve the city.

With a population of 33,600², the City of Wenatchee is served by the Wenatchee School District and the Wenatchee Valley College, which provides secondary education for students in the region. In terms of public services, the county's main hospital is also located in Wenatchee.

Cashmere/Monitor Vicinity

The Cashmere/Monitor vicinity serves as a major employment center for the large fruit and produce distributors in the region which include Crunch Pak, Liberty Orchards, and Blue Star Growers.



Aplets & Cotlets (Source: Liberty Orchards)

The City of Cashmere has a historic downtown and provides many recreational amenities from local parks, to mountain biking trails, to a museum that give Cashmere its character.

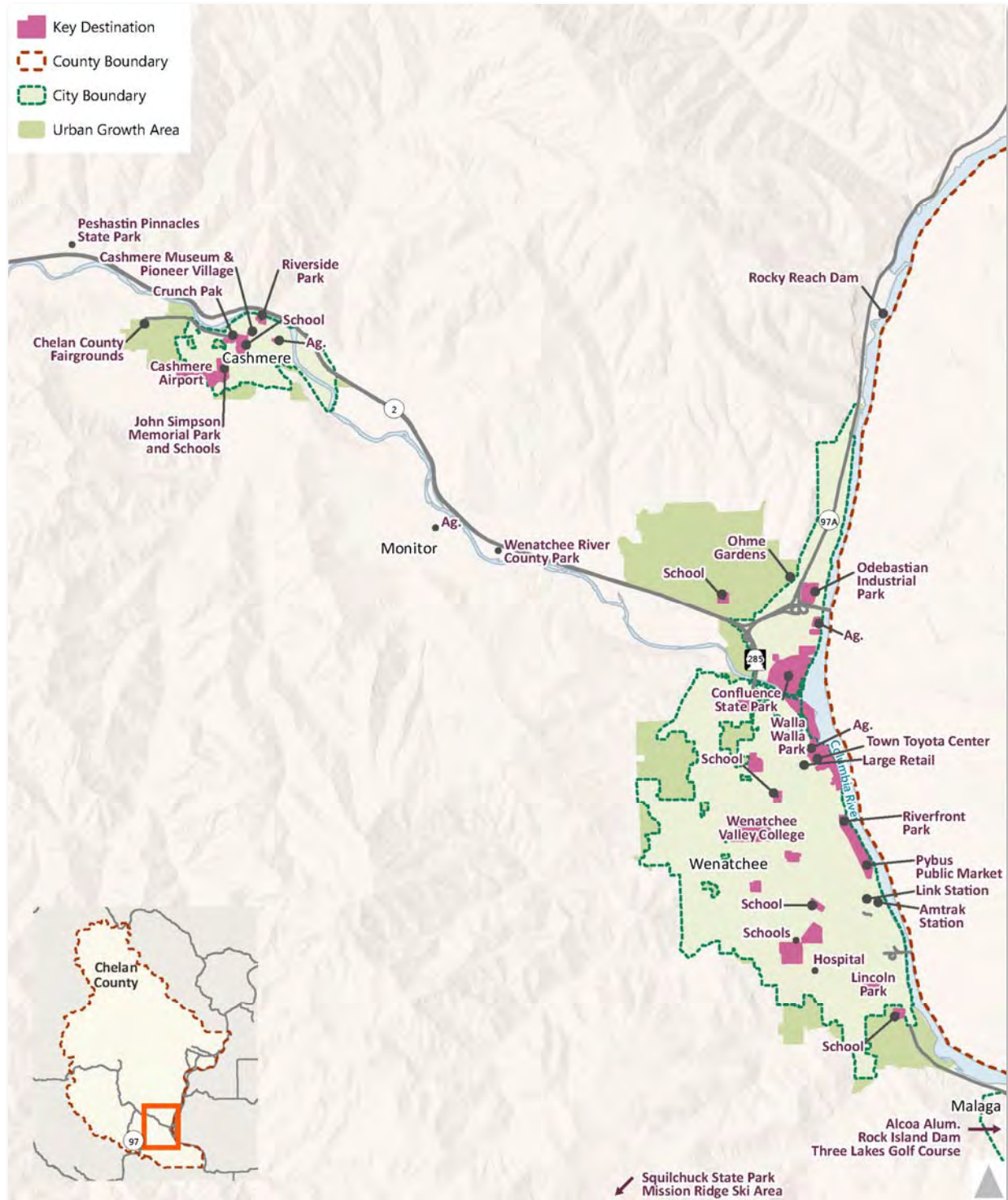
US 2/97, US 97A, and the railroad provide freight and passenger movement through and in the area.

² United States Census Bureau. *Quick Facts Wenatchee City, Washington. 2015.*
<http://www.census.gov/quickfacts/table/PST045215/5377105>

Also, there has been discussions to provide trail access through the area to connect Wenatchee through Cashmere and Monitor to Leavenworth creating an additional option for travelers through the region; however, this project has gone no further than as a topic for discussion.

Additionally, the Cashmere-Dryden Airport is located to the southwest of Cashmere. It is a county-owned airport that accommodates general aviation operations.

Figure 3. Key Destinations (Cashmere/Monitor and Wenatchee/Sunnyslope Vicinity)



Leavenworth / Peshastin / Plain Vicinity

Leavenworth's Bavarian-styled main street is characterized as the historical city center and serves as a major attraction for residents and visitors alike. It features a mix of commercial, residential, and civic destinations such as City Hall and the Upper Valley Museum. As a result, it generates high traffic volumes for all modes of travel – vehicle, pedestrian, bike, transit, and rail.



Downtown Leavenworth (Source: Port of Chelan County)

The area is also home to two major employers of the region: Blue Bird and Hi-Up Growers.

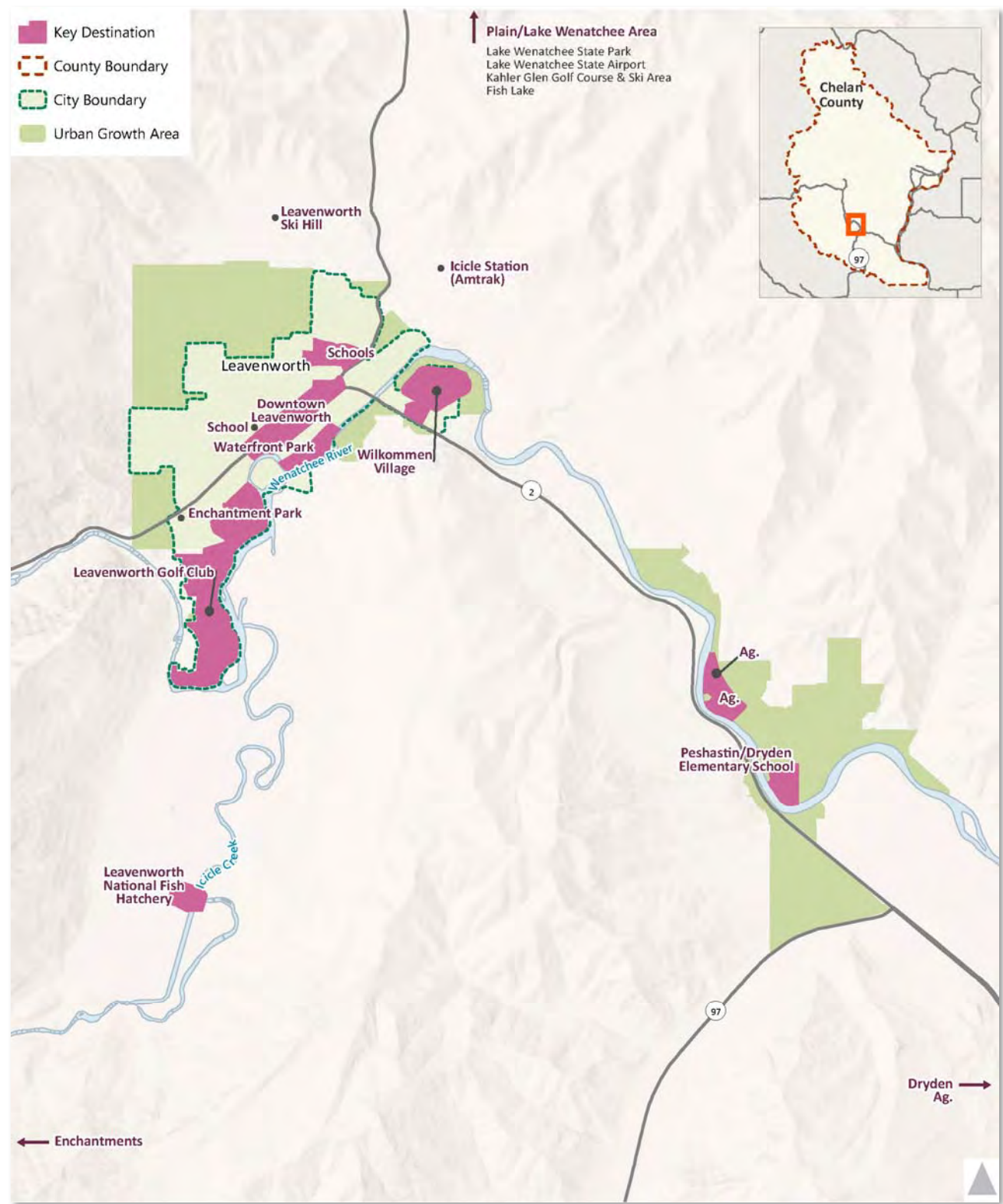
Many additional recreational attractions are located within this area such as parks, mountain bike trails, hiking trails, campgrounds, and Lake Wenatchee. The Okanogan-Wenatchee National Forest is also easily accessible through the Leavenworth and Plain areas.

US 2 bifurcates Leavenworth primarily separating much of its residential units from its commercial core. US 2 provides access to Stevens Pass and Western Washington.

The Lake Wenatchee State Airport, 16 miles northwest of Leavenworth and only a mile east of the lake provides direct access to Lake Wenatchee.

Icicle Station, located east of Leavenworth is one of two Amtrak stations along its Empire Builder Route in Chelan County, providing interstate connectivity.

Figure 4. Key Destinations (Leavenworth and Peshastin Vicinity)



TRANSPORTATION NETWORK OVERVIEW

Chelan County possesses a rich and diverse mix of land uses and destinations that require a specialized transportation plan to ensure efficient mobility and accessibility throughout the county.

The transportation network accommodates many modes of travel, including walking, bicycling, public transit, and driving. Vehicular travel is still the primary mode for most travelers in and around the county.

Rural roads and highways form the foundation of the transportation framework with roadways connecting the many communities in Chelan County. Additionally, intercity transit is available between and within many of these communities.

The incorporated cities have relatively well-connected street grids, while rural roadways with more limited pedestrian amenities characterize the remaining areas of the county.

Also, the United States Forest Service (USFS) maintains certain roadways within Chelan County. As county residents use USFS roadways, coordination between both parties is important to properly maintain these roadways.

This plan classifies Chelan County's roadways into freeways and expressways (highways), arterials, major and minor collectors, and local streets, as shown in **Table 1** and displayed in **Figure 5, Figure 6, and Figure 7**. Examples of each roadway type and characteristic are also described below.



Chelan County (source: Chelan County Public Works)



Chelan County (source: Chelan County Public Works)



Chelan County (source: Chelan County Public Works)

Table 1. Roadway Functional Classification

ROADWAY TYPE	DESCRIPTION/PURPOSE	
Freeways & Expressways (Highways) <i>Examples:</i> US 2, US 97/97A, SR 285, SR 150	Freeways are designed and constructed for mobility and long-distance travel. The freeway network links many major cities and urban growth areas throughout Chelan County.	 <p>US 2, Cashmere</p>
Urban / Rural Minor Arterial <i>Examples:</i> Easy St (within UGA), Squilchuck Rd (within UGA)	Minor arterials are designed for higher volumes, but tend not to be major regional travel ways. Minor arterial streets provide inter-neighborhood connections as well as connections to the regional freeways.	 <p>Easy Street, Sunnyslope</p>
Urban / Rural Major Collectors <i>Examples:</i> Manson Blvd, Chumstick Hwy, W Malaga, N Dryden Rd	Collectors distribute trips between local streets and arterials and serve as transition roadways to and from commercial and residential areas. Collectors have lower volumes than arterials, and can include select traffic elements to balance experience for all modes. Urban and rural collectors differ in the areas that they serve.	 <p>West Malaga Road, Malaga</p> <p>N Dryden Road, Dryden</p>
Urban / Rural Minor Collectors <i>Examples:</i> Joe Miller Rd, Ski Hill Dr, Apple Acres Rd, Mission Creek Rd	These smaller collectors link the major collectors to local roads, providing connections to rural communities throughout the County.	 <p>Ski Hill Drive, Leavenworth</p>
Local Streets <i>Examples:</i> Kimber Rd, Mountain Home Rd, Boetzkes Ave, Viewdale Ave, Zager Rd	Local streets are the lowest functional classification, providing circulation and access within residential neighborhoods and in accessing private properties.	 <p>Boetzkes Avenue, Manson</p>

Figure 5. Roadway Functional Classification (Chelan, Manson, and Entiat Vicinity)

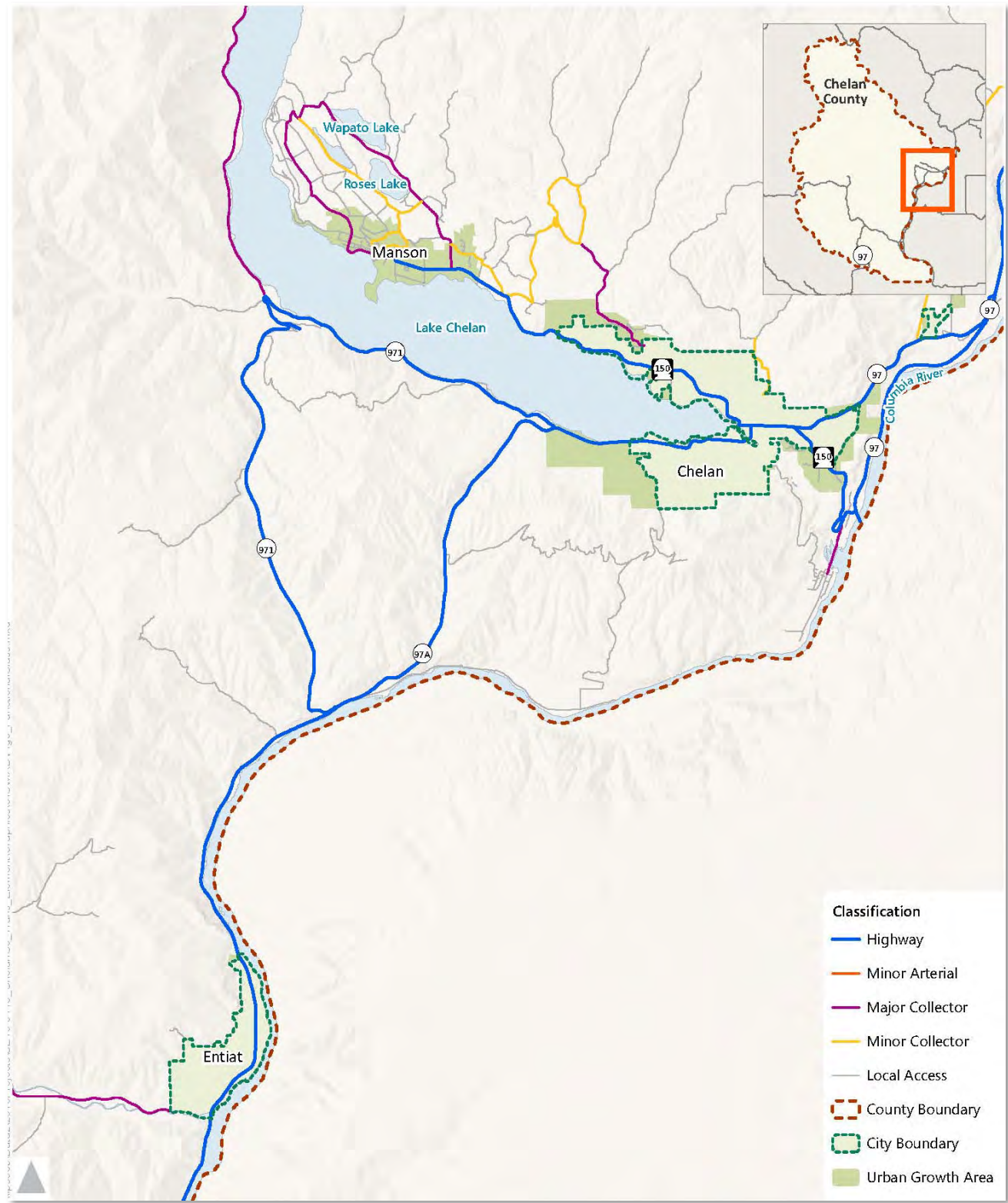


Figure 6. Roadway Functional Classification (Cashmere/Monitor and Wenatchee/Sunnyslope Vicinity)

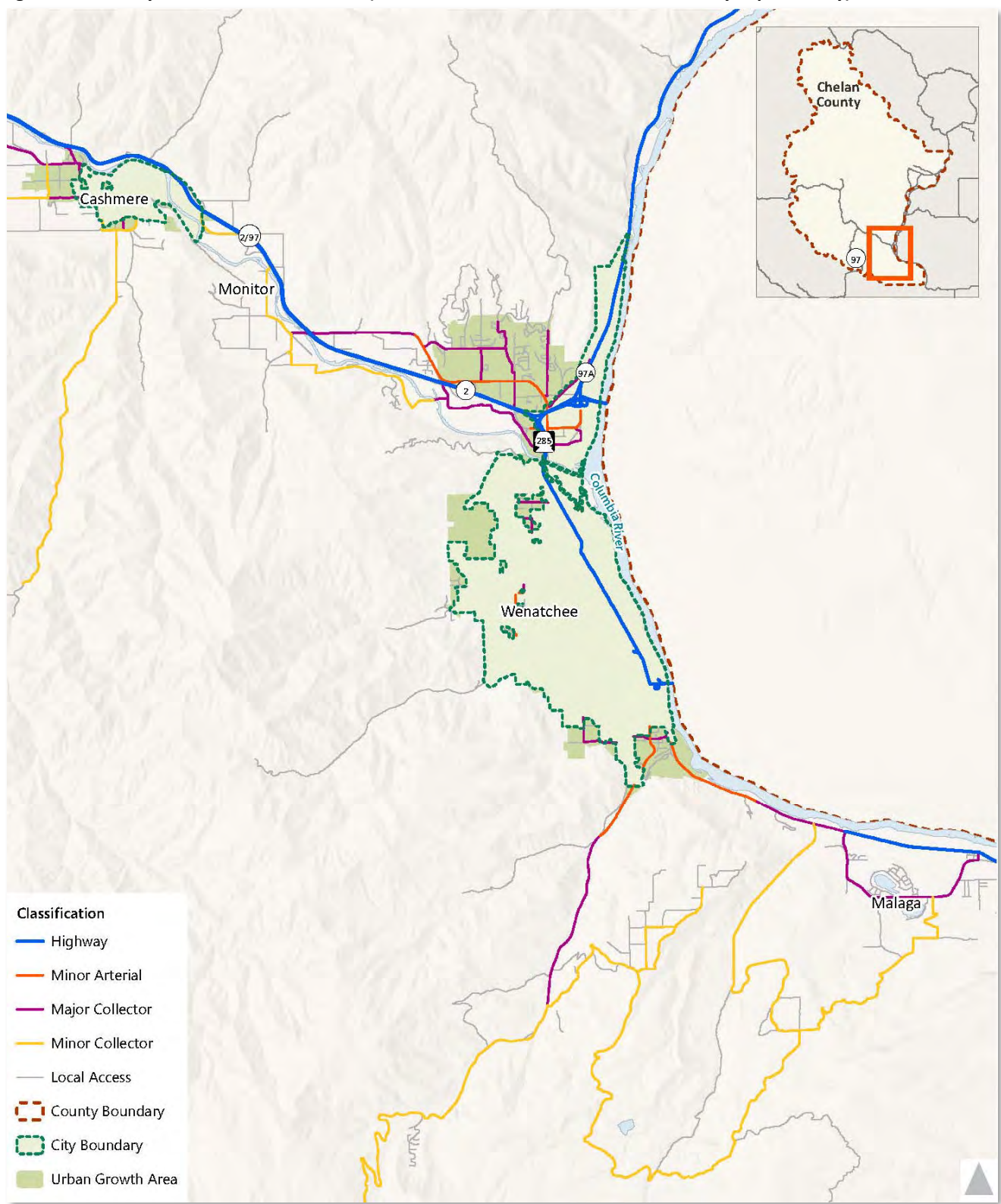
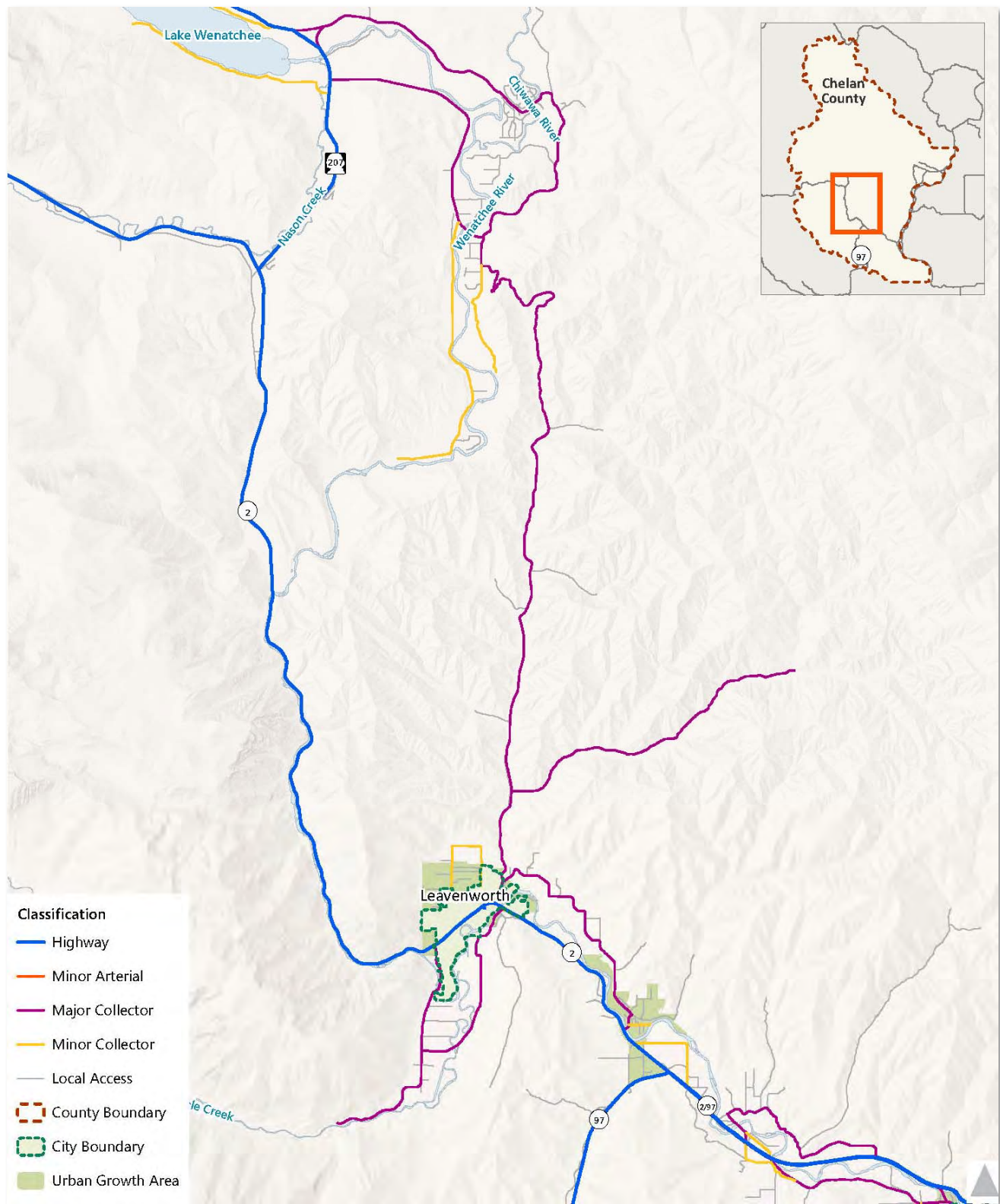


Figure 7. Roadway Functional Classification (Leavenworth, Peshastin, and Plain Vicinity)



PEDESTRIAN AND BICYCLE NETWORK

Provision of facilities for walking and biking is a goal for providing a functional, multimodal transportation system to accommodate all users. Residents and visitors walk and bike as part of their daily travel for many reasons. Children attending school, commuters taking the bus or connecting with a carpool to get to work, bicycle commuters, and senior citizens making mid-day trips, all require safe amenities.

Most of the great walkable areas in Chelan County are in incorporated downtowns: Wenatchee, Chelan, Leavenworth, and Cashmere all enjoy walkable downtowns with complete sidewalk coverage.

Outside of these downtowns and in the unincorporated areas, pedestrian facilities are much more limited. Cashmere, Chelan, Entiat, Leavenworth, Manson, Peshastin, and Wenatchee are all identified in *Transportation 2040* as communities with some pedestrian demand, but major rural routes with auto priority make walking a less desirable alternative to driving.³



Tigner Road near Cashmere High School lacks basic pedestrian facilities

With respect to biking, the City of Wenatchee offers a robust network of bike lanes and signed routes to make bike travel easy throughout the city. Wenatchee is unique among Chelan County communities with a CDTC-approved Greater Wenatchee Bicycle Master Plan. The plan includes further development of the

Princeton, Western, North End, Hawley, Fifth Street, First Street, Orondo, Methow, Wenatchee Avenue, Bridge Street, and Miller Bikeways. These are programmed to see improved connections, better signage, better buffers, and spot improvements.

Countywide, biking is accommodated on trails, and on shoulders along rural roadways. The scenic Apple Capital Loop Trail encircles a section along the Columbia River in and around Wenatchee and East Wenatchee. Other plans include increasing bicycle access and connectivity throughout the county. The county has incorporated “share-the-road” signs on several of its roadways that see a higher use of multi-modal transportation. The Upper Valley Trail is an envisioned project that will connect the City of Leavenworth all the way to the City of Wenatchee through Peshastin, Cashmere, and Monitor.



Chelan County's Share the Road Sign alerts drivers of the many multi-modal-uses of the county's roadways

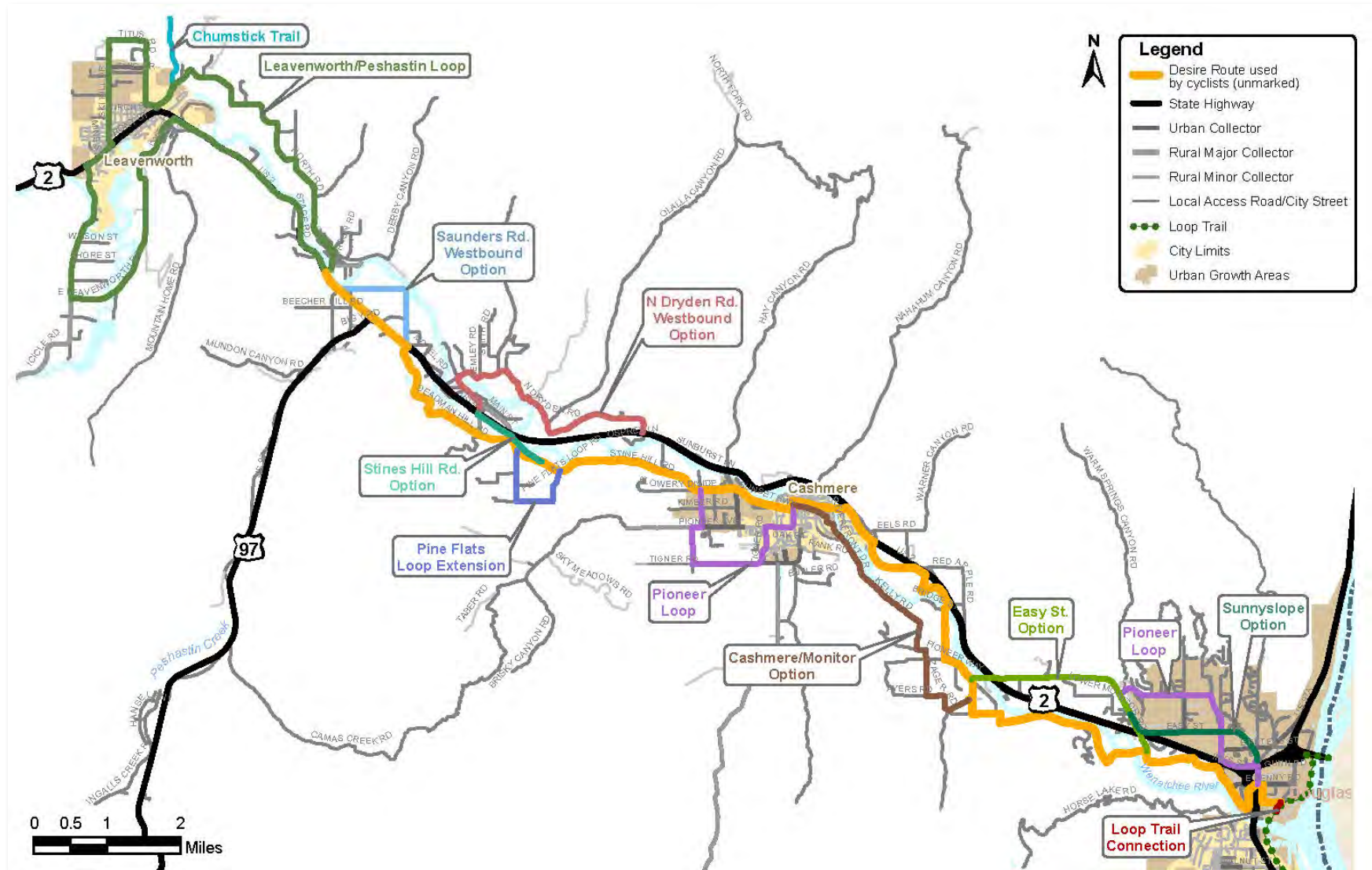
Outside of city jurisdictions, the bicycle and pedestrian network is sparse and contains many gaps due to the rural nature of the county. The county is interested in planning better connectivity from cities to the neighboring areas in the county where feasible and prudent.

³ Transportation 2040. CDTC. Figures 2-4, 2-5, and 2-6.

The Chelan-Douglas Transportation Council has identified implementation of the Bicycle Master Plan as a performance target for *Transportation 2040*. Several of the subarea plans also call for improved pedestrian and bicycle safety. As a result, providing pedestrian and bike infrastructure remains an important goal throughout the county.

Figure 8 shows the locations of pedestrian facilities and bike facilities in Chelan County from Wenatchee to Leavenworth. This map was adopted from the previous Transportation Element. Existing sidewalk facilities throughout the county are mapped and shown in the **Appendices**.

Figure 8. Existing Bicycle and Pedestrian Facilities (Leavenworth, Peshastin, Cashmere and Sunnyslope Vicinity)⁴



⁴ Source: Chelan County Transportation Element, 2009

TRANSIT NETWORK

LINK Transit provides local and intercity bus service throughout Chelan County. The majority of transit riders access this service by walking or parking at a park-and-ride lot or on-street parking and then connecting to transit. Three LINK Transit routes serve Chelan County with frequencies ranging from 15 – 30 minutes, with 10 other routes connecting communities in the county and offering local service in Wenatchee. Service is offered at all of Chelan County's seven park-and-ride lots (**Table 2**), which are located adjacent to state routes. The approximate number of parking spaces provided at each park and ride lot is also provided in **Table 2**.

LINK Transit also operates LinkPlus, a paratransit service that operates as a dial-a-ride service based on pre-scheduled requests. This fulfills the Americans with Disabilities Act mandate and is active within a ¾ mile radius of LINK Transit's fixed route services in Cashmere, Chelan, Entiat, Malaga, Manson, Monitor, and Wenatchee.

Table 2. Park and Ride Location and Spaces

Lot Name	Location	Approx. Spaces
Big Y	US 2 & SR 97	32 spaces
Columbia Station	Kittitas and Columbia Streets, Wenatchee	67 spaces
Easy Street	US 2 & SR 97	29 spaces
Entiat	SR 97A & Entiat Way	21 spaces
Lake Chelan	SR 97A & Center Street (Lakeside)	29 spaces
Leavenworth	SR2 near USFS	42 spaces
Olds Station	Olds Station Road	200 spaces

In addition to LINK Transit, AMTRAK provides long distance commuter rail services through Chelan County along its Empire Builder Route. The route runs from Seattle or Portland to Chicago. Within Chelan County, this route serves the cities of Leavenworth and Wenatchee providing interstate transit connections to and from the county.

Figure 9, Figure 10, and Figure 11 show existing LINK transit routes and park & rides throughout the county.



Link Transit's Columbia Station, located in Wenatchee (Source: Link Transit)

Figure 9. LINK Transit Routes (Chelan, Manson, and Entiat Vicinity)

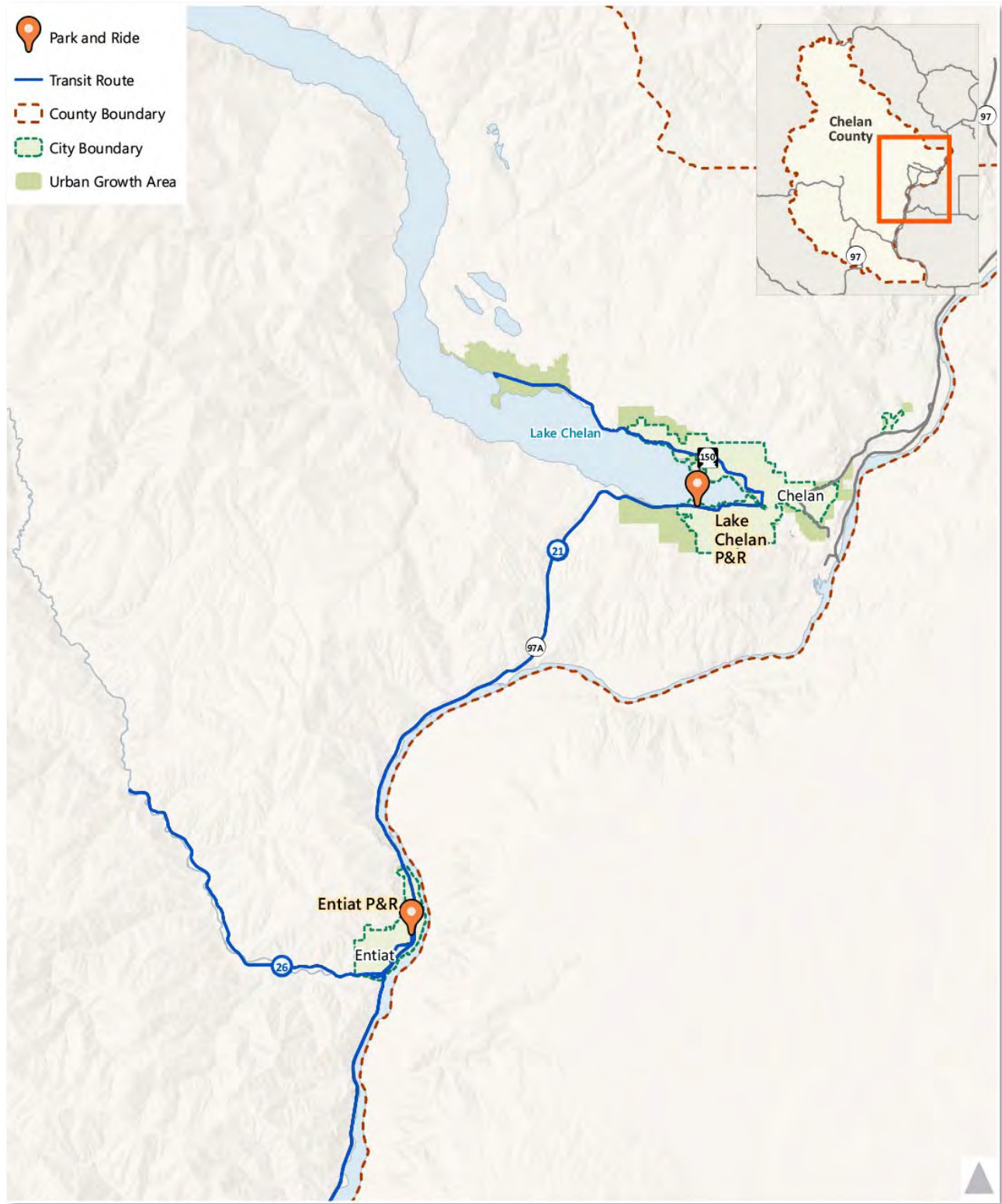
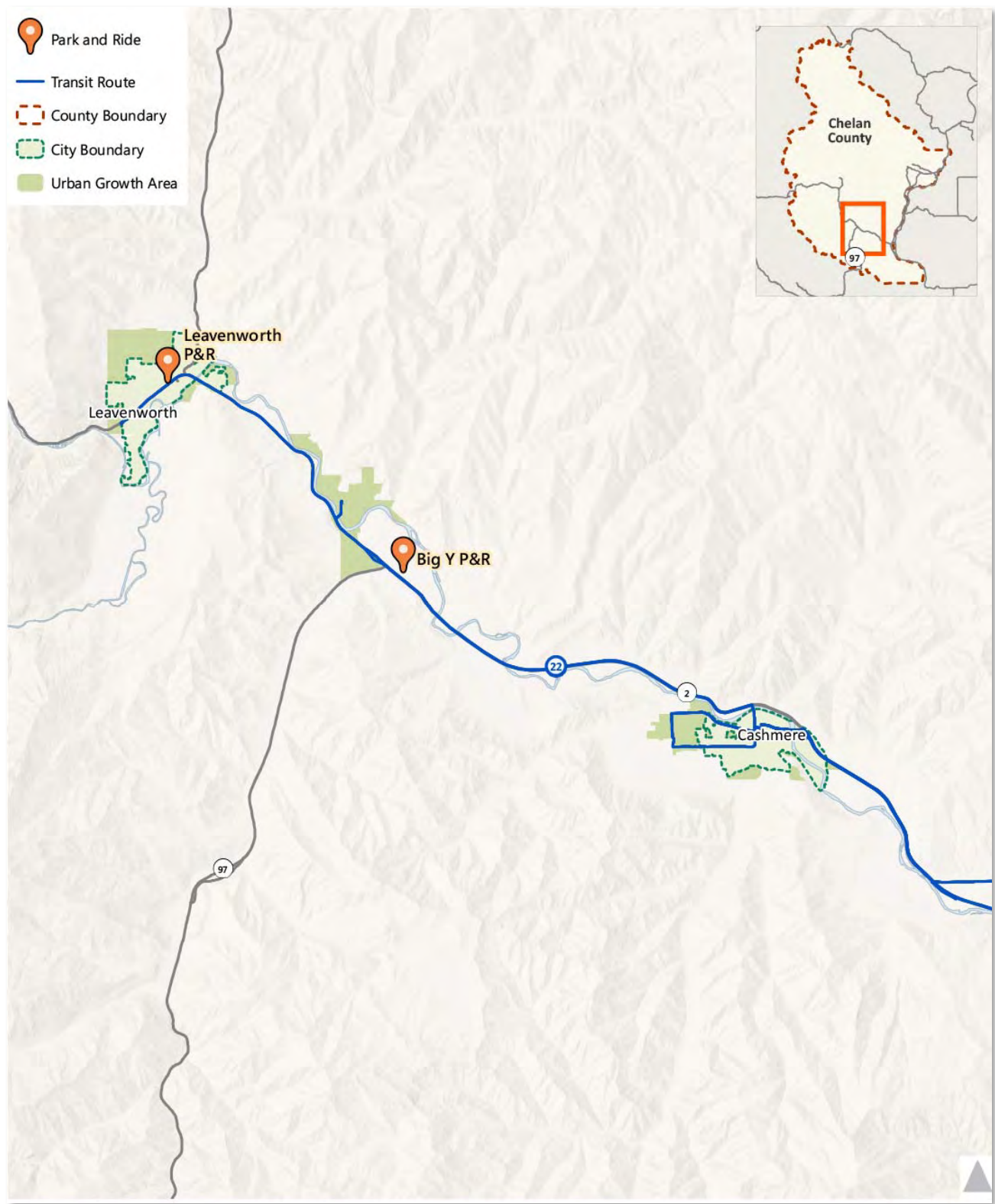


Figure 10. LINK Transit Routes (Cashmere/Monitor and Wenatchee/Sunnyslope Vicinity)



Figure 11. LINK Transit Routes (Leavenworth, Peshastin, and Plain Vicinity)



FREIGHT NETWORK

Freight and goods movement is a vital and often underappreciated element of the transportation network. Everyone is directly impacted by how goods are delivered to ports, distribution centers, stores and their homes. Chelan County is a key regional player in the movement of goods with major highway and arterial connections to distribution facilities.



Freight Hauling in Chelan County

As discussed earlier in this chapter, Chelan County is home to a number of key freight-generating and time-sensitive industries, including agriculture and forestry. Some of the key freight generators in the county are described in the key destinations section, including CrunchPak in Cashmere, Chelan Fruit in Chelan, and Hi-Up Growers in Peshastin. Providing a transportation system that accommodates these key economic generators and a timely movement of goods is of central importance to Chelan County.

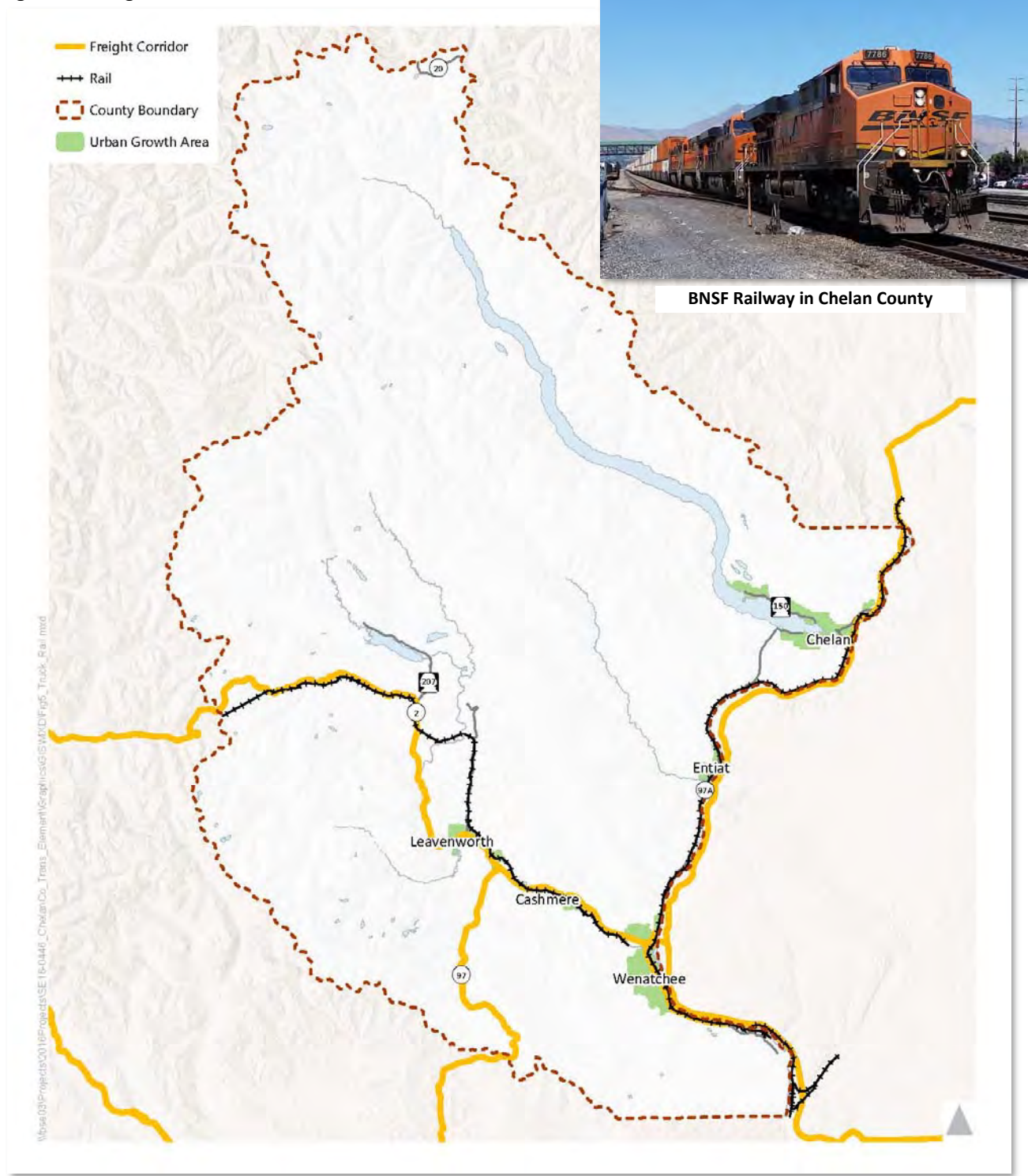
US 2, from SR 285 to the Chelan/Douglas County line, is the most heavily-traveled roadway facility in Chelan County, followed

closely by many of the segments of US 2, US 97, and SR 285 in the immediate vicinity of Wenatchee. The Chelan-Douglas Transportation Council has identified many of these facilities for roadway and signage improvements to better facilitate freight movement.

The WSDOT freight and rail corridors within Chelan County are shown in **Figure 12**. The State's Freight and Goods Transportation System (FTGS) county maps are included in the **Appendices**. The freight network in Chelan County includes rail and water transportation as well. BNSF runs between Everett and Spokane, passing through Chelan County. The BNSF route supports double-stack intermodal containers, and is connected to the transcontinental BNSF network. A 2006 Washington State Transportation Commission study found that this route is over capacity with roughly 27 60-car trains passing along it every day, but no further studies have been conducted and no plans have been made for improvements. The Columbia River Railroad Company runs another line connecting to the BNSF mainline in Wenatchee, extending to Entiat, Chelan Falls, Chelan, and Oroville in Okanogan County. The route primarily serves small industrial and agricultural locations.

The major commercial water transportation operators are Tom Courtney Tug and Barge and the Lake Chelan Boat Company, whose barges transport many of the large goods to Stehekin, Lucerne, and Holden. The US Postal Service utilizes the passenger ferry system in these communities as well.

Figure 12. Freight and Rail Corridors



AUTO NETWORK

With most Chelan County residents, employees, and visitors relying on driving as their primary mode of transportation, the county's roadway network is critical to the transportation system.

Most of the congestion in Chelan County is experienced in the urban areas or at certain times of year – nearby ski resorts in winter or routes accessing Lake Chelan in the summer. In the unincorporated area, only one short segment of roadway regularly experiences congestion that exceeds the county's level of service standards - Easy Street in the Sunnyslope subarea.

Analyses were conducted on major arterial and collector roadways (the county's highest class of roadways) throughout the county and are shown in **Figure 13**. Roadway segment operations were evaluated and assigned a level of service (LOS) grade based on their operations in terms of volume to capacity ratio. In Chelan County, the standard for a roadway to be considered "acceptable" is LOS C or better in rural areas and LOS D or better in urban areas. **Table 3** describes the Level of Service definitions laid out in Chapter 17 of the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2010), which is a standard methodology for measuring the performance of roadway segments. In Chelan County, the standard for a roadway to be considered "acceptable" is LOS C or better in rural areas and LOS D or better in urban areas.

Table 3. Level of Service Definitions

Level of Service	Description
A	Free-flowing conditions.
B	Reasonably unimpeded operation.
C	Stable operating conditions, but individual motorists are affected by the interaction with other motorists.
D	Less stable operating conditions where a small increase in flow may cause substantial increases in delay and decreases in travel speed
E	Unstable operation and significant delay
F	Over capacity, with delays.

As described earlier, traffic volumes on the county's roads vary by season. Peak tourism

seasons draw heavy traffic, and crop harvest times see increased numbers of trucks on the roads.

Based on traffic counts collected over many months of the year, May was identified as a "typical" month as it generally avoids abnormal travel seasons during the summer and winter periods. In contrast, August represents peak summer conditions, when tourism and the agricultural sector drive traffic congestion.

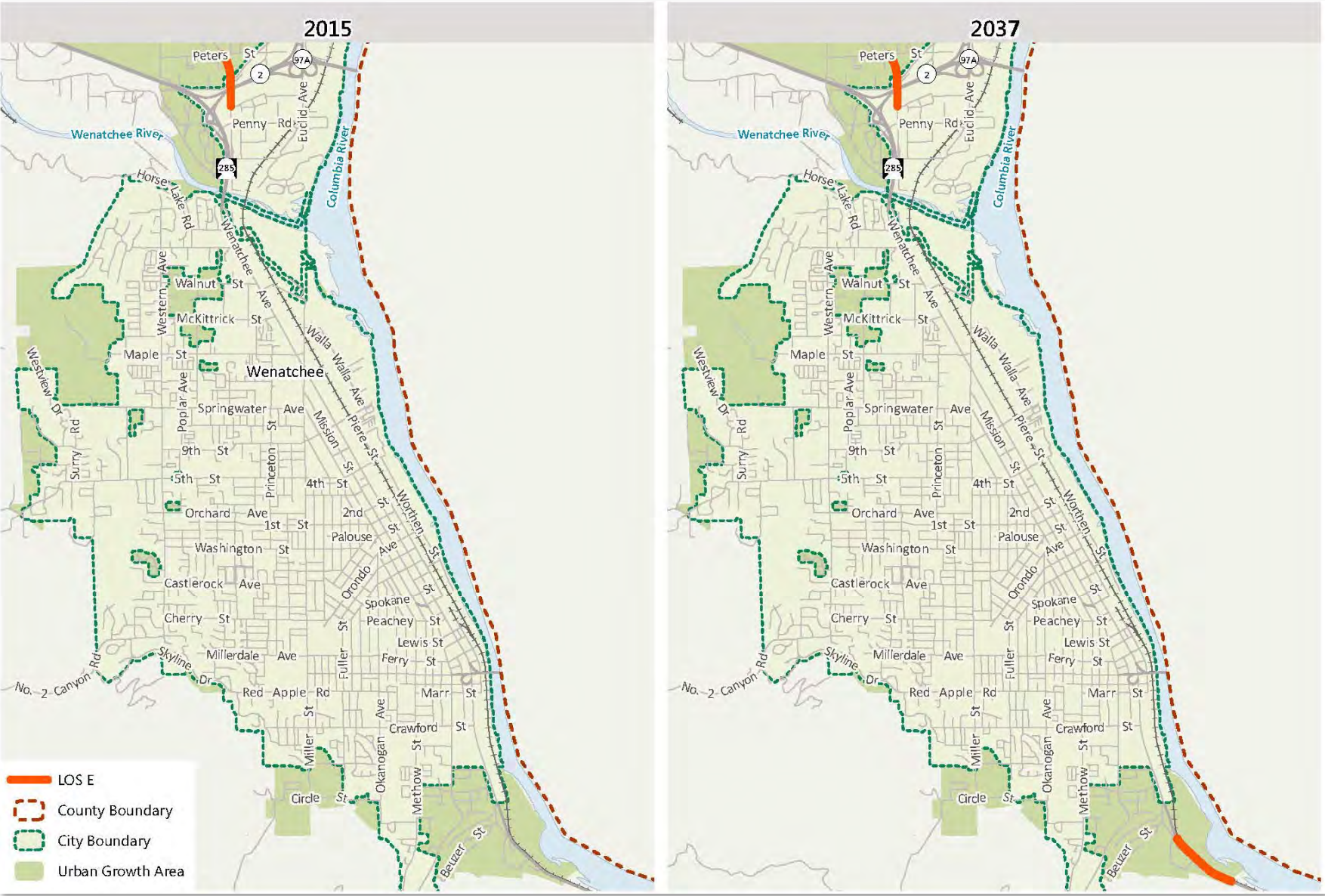
Under current year conditions, of the county's road system, only a short segment on Easy Street fails the county's LOS standard, as it operates at a level of service "E" in peak summer time conditions (see **Figure 13**).

2037 FORECAST

Of course, the traffic volumes seen today are expected to grow based on population and employment growth both in the county, as well as regionally. Using population growth estimates (provided in the **Appendices**), an annual growth rate of one percent was applied to roadway segment counts, which accounts for both Chelan County and regional growth. Roadway segment operations were evaluated under this 2037 condition, with anticipated LOS in peak summertime conditions in 2037 also shown in **Figure 13**. Based on the forecasted volumes, only two county roadway segments are expected to fall below the county's LOS standard: Easy Street near the US 2 intersection as well as a segment along the Malaga Alcoa Highway just south of the city of Wenatchee.

The finding that the Malaga Alcoa Highway fails in the future assumes full utilization of the facility that used to house the Alcoa Plant. Since that facility has been vacant since early 2016, it is unlikely that the roadway will fail the county's standard anytime soon. Since the Malaga Alcoa Highway serves as the main access roadway between Malaga and the rest of the county, it is recommended that operations along this roadway be monitored to ensure continued access to the Malaga community.

Figure 13. Roadway Segment Level of Service (2015 and 2037)



The county is aware of the capacity issues along Easy Street, especially near the US 2 and US 97 interchange. The county recognizes multiple projects that could improve conditions in this area, including the proposed Confluence Parkway as well as the US 2 and Easy Street intersection improvements. Chelan County will work closely with WSDOT and the City of Wenatchee to address the expected increase in traffic.

Based on the regional demand and the forecasted traffic volume, county roadways should be able to accommodate anticipated local and regional growth for the next 20 years. Nevertheless, the county should monitor key segments especially near freeway interchanges and potential bottleneck locations to maintain an efficient roadway network.

II. OPPORTUNITIES AND CHALLENGES

Chelan County has several important challenges to face as it prepares for future growth and development. Each community and stakeholder possesses a different set of priorities, which the county must balance as it works to provide a multimodal network that serves diverse needs.

NETWORK CONNECTIVITY

Maintaining a Functional System

The county's vast roadway network needs to be maintained to provide access for all roadway users. A poorly maintained network will hinder the county's ability to support future development as well as life safety and emergency operations. An important component of the roadway network is the county's bridge inventory. Bridge repair and maintenance is crucial to regional connectivity. In addition, seasonal changes and natural hazards (landslides, stormwater runoff, and fallen trees) guarantee that maintenance will be

a significant component of Chelan County's transportation plan in the next 20 years.

Pedestrian and Bicycle Infrastructure

Sidewalks are generally available within city jurisdictions. However, in more rural areas of the county, only shoulders are provided and in most cases no separated pedestrian facilities are provided at all. This limits the mobility of pedestrians outside of city limits.

The City of Wenatchee has an existing bicycle plan as it provides bicycle facilities throughout the city. Other jurisdictions provide shared mixed-use lanes and signage. The county plans and implements pedestrian and bicycle facilities outside of city limits where feasible and funding is available.

Transit Access and Availability

Since population centers are distant from one another, bus service provides significant mobility. The county coordinates with and encourages transit usage and service to help residents, employees, and visitors reach their destinations.

REGIONAL GROWTH

Regional development will play a role in the growing demands on Chelan County's transportation network by 2037. The county is expected to continue adding residents and jobs at a steady rate. This growth will add traffic to Chelan County's streets, as well as US 2, US 97 and US 97A, which has an impact on the quality of life for county residents. To maintain and improve mobility, as well as connectivity to the rest of the region, the county should coordinate with regional and local partners. Continued coordination with regional entities and city agencies will be critical to ensure a complete and connected transportation system that serves Chelan County residents, employees, and visitors in the future.

FUNDING

Funding for transportation improvement projects as well as preservation and maintenance of the current network has been stretched thin in recent years. The county is exploring multiple options to best maximize its funds to best serve the needs of residents, employees, and tourists in the county. Chapters three and seven of this Transportation Element shed more light on the challenges and opportunities of funding the transportation network.

agencies apply for the grants in an effort to increase pedestrian safety. In addition, the county is looking to provide more complete facilities for non-motorized users, such as shoulders, trails, and sidewalks.

SAFETY

Since 2011, Chelan County has seen 150 to 175 traffic collisions per year. **Figure 14, Figure 15, and Figure 16** display traffic crashes around the county over a period spanning January 2011 to April 2016.

The county has a draft Roadway Safety Plan per the states mandate. This plan follows WSDOTs Target Zero methodology where primary crash factors and high risk behaviors are identified so that a countywide, or systemic, approach would be taken to generate high priority mitigation projects. The current analyses found that “Lane Departure crashes are identified as the top priority for the 2017 Chelan County Roadway Safety Plan (CCRSP). Based on the historical data from 2011 to 2016, over 54 percent of collisions involved a stationary object along rural roads (i.e. trees, signs, guardrails). The statistics not only verify Lane Departure as a Priority Level 1 factor but also demonstrate that other factors within the high risk behavior and road user groups may be positively affected by focusing efforts on reducing the occurrence and severity of lane departure crashes.” This Plan analyzes fatal and serious injury crashes in the years 2005 through 2015.

Furthermore, the county and individual cities aim to provide safe access to schools through the state’s Safe Routes to School (SRTS) grants as well as other key destinations. These

Figure 14. Collisions from 2011-2016 (Chelan, Manson, and Entiat Vicinity)

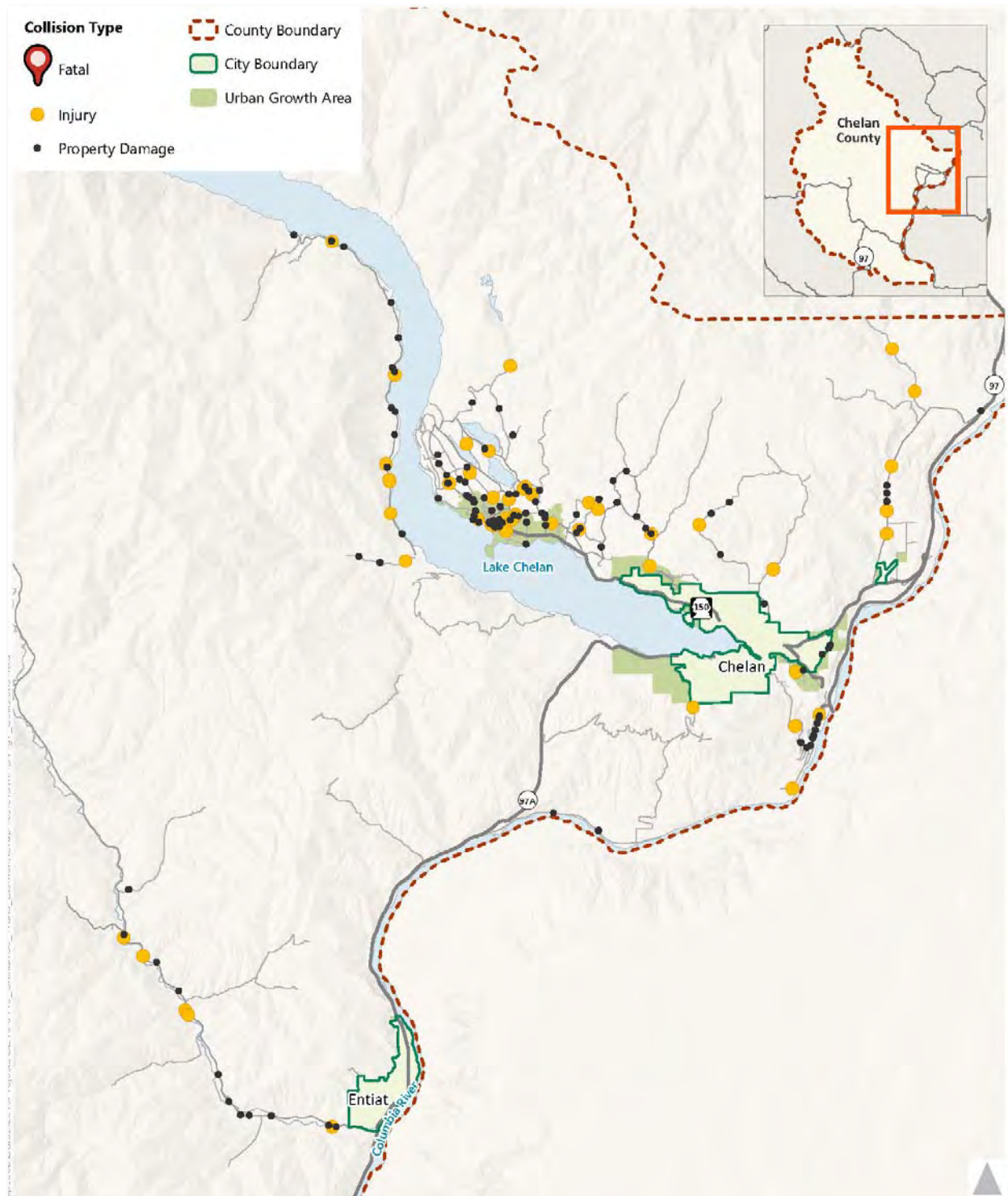


Figure 15. Collisions in 2011-2016 (Cashmere/Monitor and Wenatchee/Sunnyslope Vicinity)

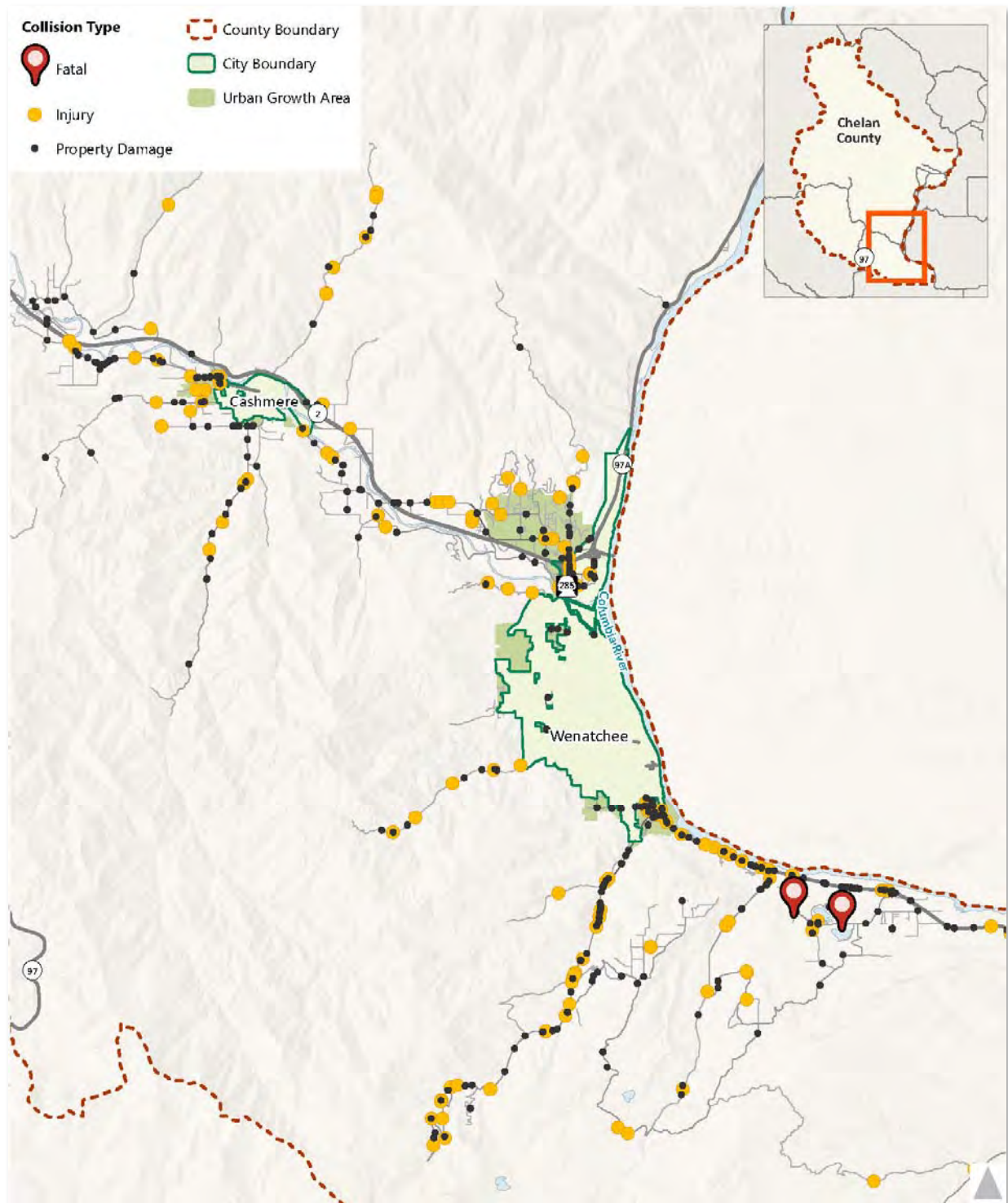
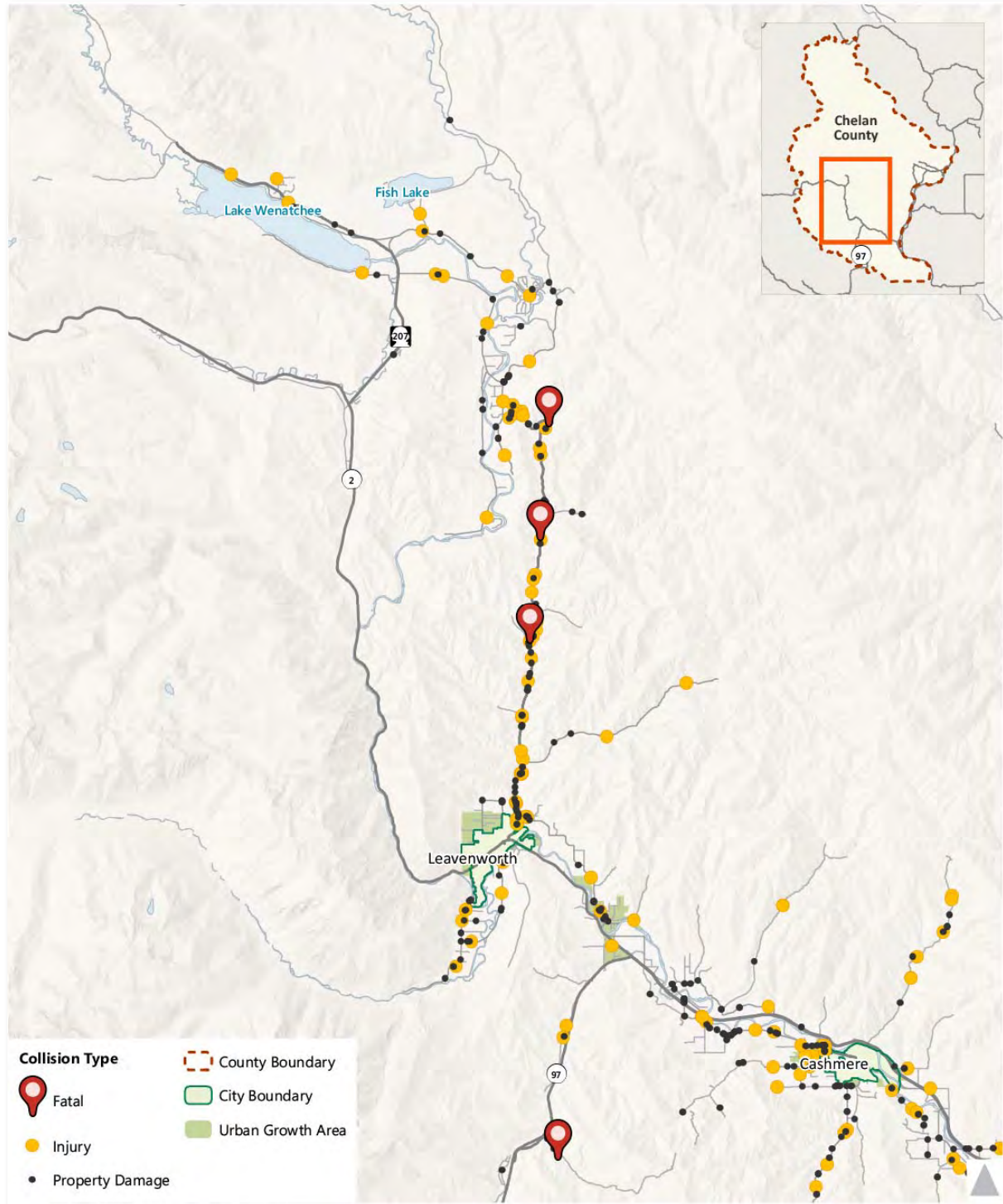


Figure 16. Collisions in 2011-2016 (Leavenworth, Peshastin, and Plain Vicinity)



CHAPTER 3: MAINTAINING OUR SYSTEM

The capital plan (Chapter 6) of this element presents the future transportation infrastructure investments that are recommended to achieve the county's mobility goals. However, the vast majority of the county's future transportation system is already on the ground today and needs to be operated, maintained, and preserved over the life of this plan. The critical importance of adequately funding ongoing programmatic expenditures is emphasized in Goal 1 of this plan: Maintain What We Have.

This chapter discusses conditions and trends in programmatic expenditures related to the county's existing roads and bridges.

I. EXISTING SYSTEM

The county road inventory consists of a total of 644 miles of roads and 52 county-owned bridges. This inventory does not include State Routes or city streets, which are maintained and operated by the State and city agencies, respectively. Rural roads form the majority of the system (567 miles). A total of 123 miles of county roadways were unpaved in 2016.

To keep this system functioning, the county makes the following types of investments, which are described in further detail below:

- **Maintenance.** Routine and ongoing activities to ensure facility utility, e.g. pothole repair and snow and ice control.
- **Preservation.** More substantive improvements to extend the useful life of assets, like pavement repair and chip seals.
- **Administration and Operations.** Public works transportation administration and support; engineering and planning

services that support transportation projects.

- **Capital Outlay.** Buildings and maintenance facilities that support the transportation program.

MAINTENANCE

The county performs regular maintenance on its roadway system. Maintenance is considered a routine activity associated with repairing a physical asset or keeping the physical asset functional during its useful life. The major maintenance activities conducted by the county include:

- Pavement crack sealing and pothole repair
- Gravel road maintenance
- Shoulder maintenance
- Roadside maintenance
- Road storm drainage facility maintenance
- Bridge repair and maintenance
- Guardrail repair and maintenance
- Signing and striping
- Snow plowing and ice removal

PRESERVATION

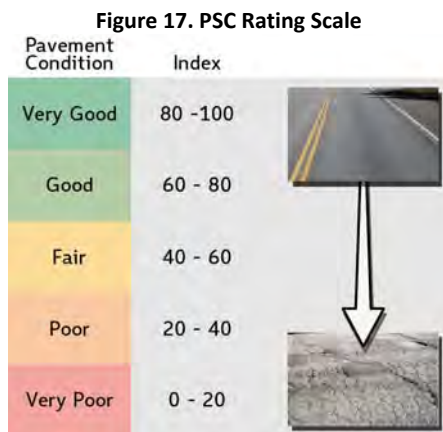
Preservation is the replacement or repair of an asset to keep it in service at its lowest life cycle cost. Examples of preservation are replacing a bridge or repaving a roadway. There is a strong relationship between maintenance and preservation, in that if the county's roadways are well maintained, it will maximize their useful life and minimize the cost of keeping the roadways functional when it comes time to repair/replace them.

The following activities are examples of preservation:

- Pavement repair followed by
 - Chip Sealing

- Hot Mix Asphalt overlay
- Bridge repair/replacement

To monitor pavement maintenance and preservation needs, Chelan County maintains a Pavement Management (PM) program that regularly collects data and rates pavement conditions for all paved roadways under the county's jurisdiction. The ratings are the result of field assessments of the percentage of roadway surface experiencing conditions like alligator cracking, longitudinal cracking, patching, asphalt raveling, and transverse cracking in a given length of roadway. From these observations, the Pavement Surface Condition (PSC) rating is calculated. The rating is a scale of 0 to 100 (**Figure 17**).



These ratings are used to evaluate treatment strategies, assess overall management of the

roadway surface network, and inform future funding needs.

As the figure (**Figure 18**) below shows, pavement degrades in a non-linear fashion. Once pavement falls into the fair/poor categories, its condition rapidly degrades without maintenance intervention. The cost to bring a road into good condition or maintain it at this level escalates quickly as the roadway degrades. A road in good condition can be maintained with simple patching and sealing, whereas roads in fair condition may require an overlay, and very poor condition roads often require full reconstruction.



(Source: Chelan County Public Works)

Figure 18. National Standard Deterioration Curve for Pavement



In addition to roadways, the other major asset that the county is responsible for is bridges. The State mandates a biannual review of all bridges to determine their condition. The result of this analysis is a rating of bridges to determine the condition of the structure and if they are functionally obsolete or structurally deficient. Of the 52 bridges under the county's jurisdiction, 11 are deficient, either structurally deficient or functionally obsolete, while several other structures require deck rehabilitation, scour repairs, painting, or structural concrete repairs.

It is a federal requirement that signs be replaced when the visibility of the sign at night falls below a prescribed visibility. To comply with this mandate, the county must determine when signs need to be replaced based on the average visibility of a sign. Different sign material fades at different rates.

There are many other elements of county roads including shoulders, drainage features, walls, guardrail, pedestrian facilities, traffic signals and street lights. Most of these elements have not had a systematic method of evaluating condition over time, with elements of the system replaced only when they fail or fall out of compliance. The county's recent efforts to develop an Asset Management System for all roadway elements will close this gap and provide a systematic means for replacing or refurbishing these elements over time.

ADMINISTRATION AND OPERATIONS

Another critical component to keeping the county's transportation system functioning are the public works staff that administer and support the system by responding to emergencies, conducting maintenance activities, and providing planning and engineering improvements to the system.

CAPITAL OUTLAY

Last, but not least, are the support infrastructure for the transportation system, such as snow plows, maintenance shops, and other heavy machinery that are owned and maintained by the county to keep the transportation system functioning year round.



(Source: Chelan County Public Works)

The following table (**Table 4**) shows programmatic expenditures over the past 10 years.

Table 4. Historical Programmatic Expenditures, 2005-2015

Year	Preservation	Maintenance	Administration & Facility Operations	Capital Outlay for Facilities	Total Programmatic Expenditures
2005		\$4,762,181 ⁵	\$1,407,740	\$494,992	\$6,664,913
2006		\$6,305,543	\$1,659,964	\$15,123	\$7,980,630
2007		\$7,432,486	\$2,193,314		\$9,625,800
2008		\$5,342,218	\$2,349,098	\$129,475	\$7,820,791
2009	\$1,121,213	\$5,090,481	\$2,358,031		\$8,569,725
2010	\$1,473,810	\$4,658,762	\$2,076,978		\$8,209,550
2011	\$1,430,599	\$4,700,316	\$2,384,530		\$8,515,445
2012	\$1,193,949	\$5,031,611	\$2,492,566		\$8,718,126
2013	\$2,020,342*	\$4,913,515	\$2,893,629	\$78,647	\$9,906,133
2014	\$2,472,675*	\$4,930,081	\$2,492,189	\$74,129	\$9,969,074
2015	\$1,163,702*	\$5,543,230*	\$2,719,765	\$18,767	\$9,445,464
TOTAL	\$10,876,290	\$58,710,424	\$25,027,804	\$811,133	\$95,425,651

Source: Chelan County Public Works, 2016.

*These years had an injection of funding allocated from the Distressed County fund with some Preservation dollars moved to Maintenance in 2015. The Distressed County funding was a one-time allocation.

⁵ Maintenance expenditure includes preservation expenditures from 2005 to 2008.

II. BUDGETING FOR GOOD STATE OF REPAIR

The county evaluated its transportation system inventory and likely maintenance and preservation needs over the next 20 years. Below, each element of the county's inventory is described with annual expenditure needs summarized at the end.

PAVEMENT

There are two primary types of paved roadways under Chelan County's jurisdiction:

- Hot mix asphalt (HMA) is the most durable asphalt treatment regularly performed in the county. These roadways have a design life of 20 years. Performing a roadway overlay with HMA costs approximately \$210,000 per center line mile for roadways that are in fair condition or better and \$252,000 per center line mile for roads in poor condition. The county has 79 center line miles of HMA paved roadways, 5.5 miles of which are in poor condition (PSC less than 40). (Roadways that are HMA paved generally receive a chip seal within 10-years to further the life of the road. These roads may be listed included in the BST inventory.)
- Bituminous surface treatment (BST), also known as chip seal, is a lower-cost treatment that has a shorter design life of approximately 7 years. The county currently has 444-centerline miles of BST paved roadways, 13 miles of which are in poor condition (PSC less than 40). Performing an overlay of a BST roadway is approximately \$30,000 per center line mile. (An undetermined number of miles of BST roadways were originally constructed with HMA surfacing.)

Table 5, below, summarizes the annual investment need for pavement preservation based on this inventory. Consistent with Goal 1 of Maintaining What We Have, this plan recommends front loading pavement preservation costs in the first six years of this plan to address the existing backlog in pavement needs.

OTHER ROADWAY ELEMENTS

While pavement preservation is the primary cost related county roads, there are other important elements to consider, including shoulders, drainage features, pedestrian facilities, guardrail, concrete barriers, signals and signage. **Table 5** summarizes costs associated with replace/refurbishing guardrail, concrete barriers, and signage over the life of this plan.

BRIDGES

As described earlier, there are 52 bridges under Chelan County's jurisdiction and 11 are considered functionally obsolete or structurally deficient. While the County does not have the resources to address all 11 deficient bridges in the near future, to protect the safety and continued mobility of Chelan County residents and businesses, this Plan recommends starting rehabilitation of two of these bridges over the next 10 years. It is assumed that the cost to rehabilitate two bridges is approximately \$28 million. Assuming the federal match of 80 percent for those bridges, the cost to the county of retrofitting these bridges would be approximately \$560,000 annually over the next 10 years.

Table 5. Recommended Preservation Expenditures

Element	Conditions PSC	Qualitative Condition	Inventory	Unit	Design Life (years)	Unit cost (\$)	Annual Investment
Paved County Roads							
Paved Roads	PSC \geq 40	Fair to Very Good	507	Center line (CL) miles	7	\$30,000 per CL mile	\$2,173,000
	PSC < 40	Poor to Very Poor	18	CL miles	6	\$400,000 per CL mile	\$1,200,000
Annual Pavement (Years 1-6)							\$3,373,000
Annual Pavement (Years 7-20)							\$2,173,000
Other Roadway Elements							
Guardrail			75	CL miles	30	\$158,400 per CL mile	\$396,000
Signs			45,150	SF	10	\$15 per SF	\$68,000
Concrete Barriers			12	CL miles	40	\$45 per linear foot	\$77,000
Pedestrian Facilities			118,117	LF	50	\$58	\$138,000
Drainage Facilities			35	EA	75	\$176,790	\$83,000
Annual Other Roadway Elements							\$762,000
Bridges							
Bridges			52	EA	100	\$28,000,000 for the replacement of 2 bridges	\$560,000 <i>(Assumes federal funding)</i>
Annual Preservation Years 1-6							\$4,695,000
Annual Preservation Years 7-10							\$3,495,000
Annual Preservation Years 11-20							\$3,495,000

MAJOR FINDINGS

It is worthwhile to note that this analysis suggests that the county's investments in preservation should increase substantially relative to recent spending levels. To make room for this growth in preservation expenditures, the county will need to reconsider its funding priorities and potentially consider additional funding sources for transportation. The final chapter of this Plan considers ways to increase transportation revenues, such as local option gas taxes and a

levy lid lift, both of which could fund system preservation.

III. POLICIES TO SUPPORT A GOOD STATE OF REPAIR

The following policies are recommended to enhance Chelan County's ability to preserve its existing system over the course of this Plan. Many of these policies have been applied in other jurisdictions and already with Chelan County.⁶

⁶ Pierce County's May 2008 Transportation System Preservation Discussion white paper was a source for some of these policies.

PRIORITIZE SYSTEM MAINTENANCE OVER SYSTEM EXPANSION

The cost-effective preservation of the existing and future transportation system should be a funding priority ahead of expanding the system. This Plan recommends addressing the backlog of pavement and bridge projects in the first 10 years, even at the expense of capital expansion.

IDENTIFY NEW SOURCES OF FUNDING THAT CAN PAY FOR SYSTEM MAINTENANCE AND PRESERVATION

The county should look for ways to increase the amount of annual funding available for system maintenance and preservation activities. In considering new sources of funding, those that can fund maintenance and system preservation activities should be prioritized.

MAINTAIN THE COUNTY'S TRANSPORTATION SYSTEM AT LOWEST LIFECYCLE COST

To maximize the county's funding resources, transportation assets should be replaced or rehabilitated at the point of lowest cost in the lifecycle of the asset.

ENHANCE THE CURRENT PAVEMENT MANAGEMENT SYSTEM TO CONSIDER MORE COMPREHENSIVE INVENTORY OF ASSETS

A comprehensive asset management system for all road assets is a key strategy for being able to accomplish the goal of lowest life-cycle cost for these assets. The county's Pavement Management system is an excellent step in the right direction, although the system could be expanded to monitor the condition of a comprehensive list of roadway assets, such as guardrail, signs, and concrete barriers. A comprehensive asset management system includes the following elements:

- Setting level of service goals
- Developing and maintaining a complete inventory of assets
- Regularly collecting asset condition and usage data
- Tracking costs

- Developing a method for evaluating risk
- Developing a method for evaluating when and how to replace or refurbish the asset
- Adopting performance measures that provide information to best manage the resources used to manage the asset.

Once all of these elements of a system are in place to manage an asset, county staff can justify and allocate the resources needed to effectively preserve the assets.

DEVELOP A RESERVE FUND TO ADDRESS UNFUNDED PROGRAMMATIC AND UNANTICIPATED EVENTS

In recent years, the county has seen an uptick in system failures related to weather and aging infrastructure. The county should consider developing an emergency infrastructure fund to address these unanticipated events, as they can strongly impact safety and quality of life in Chelan County. The types of expenditures that might be covered by this sort of account includes the needs shown in **Table 6**.

Table 6. Reserve Fund

Need	Annual Cost	Note
Bridge Repairs	\$150,000	
Culvert Replacement and Stormwater Mitigation	\$1,000,000	Over 7 years to replace culvert with a mandated bridge and other significant infrastructure
Guardrail Infill	\$75,000	
ADA Compliant Needs	\$100,000	
Slope/Wall Stabilization Needs	\$500,000	For first 10 years then \$250,000 per year after
Hazardous Tree Removal	\$150,000	For first 6 years, then \$50,000 per year after
Increase in Regulatory Mandates	\$30,000	Increases that impact Public Works from operations and maintenance to unforeseen impacts of projects
Emergency Funding	\$100,000	\$200,000 is already budgeted under Extraordinary Operations

CHAPTER 4: TRANSPORTATION GOALS AND POLICIES

This chapter provides a summary of the six main goals that encompass the county's transportation vision. These goals incorporate the many different priorities from different jurisdictions to promote consistency between the county and other stakeholders. Ultimately, this transportation element is guided by one overarching goal:

Provide a safe, balanced, and efficient multimodal transportation system that is consistent with the county's overall vision and adequately serves anticipated growth.

I. GOAL 1 – MAINTAIN WHAT WE HAVE

Maintain existing transportation facilities in a state-of-good-repair to ensure their continued function, which is critical to achieving all of the county's mobility goals.



1.1 Maintain a comprehensive transportation system plan, showing roadway classifications, roadway extensions, future facility locations and right-of-way needs.

1.2 Prioritize the cost-effective maintenance and preservation of the existing transportation system over system expansion.

1.3 Identify new sources of funding that can fund system maintenance and preservation.

1.4 Enhance, or add to, the current pavement management system to consider replacement needs of a more comprehensive inventory of assets.

1.5 Develop an emergency fund to address unanticipated events, such as slides and bridge failures.

1.6 Document, in rank-order from highest to lowest priority, Chelan County roads that are to be maintained during snow periods.

1.7 Require a maintenance agreement for private roads that are approved as a result of development or changes in land use.

1.8 Define and implement improvements to preserve the level of service and operations of the existing county road system.

1.9 Implement a transportation concurrency program to deny approval of any development proposal that would cause a roadway segment to fall below the adopted minimum level of service (except for highways of statewide significance) unless transportation improvements or strategies to accommodate the impacts of the proposed development are made concurrent with the development.

1.10 For SEPA review of new development and planning and design of transportation facilities, recognize that the minimum level of service adopted for State Routes and county arterials and collectors is level "C" for rural areas and level "D" for urban areas.

1.11 Prioritize and program road improvements to minimize seasonal road restrictions or closures.

1.12 Minimize direct vehicular access from private property onto arterial streets and collectors. Instead, encourage access via frontage roads or connecting local streets.

1.13 Pursue the restriction/elimination of roadway access points as opportunities arise to maintain the capacity, operations and safety of existing arterials and collectors.

1.14 Maintain access to existing airport and floatplane facilities and accommodate needed

expansion to serve growing population and employment needs.

1.15 Support the Emergency Management Service and the school bus services to address their specific needs in the prioritization of roadway maintenance activities.

1.16 Where possible, use the planning process and SEPA to evaluate impacts to safety, access, roadway/intersection operations, environmental processes, and apply transportation concurrency to measure the adequacy of the impacted roadway segments from new development.

II. GOAL 2 – PROVIDE A SAFE SYSTEM

Create a transportation network that can be shared safely by all users and provides sufficient access for emergency response.



2.1 Recognize the needs of all users of the transportation system including motor and freight vehicle drivers, bicyclists, pedestrians, and public transportation users, and balance the needs in all types of *rural* and *urban* transportation and development projects and through all phases of a project.

2.2 Apply adopted County Road Classification and Design Standards in the design and construction of roadways consistent with Title 15.30 of the Chelan County Code.

2.3 Maintain a functional classification system, and design roadways in accordance with functional classifications and 20-year travel demands.

2.4 Treat safety, and preservation of the existing roadway systems as high priorities.

2.5 Work with WSDOT and other agencies to improve traffic safety of roadways and intersections that intersect with county facilities.

2.6 Evaluate proposed transportation projects for their impacts to emergency service access and existing uses.

2.7 Include specific provisions for non-motorized travel in the design of all new and existing transportation facilities, where feasible.

2.8 Encourage safe and convenient non-motorized connections between developed and developing areas.

2.9 Establish a system of designated bicycle and trail routes for transportation and other recreational uses utilizing existing transportation corridors where safety considerations are not compromised.

2.10 Support improved non-motorized and trail signage.

2.11 Recognize the non-motorized system as an extension of transit, and support needed linkages and access to transit stops.

2.12 Apply Americans with Disabilities Act (ADA) guidelines to facilitate access within urbanized areas.

2.13 Improve the safety and efficiency of railroad crossings.

2.14 Discourage the use of dead-end roadways in new developments, where feasible.

2.15 Develop and maintain a countywide safety plan to address systemic safety concerns on county rural roadways.

III. GOAL 3 – ENSURE FINANCIAL VIABILITY

Plan for a system that is financially viable, including consideration of full lifecycle costs in infrastructure investments and leveraging outside funds (including grants and private dollars) wherever possible to maximize community benefits.



3.1 Establish a prioritization system based on criteria and ranking of transportation projects based on the three highest county priorities – safety, leveraging of outside funding sources, coordination with other agencies.

3.2 Promote the equitable distribution of the costs of transportation facilities between the public and the private sector.

3.3 Develop the annual Six-Year Transportation Improvement Program (TIP) so it is financially viable, leverages available county funding, and is consistent with the Comprehensive Plan.

3.4 Ensure that new development mitigates their impacts on the transportation system.

3.5 Maintain the existing development review process for transportation that addresses concurrency, SEPA, Road Standards, and other impacts and potential mitigation requirements per Title 15. Review the cumulative transportation impacts of new development and implement methods of sharing mitigation costs.

3.6 Provide for Latecomer Agreements to better allocate improvement costs.

3.7 Explore implementation of a Transportation Impact Fee program to help fund the implementation of growth-related transportation projects.

3.8 Improve the sustainability of the county's funding maintenance, operations, and capital improvements. Periodically review funding status and consider increasing the County Road Levy, including possible voter approval of a Levy lift. Consider formation of a Transportation Benefit District (TBD) to help fund county and/or regional transportation improvement projects. Explore and implement other public/private funding options such as Local Improvement Districts (LID) and Road Improvement Districts (RID).

3.9 Coordinate among jurisdictions (Chelan County, Cities, LINK Transit, Port Authority of Chelan County, WSDOT, and incorporated cities) to jointly fund transportation improvements.

3.10 Pursue a range of grants to help fund roadway and multimodal transportation improvement projects.

3.11 Work with State legislators, other counties, local cities, and other stakeholders to reduce restrictions on use of Planned Action Ordinances, Transportation Benefit Districts, and other available funding programs.

IV. GOAL 4 – SUPPORT LAND USE

Provide a transportation system that works hand-in-hand with existing and planned land uses, supports farm-to-market and recreational tourism needs, and balances economic development with existing users.



4.1 Review and update the transportation element concurrent with major Comprehensive Plan Update to respond to changes in land use planning, funding, or operating of the

transportation system and in accordance with state law

4.2 Prioritize and support improvements to facilities that are critical components of the intermodal transportation systems (e.g. roads leading to airports, rail transfer facilities, access to businesses, agricultural lands and employment centers, etc.).

4.3 Prioritize and support improvements to the County Freight and Goods Transportation System (FGTS) roads to complete an All-Weather Road System.

4.4 Promote coordinated non-motorized system improvements focusing on access to schools, parks, transit services, employment and service centers, and shorelines.

4.5 Coordinate with other agencies to develop a Comprehensive Trails Plan to analyze alignment, design, cost, phasing and relative priority of trail projects, and to identify the needed linkages between the trails.

4.6 Encourage transit facilities and services as mitigation, where appropriate, for new developments.

4.7 Encourage improved water transportation on Lake Chelan.

4.8 Protect existing public access to public waterways and lands and seek opportunities to increase public access wherever practical.

4.9 Coordinate with Cities, communities and port districts, where possible, to accommodate industry in new growth areas.

4.10 Require development to include public and non-motorized transportation compatible designs in all projects.

4.11 Support urban growth boundaries, urban nodes, residential centers, and employment centers identified in local comprehensive plans

in order to promote an efficient land use pattern and transportation network integration.

4.12 Ensure development regulations are flexible and receptive to innovations and advances in transportation technology.

V. GOAL 5 – ENVIRONMENTAL STEWARDSHIP

Avoid and minimize negative environmental and societal impacts from the transportation system and enhance the natural and social environment when possible.



5.1 Consider and be respectful of the rural and historic character of the county while implementing the transportation element.

5.2 Encourage the development and implementation of transportation demand management programs appropriate for the various communities in the County.

5.3 Coordinate with and adhere to regional, State, and Federal agencies on reducing air quality impacts.

5.4 Consider refinements to roadway design standards so as to minimize impacts on hydrologic systems, including surface and groundwater quality.

5.5 Provide flexibility on the width of pavement and lanes to allow for narrower lanes while still assuring that roadways function safely for cars and trucks, public transportation, bikes, pedestrians, and other service vehicles. The use of alternatives to impervious surface materials, wherever possible, should also be considered.

5.6 Develop alternatives to transportation improvement projects when significant adverse environmental impacts have been identified.

5.7 Develop and apply mitigation strategies to reduce unavoidable adverse environmental impacts of transportation improvements.

VI. GOAL 6 – BE AN ACTIVE PARTNER

Coordinate with a broad range of groups (including local, state, and regional agencies, key stakeholders, businesses, and the public) to develop and operate the transportation system.



6.1 Coordinate with Cities, Chelan-Douglas Transportation Council (CDTC), LINK Transit, Washington State Department of Transportation (WSDOT), and other adjoining agencies.

6.2 Encourage public participation in transportation-related decisions and provide forums to help citizens understand transportation issues.

6.3 Work with cities to develop and adopt street design standards for each city's Urban Growth Area.

6.4 Develop consistent or compatible processes to identify and set priorities for transportation improvement projects in each agency's six-year transportation improvement program.

6.5 Coordinate with the US Forest Service relative to their activities and policies on transportation.

6.6 Prioritize projects that help to create a comprehensive, integrated and connected network of roads, trails, and other transportation services.

6.7 Coordinate maintenance activities and annual maintenance programs with adjacent jurisdictions, Forest Service, and WSDOT.

6.8 Work with WSDOT to provide input into the planning process and to explore opportunities to implement the State Airport Plan.

6.9 Work with WSDOT to provide input on the State Rail Plan and to facilitate implementation of rail transportation facilities and services.

6.10 Work closely with local, regional and State partners to monitor rail freight activity and ensure that the county's priorities, preferences, and interests are represented and factored into emerging State and County policies and programs.

6.11 Explore opportunities for separated mixed-use paths to enhance enjoyment of natural/scenic areas in a safe manner.

6.12 Work with LINK Transit, WSDOT, and local agencies to develop park-and-ride, park-and-pool, and express transit service where the need for such facilities has been identified.

6.13 Work with other local, State, and Federal agencies to achieve improvements to transportation systems that promote safe and efficient access for recreational and tourism activities throughout the county.

6.14 Require dedication of roadway rights-of-way in land development processes, in accordance with the appropriate functional classification, County Road Standards, and County/WSDOT policies.

6.15 Recognize that Forest Service and primitive roads are generally unsuitable for residential development.

6.16 Support cooperative efforts to provide for docking of boats, barges, and float planes on Lake Chelan with the National Park Service, Forest Service, Chelan County Public Utility District, and the Port of Chelan County.

6.17 Ensure that stakeholders, including property owners, have an opportunity to

provide comment on the expansion of trails and on transportation facility improvement projects.

CHAPTER 5: TRANSPORTATION VISION

Looking into the future, Chelan County aspires to provide a transportation system that serves all users through the provision of safe and well-maintained facilities.

The following chapters detail the capital plan to meet this transportation vision and the funding plan needed to ensure these capital investments and ongoing programmatic expenditures, including system operations and maintenance, are in place during the life of this plan.

In general, Chelan County roads are rural two lane roads which mainly serve automobile traffic. Determining how the entire transportation network fits together throughout the county requires identifying desirable facilities for each mode and then identifying infrastructure enhancements to ensure safe and complete facilities for all users.

I. WALKING

Walking is the most fundamental transportation mode since a portion of every trip is made by walking. While most county streets tend not to need fully separate sidewalks or paths due to their low pedestrian and vehicle volumes, some of the county's arterials and collectors do warrant dedicated pedestrian infrastructure.

Population dense areas with commercial land uses and roadways that serve schools, parks, regional recreational destinations and churches support more pedestrians and may have a larger portion of vulnerable users than other streets.

Measures such as widened shoulders that provide increased separation from moving vehicles, multi-use trails, marked crosswalks, and sidewalks at roadway crossings support pedestrian travel throughout the county.

Table 7 and Table 8 establish guidance in terms of the level of accommodation that the county wishes to provide for pedestrians. **Table 7** applies to the UGA and LAMIRD areas, where pedestrian demands warrant special attention.

The highest level of accommodation for walking, indicated in the green row, would provide improved pedestrian facilities such as trails and separated facilities that are ADA accessible and have wayfinding signage and milepost markers. The yellow level of accommodation would make strong progress in maintaining the existing sidewalk and pedestrian network and building out the network by filling sidewalk gaps or pedestrian shoulders to ensure that a pedestrian facility is provided on at least one side of the roadway. Incomplete or missing pedestrian facilities would fall into the red category and not satisfy the county's goals for accommodating pedestrians.

Table 7. Pedestrian Level of Service in UGA or LAMIRD Areas







LOS	Description
	Improved network of paved trails that are ADA accessible and have marked wayfinding signage and milepost markers.
	Maintain existing sidewalk and pedestrian facility provided on one side of the street.
	No pedestrian facility or degradation of existing facilities.

Table 8 applies to unincorporated areas outside of the UGA and LAMIRD areas, where pedestrian demands are considerably lower. The highest level of accommodation for walking, indicated in the green row, would provide enhanced pedestrian facilities relative to what exists today. These types of improvements could be provision of trails, wayfinding signage, or sidewalks or wide

shoulders on at least one side of the roadway. The yellow level of accommodation would include maintaining what exists today. The red category, or not meeting the county's standards, would be allowing existing pedestrian facilities to fall into disrepair.

Table 8. Pedestrian Level of Service Outside of UGA or LAMIRD Areas

LOS	Description
	Improved network pedestrian facilities from what exists today
	Maintain existing pedestrian facilities
	Degradation of existing facilities



II. BICYCLING

Chelan County already sees bicycling along its trails and rural roadways, which offer one popular form of recreation and a practical mode of transportation for some county residents, recreationalists and workers.

One of the county's goals is to support bike route connections to provide cross-county bicycle mobility. This can be challenging due to the lack of bicycle infrastructure. In most cases, shared shoulders and on-street bicycle lanes provide sufficient infrastructure for county roads. Shoulder widening and additional trails or trail extensions can enhance connectivity between destinations.

Chelan County strives for the green level of accommodation for bicycling by installing the bicycle facilities that offer more separation from vehicle traffic. At a minimum, maintaining its existing network of bicycle infrastructure along county roads and supporting city and regional entities in implementing bike projects will achieve the yellow level of accommodation for cycling as shown in **Table 9**.

Table 9. Bicycle Level of Service

LOS	Description
	Installation of facilities that provide more separation from vehicle traffic
	Maintain existing bicycle network and support regional entities in implementing improvements
	Removal or degradation of existing bicycle facilities.




III. TRANSIT

Transit operations throughout the county are managed by LINK Transit, but Chelan County can still aim to create an environment that is welcoming to transit. The county will work with LINK Transit to assist with transportation accommodations for planned service expansions and identify areas where additional or future service or improvements are needed.

Interstate transit service is provided by Amtrak. The county will also assist with transportation accommodations for access to Amtrak and connections to and from its own transportation system.

Table 10 provides guidance for the county's level of accommodation for Transit.

Table 10. Transit Level of Service

LOS	Description
	Work with transit to accommodate access to transit service expansion.
	Work with LINK Transit to maintain existing transit service.
	Removal of access to transit.



Amtrak Icicle Station, Leavenworth



LINK Transit Columbia Street Station, Wenatchee

IV. FREIGHT AND AUTO

Most trips in Chelan County occur along its roadway network, which serves as the backbone for accessing homes, jobs, and other destinations. Many of these trips occur along low-volume county rural roadways or local streets that do not see significant traffic volumes throughout the day. Similarly, goods movement and delivery vehicles for the many fruit producers and transporters use some corridors frequently while other roadways see only occasional local delivery. As fruit and produce production is a seasonal industry, county roads experience high volumes of freight and auto usage during harvest season.

Table 1 (Chapter 2) identifies the functional classification of all roadways. These classes indicate the level of use of each facility for automobiles, specifically in terms of facilitating vehicle and freight mobility as well as other modes.

Figure 12 (Chapter 2) specifies the WSDOT freight classification of Chelan County's major roadways that support goods movement. The classifications of these corridors (**shown in Appendix**) indicate the annual weight of goods that travel on a corridor. The functional classification and freight class of a roadway should guide future investments to ensure a roadway can carry appropriate freight loads.

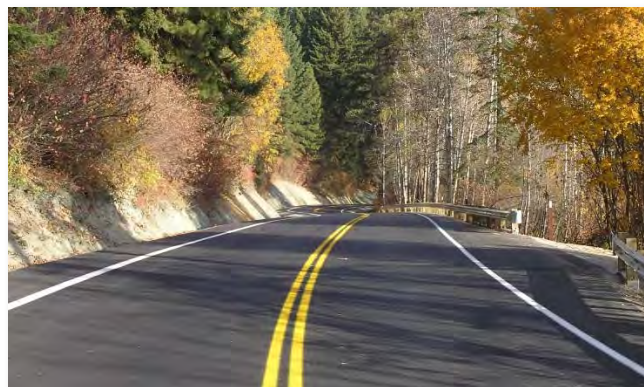
Chelan County will maintain its current LOS standards roadways (LOS C for rural roads and LOS D for roadways in urban growth areas). Very few areas within the unincorporated parts of Chelan County have operational issues. Most roadways are currently meeting the LOS standard and are still expected to continue meeting that standard over the next 20 years as the county grows. One segment along Easy Street near the US 2 interchange is expected to fall below the LOS D standard. Additional notable segments to monitor include the Malaga Alcoa Highway which may fall below the LOS D standard if the Alcoa Plant reopens as

well as Squilchuck Road which will see increased traffic if the Mission Ridge Ski Resort expands.

The capital list provided in the next chapter includes future roadway projects that would maintain the county's LOS standard through 2037.



Easy Street and School Street, Sunnyslope



Chiwawa Loop Road, Chelan County



Joe Miller Road, Chelan County

CHAPTER 6: CAPITAL PLAN

This chapter presents the capital program that forms the basis of this transportation element. Collectively, this program adds up to about \$102 million in transportation capital improvements to be constructed over the next twenty years.

The components of the transportation program include \$248 million for programmatic expenditures which include administration and operations, maintenance, and preservation of the county's transportation infrastructure.

Table 11 provides a summary of the total expenditures for the 20-year program.

Maintaining Chelan County's transportation system is important for sustaining the quality and safety of roadways and is listed as the number one goal for this plan.

Table 11. Twenty Year Transportation Program

<i>Expenditures</i>	<i>Planning Level Costs</i>
Programmatic Expenditures	
Administration and Operations	\$53.5 million
Maintenance	\$163.7 million
Preservation	\$25.9 million
Capital Outlay	\$5.4 million
Capital	
Capital Projects	\$102 million
Total	\$350.5 million

Funding to support this program will come from a number of sources including property tax, fuel tax, Real Estate Excise Tax 2, and state and federal grants, as well as consideration of new funding sources, such as a Levy Lid Lift. Additional detail about funding to support the transportation plan can be found in the following chapter (**Chapter 7**).

The program was developed to realize Chelan County's goal: to provide a safe, balanced, and efficient multi-modal transportation system that is consistent with the county's overall

vision and adequately serves anticipated growth. This vision is guided by the transportation goals outlined in this plan:

Goal 1: Maintain what we have

Goal 2: Safety

Goal 3: Ensure financial viability

Goal 4: Support land use

Goal 5: Environmental stewardship

Goal 6: Be an active partner

The six goals, as well as existing and anticipated needs gathered from countywide planning documents and conversations with stakeholders and the general public form the basis of this project list. **Table 12** provides the Chelan County 20-Year Project List, which represents a balance of maintenance, safety, and operational improvements for all modes. These projects are listed by geographical area and are ordered based on their priority, as determined by how well each project helps advance county goals. The projects are also mapped in **Figures 20-27**.

These projects provide a starting point for the county in developing its financially constrained Six-Year Capital Improvement Plan, which is updated annually and is developed based on knowledge related to project feasibility and funding availability.

While the scope of the 20-year project list exceeds revenues from exclusive county sources over the next few decades, it has been sized to fit within reasonable assumptions for grants and other outside funding sources. Additional projects that were identified in the planning process, but did not fit within the financially constrained 20-year project list are included in **Table 13** as Vision Projects.

Moreover, projects located in the county that are led by the cities and other agencies such as LINK Transit, CDTC and WSDOT are described at the end of this chapter under Regional Collaboration.

Table 12. Twenty Year Project List

*All of the recommended transportation projects in Table 11 will require further analysis prior to actual construction

Location	Project ID	Title	Description	Planning Level Cost
Cashmere/Monitor Vicinity	CA-1	West Cashmere Bridge Replacement	Replacement of bridge to support freight and safety	\$23,000,000
	CA-2	Binder Road/ Tigner Road	Roadway relocation to support sidewalks and a safe route to school	\$1,000,000
	CA-3	Goodwin Road	Roadway improvements from Sunset Hwy to Goodwin Road Bridge	\$2,000,000
Cashmere / Monitor Subtotal				\$26,000,000
Chelan Vicinity	CH-1	Slide Ridge	Retrofit and slope stabilization	\$800,000
	CH-2	Anderson Road, Phase II	Phase 2: MP 0.28 to MP 0.46	\$75,000
	CH-3	Howard Flats Road Relocation	Roadway relocation to accommodate airport expansion	\$500,000
	CH-4	25-Mile Creek Culvert Rehabilitation	Maintenance of culvert	\$185,000
	CH-5	Union Valley Road	Widen, grade, drain, add base and top course, and pave MP 2.42 to MP 3.63	\$1,000,000
Chelan Subtotal				\$2,560,000
Manson Vicinity	MAN-1	Totem Pole Road	Manson Schools (Hill Street) to end of Harris	\$3,750,000
	MAN-2	Wapato Lake Road	Reconstruction and widening, MP 0.6 to MP 2.3	\$2,600,000
	MAN-3	Summit Boulevard / Manson Boulevard	Intersection Improvements	\$255,000
	MAN-4	Ivan Morse Road	Widen, grade, drain, add base and top course, and pave curve at MP	\$300,000
	MAN-5	Grade Creek Road	Road Rehabilitation: repave and upgrade existing shoulders	\$400,000
	MAN-6	Pedoi Street Recirculation	Reconfigure existing road to accommodate parking	\$100,000
	MAN-7	Boetzkes Avenue	Truck route study between Totem Pole Road and Manson Road	\$30,000
	MAN-8	Trail Access to Water	Open public rights-of-way for public access to Lake Chelan	\$100,000
Manson Subtotal				\$7,535,000
Entiat Vicinity	E-1	Entiat River Bridges Scour	Scour mitigation on bridges along Entiat River Road	\$2,000,000
	E-2	Moe Ridge Bridge	Bridge replacement	\$2,100,000
Entiat Subtotal				\$4,100,000

Location	Project ID	Title	Description	Planning Level Cost
Leavenworth Vicinity	L-1	Chumstick Hwy / North Road	Intersection reconstruction	\$1,300,000
	L-2	North Road	Construct/widen shoulders, improve horizontal curves, signage, and safety between Fox Road and Nibblelink Road (South connection)	\$3,500,000
	L-3	Eagle Creek Road, Phase II	Full Depth Reclamation (FDR) with a cement treated base and an HMA overlay. MP 3.3 to MP 5.8	\$3,520,000
	L-4	Titus Road	Multimodal improvements, illumination, signage, and provide traffic calming along Titus Road from city limits to Ski Hill Drive	\$2,710,000
	L-5	Ski Hill Drive	Multimodal improvements, illumination, signage, and provide traffic calming along Ski Hill Drive from city limits to Titus Road	\$1,790,000
	L-6	Yodelin Culvert	Culvert Replacement	\$900,000
	L-7	Icicle Road	Potential improvements following federal safety audit	\$100,000
	L-8	Icicle Station Trail with bridge	Shared-use trail connecting downtown to Icicle Station and Valley Trail.	\$400,000
	L-9	Motteler Road Bridge Replacement	Bridge Replacement	\$1,500,000
Leavenworth Subtotal				\$15,720,000
Peshastin Vicinity	PE-1	Peshastin Main Street Bridge	Bridge replacement	\$18,700,000
	PE-2	Peshastin Main Street Sidewalk	Sidewalk/pedestrian facility improvements from end of bridge to Megelos Street	\$760,000
Peshastin Subtotal				\$19,460,000
Plain Vicinity	PL-1	Chiwawa Loop, Phase III	Roadway reconstruction to address deteriorating pavement, includes drainage, guardrail, and clear zone improvements, from Wending Lane to Sumac Lane	\$3,335,000
	PL-2	Chiwawa Loop, Phase IV	Roadway preservation to address deteriorating pavement, from Sumac Lane to SR207	\$1,800,000
	PL-3	Beaver Valley Road Shoulder Improvement	Roadway expansion to include shoulders for multi-modal use	\$500,000
	PL-4	River Road - milepost 6	Retaining wall and bank improvements	\$250,000
	PL-5	Camp 12 Road	Slope stabilization	\$500,000
Plain Subtotal				\$6,385,000

Location	Project ID	Title	Description	Planning Level Cost
Malaga Vicinity	MAL-1	McElDowney / W. Malaga	Sight distance and intersection geometry improvements	\$650,000
	MAL-2	Joe Miller Road Permanent Slide Repair	Slope stabilization	\$400,000
	MAL-3	Dixie Lane	Road widening and pedestrian improvements.	\$2,440,000
	MAL-4	Malaga-Alcoa Hwy Ped Access	Malaga store to W. Malaga Ave. MP 4.9 to 5.1	\$450,000
	MAL-5	Bainard Road	Pedestrian facilities improvements	\$420,000
	MAL-6	Saturday Avenue	Pedestrian facilities improvements	\$420,000
	MAL-7	Malaga Area Circulation Plan	Update subarea plan to incorporate new growth assumptions and revise planned transportation network	\$150,000
Malaga Subtotal				\$4,930,000
Wenatchee Vicinity	W-1	Easy Street/School Street	Intersection Improvements	\$1,500,000
	W-2	Easy Street/Peters Street	Intersection Improvements	\$1,500,000
	W-3	Wenatchee Heights Road	Road Reconstruction: and upgrade existing shoulders	\$2,500,000
	W-4	Easy St/Crestview St	Intersection Improvements	\$140,000
	W-5	Knowles Road, Phase I	Roadway improvements - Phase I: American Fruit Road to Rolling Hills Lane	\$1,800,000
	W-6	Knowles Road, Phase II	Roadway improvements - Phase II: School Street to American Fruit Road	\$1,500,000
	W-7	So. Wenatchee Area Pedestrian, Phase II	Pedestrian improvements Mission View School to Crawford Avenue	\$600,000
	W-8	Peters Street	Widening - Easy Street to School Street	\$800,000
	W-9	S. Wenatchee Avenue	Construct sidewalk on S. Wenatchee Avenue between Boodry Street and city limit	\$870,000
	W-10	American Fruit Road	Roadway Improvements - Knowles Road to Crestview Road	\$800,000
	W-11	School Street	Mid-block crossing improvements (Rectangular Rapid Flashing Beacon and ped ramps)	\$40,000
	W-12	Sunnyslope	Update subarea plan to incorporate new growth assumptions and revise planned transportation network (includes new connection to US 2)	\$150,000
	W-13	West Wenatchee (new circulation areas)	Update subarea plan to incorporate new growth assumptions and revise planned transportation network	\$150,000
	W-14	Boodry/S. Wenatchee Ave Improvement	Malaga-Alcoa Intersection to Squilchuck Creek Bridge	\$1,800,000
	W-15	Easy St Bikeway (SR2/97 to School St)	Bike lane - mark and sign existing shoulder as designed bike lane for access to/from Sunnyslope	\$66,000
	W-16	Number One Canyon Road	Improve drainage and stormwater runoff and provide pedestrian facility	\$940,000
Wenatchee Subtotal				\$15,156,000
Countywide Total				\$101,846,000

Table 13. Vision Projects (Beyond 20 year timeframe)

*All of the recommended transportation projects in Table 12 will require further analysis prior to actual construction

Location	Title	Description	Planning Level Cost
Cashmere / Monitor	Monitor Main Street Bridge Replacement	Bridge replacement	\$18,700,000
Cashmere / Monitor	Sunset Highway	Reconstruct to city standards (N Division St to Goodwin Rd); would follow Goodwin Bridge reconstruction	\$7,000,000
Chelan	Boyd Road	Construct/widen shoulders, construct sidewalks in UGA, upgrade base material, and pave between city limits and Wapato Butte Road	\$3,030,000
Leavenworth	Chumstick Highway Rehabilitation	Construct all-weather road and improve some safety elements including spot widening of roadway	\$10,000,000
Malaga	Stemilt Creek Road	Spot improvements along the corridor to construct/widen shoulders, improve vertical/horizontal curves, add signage, and reconstruct sections of roadway	\$6,720,000
Malaga	Malaga-Alcoa Highway	Spot safety improvements	TBD
Manson	Manson Stormwater Drainage Improvements	Improve drainage within the Manson Area	\$15,000,000
Manson	Alternate Route from Chelan to Manson	Investigate alternate route	\$300,000
Peshastin	Peshastin/Mill Site Connector	Port Proposed Bridge from US 2 to Peshastin	\$50,000
Peshastin	Main Street	Railroad grade separated crossing structure	\$10,000,000
USFS	Number 2 Canyon Road	Potential improvement of road bed structure	\$180,000
Sunnyslope	School Street Improvements	Extend School Street improvements between US 2 and Easy Street	\$700,000
Sunnyslope	Crestview Road to Knowles Road Connector	East / West connector north of Rolling Hills Lane	TBD

Figure 19. Twenty Year Projects (Cashmere / Monitor Vicinity)



Figure 20. Twenty Year Projects (Chelan Vicinity)



Figure 21. Twenty Year Projects (Manson Vicinity)



Figure 22. Twenty Year Projects (Entiat Vicinity)

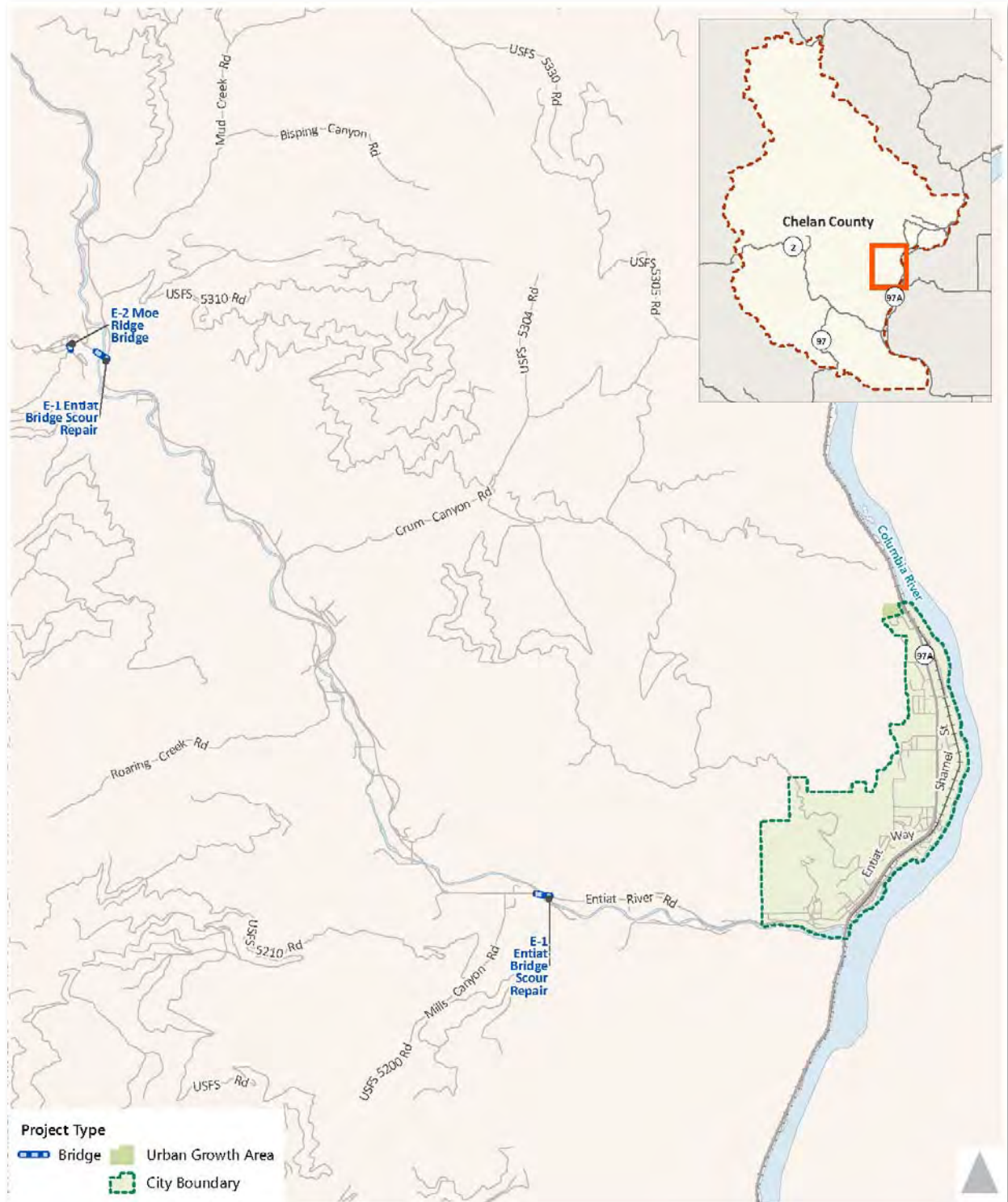


Figure 23. Twenty Year Projects (Leavenworth and Peshastin Vicinity)

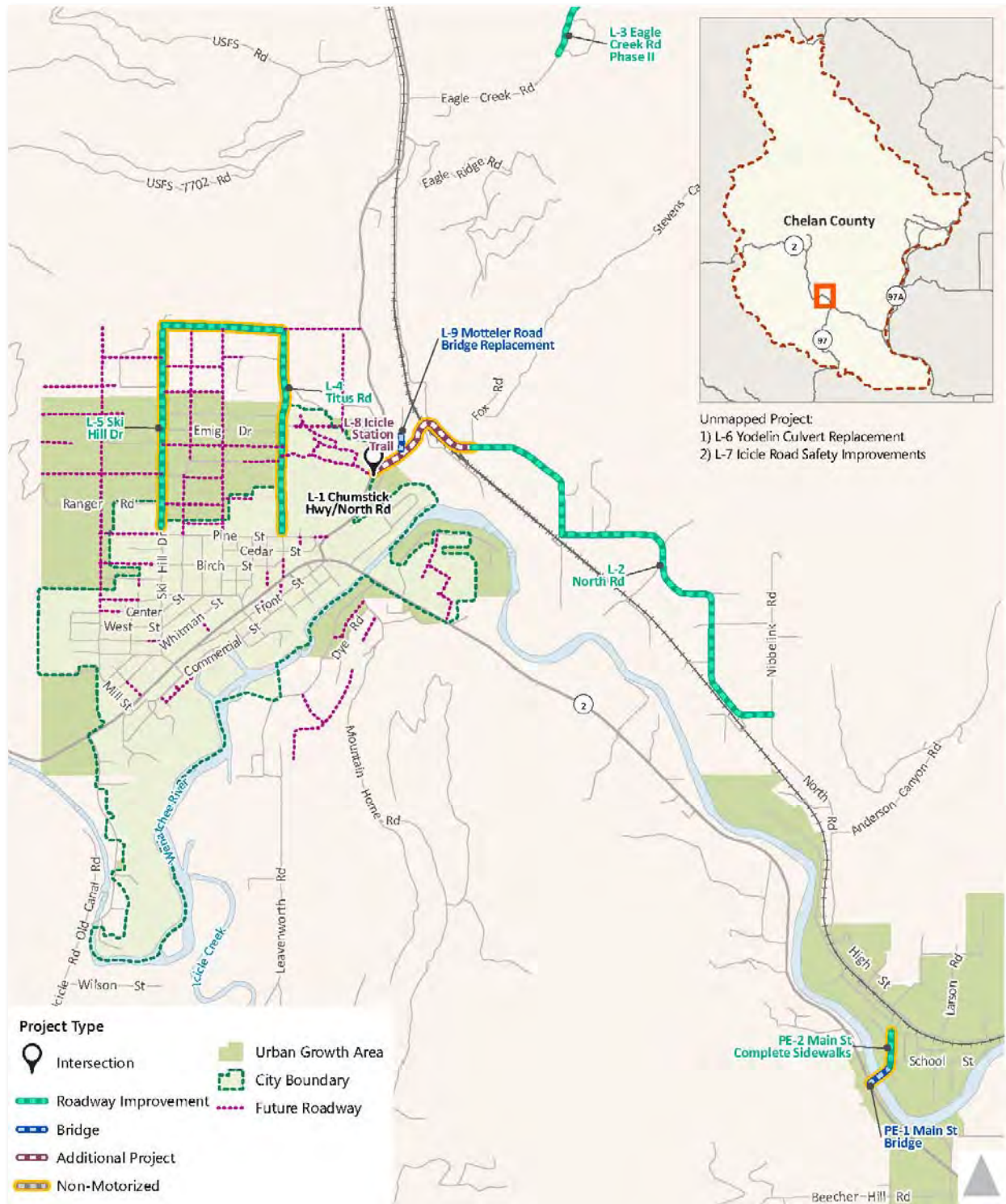


Figure 25. Twenty Year Projects (Malaga Vicinity)

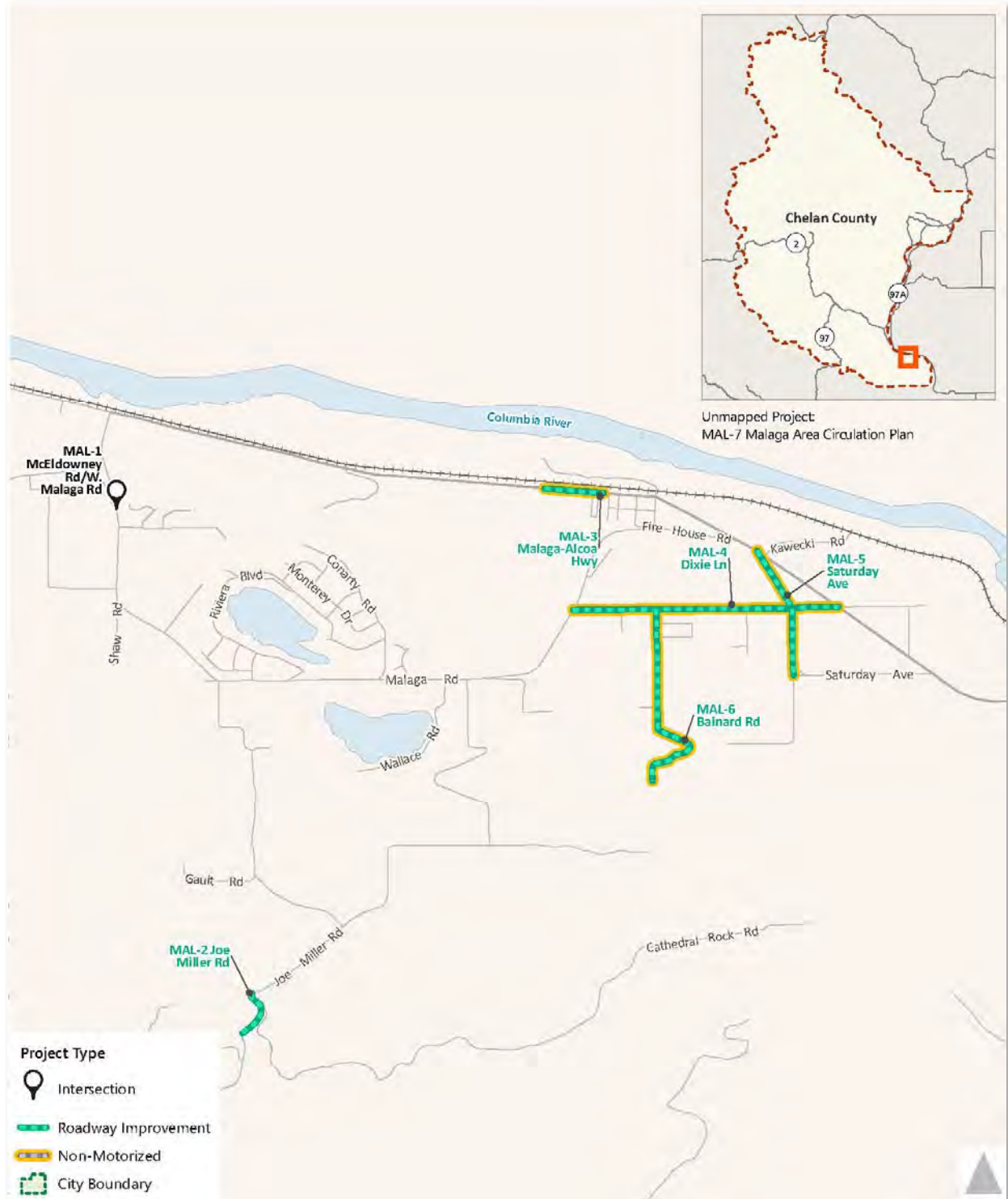
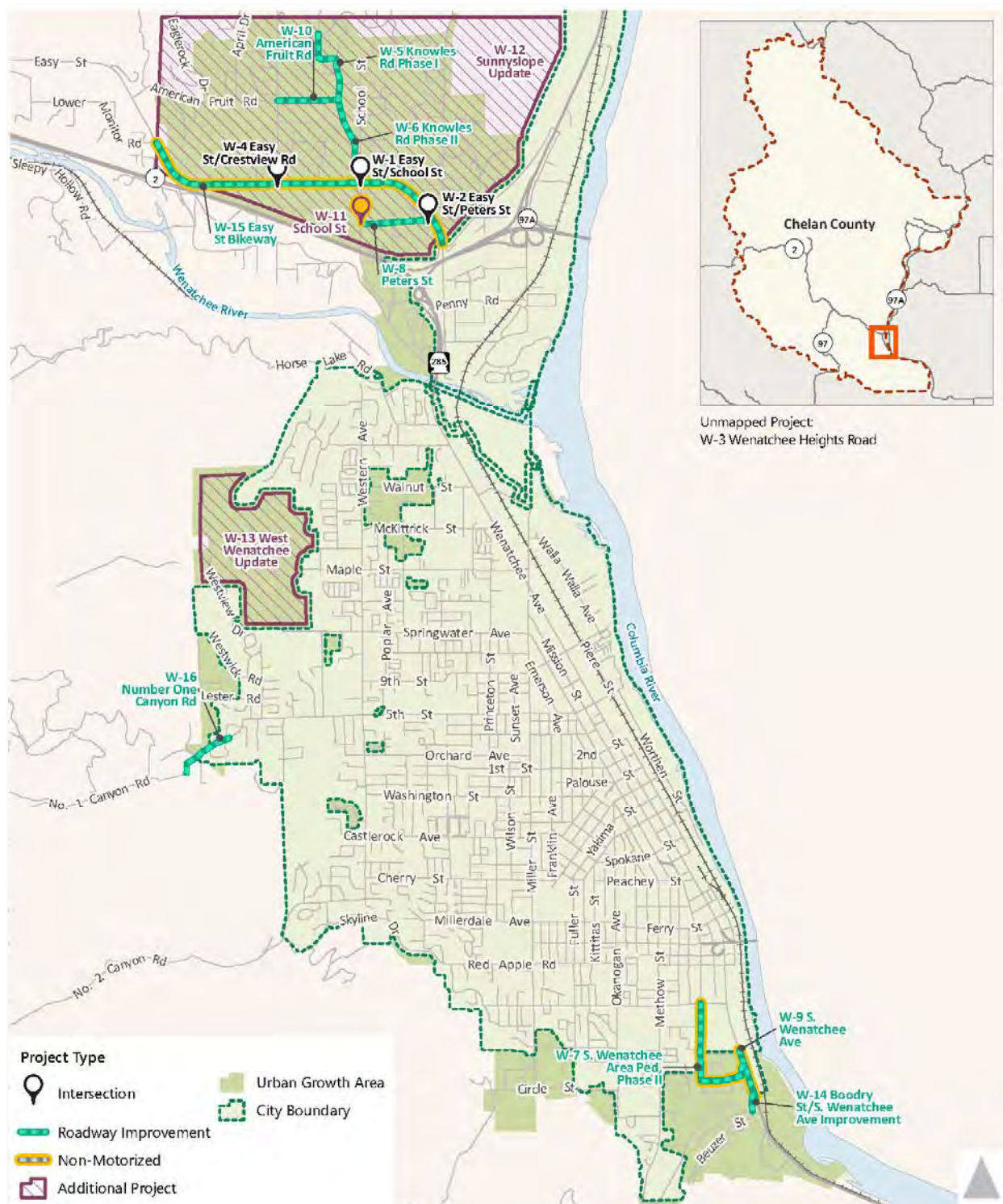


Figure 26. Twenty Year Projects (Wenatchee/Sunnyslope Vicinity)



I. REGIONAL COLLABORATION

As stated earlier, one of the county's main goals in this plan is effective coordination with other agencies to ensure that the local and regional transportation systems complement one another. A key element of this will be partnering with cities, neighboring counties, WSDOT, LINK Transit, and other agencies to ensure a cohesiveness in transportation planning throughout the county.

OTHER REGIONAL PROJECTS

There are projects outside of county jurisdiction that will impact travel through Chelan County. These projects are listed below in **Table 14**. These projects range from highway intersection improvements to bicycle and pedestrian access projects.

One of the major projects in the county is the Confluence Parkway project, identified in the 2011 the North Wenatchee Transportation Master Plan and the CDTC Transportation 2040 RTP for years 2028-2040, seeks to provide an alternate route into Wenatchee from the north due to increasing congestion along SR 285. There is no funding obligated for this project at this time.

Another major project that has been has been discussed includes a bicycle and pedestrian trail that extends from Leavenworth to Peshastin and from Monitor to Wenatchee providing access to all cities along US 2. No formal planning effort has taken place.

As part of this planning process, several transportation issues or performance gaps were identified through stakeholder meetings, meetings with county staff and project development that fall outside of county authority. These issues or performance gaps require cooperation between multiple agencies and increased regional collaboration will lead to more effective transportation systems throughout the county.

WSDOT

WSDOT supports multimodal integration into projects and planning multi-agency and community network interconnectivity. The state system provides access to key destinations within the county, so WSDOT will partner with Chelan County to ensure that both agencies' needs and concerns are addressed.

TRANSIT FACILITIES

On the transit side, LINK Transit is working to improve transit service and facilities within the county. LINK Transit has several goals for their future, the most important being creating a long range plan to examine needs and resources.

U.S. FOREST SERVICE

The USFS owns and maintains roads throughout the Okanogan-Wenatchee National Forest which covers a majority of Chelan County. Maintenance and repairs are necessary to provide access to popular recreation destinations. USFS provides grant funding for roads designated as Forest Highways which provide access to Forest Lands. Several Chelan County roads have this designation: Chumstick Highway, Eagle Creek Road, Chiwawa Loop Road, South Lakeshore Road are a few.



Okanogan-Wenatchee National Forest (Source: USFS)

Table 14. Other Notable Agency Projects

*All of the recommended transportation projects in Table 13 will require further analysis prior to actual construction

Lead Agency	Location	Title	Description
WSDOT	Cashmere	US 2 / Applets	Address congestion and geometric configuration of intersection.
WSDOT	Cashmere	US 2 / Cotlets	Address congestion and geometric configuration of intersection.
WSDOT	Entiat	SR 97A / Entiat River Road	Intersection improvements
WSDOT	Entiat	SR 97A / Hagen Street	Intersection improvements
Entiat	Entiat	Waterfront Development	Access/egress redesign and pedestrian and bike improvements to waterfront area
Leavenworth	Leavenworth	Valley Trail - Leavenworth to Peshastin	Currently in planning phases; working with private landowners to develop a trail connecting Waterfront Park to Peshastin.
Leavenworth	Leavenworth	Ski Hill/Freund Canyon Trails	Mountain bike and hiking trails connecting Ski Hill to Freund Canyon areas.
Leavenworth	Leavenworth	Better grid in UGA	Meet county standards for street alignments as land develops
Link Transit	Link Transit	Park & Ride Facility	New park & ride facility adjacent to Willkommen Village in Leavenworth
Wenatchee	Wenatchee	Confluence Parkway	Construct new 2-lane arterial parallel to N. Wenatchee Avenue by extending Miller Street Roadway improvements to increase auto, bike, and pedestrian capacity including a new bridge and undercrossing of railroad tracks
Wenatchee	Wenatchee	Wenatchee Bicycle Improvements	Bicycle improvement projects denoted in the Greater Wenatchee Bike Master Plan
Wenatchee	Wenatchee	Squilchuck Road	Upgrade to urban standards, widen and add sidewalks within the UGA
Wenatchee	Wenatchee	McKittrick Street	Reconstruct and upgrade to urban standards between Western Avenue and Pershing Street; new storm, sewer, sidewalks and illumination
Wenatchee	Wenatchee	Walnut Street	Upgrade to urban standards, widen and add sidewalks between Western Avenue and Rogers Drive
Wenatchee	Wenatchee	Okanogan Avenue/Circle Street	Construct sidewalk on Okanogan Avenue between Circle Street and City limit, and Circle Street between Miller Street and Okanogan Avenue

CHAPTER 7: IMPLEMENTING THE TRANSPORTATION ELEMENT

I. INTRODUCTION

This chapter considers Chelan County's funding picture over the next 20 years to ensure that the recommendations made as part of this Transportation Element can be implemented.

BACKGROUND AND CONTEXT

This implementation plan is an update of the funding strategy developed as part of the Transportation Element update process in 2009. For that effort, the County established three principles to guide future funding strategies:

- Reserve regional funding sources for operation and maintenance of existing county-wide transportation facilities.
- Direct funding sources to projects (or categories of projects) that best relate the funding for those projects to their primary beneficiaries.
- Require new development to pay its fair share of expanding/upgrading transportation facilities in the County

In addition, any funding strategy must balance those goals against developing sustainable revenue sources that are feasible for the County to implement. This is even more pressing given the limited means counties have at their disposal for raising revenue. Over the past two decades, a combination of statewide initiatives and legislative actions has altered the landscape for local governments. The most sweeping changes have revolved around voters' decisions to (1) end the Motor Vehicle Excise Tax and (2) create strict limits on the growth of property taxes.

Across Washington State, the effect of these actions has varied by jurisdiction. Cities and local service providers, like counties, are facing increasing difficulty given their continued reliance on the property tax. Washington's counties are different from cities and special

service districts in fundamental ways. These differences are brought into stark relief by considering the interplay of four factors:

- Counties face strict limits on their taxing authority.
- Counties are heavily reliant on property taxes, whose purchasing power is eroding due to Initiative 747, explained in Section III.
- Counties face a long list of regional service obligations that are mandated by the state.
- Counties have a complex set of relationships with multiple constituencies:
 - They collect *regional taxes* and provide *regional services* for all constituents in the county.
 - They collect *local taxes* and provide *local services* to unincorporated areas.

Given this combination of factors, Washington's counties have found themselves squeezed between two positions. They have a long list of service obligations that are non-negotiable with few statutory options for securing new revenue streams, and they face structural erosion in their most important revenue source. As they look to the future, Washington's counties face a fundamental, structural challenge—a challenge that will become increasingly unmanageable over time. Chelan County is no exception and this larger systemic issue must be considered as part of their long-term transportation funding strategy.

II. APPROACH

DATA SOURCES AND METHODOLOGY

HISTORICAL REVENUES AND EXPENDITURES

The data used to summarize historical revenues and expenditures came from WSDOT's County Road and City Street Revenues and Expenditures, FY 2006 to 2015 datasets.⁷

⁷2016 data was not available at the time of this analysis.

WSDOT collects this data from counties and cities as part of its annual reporting to the Federal Highway Administration. The data is collected from counties and cities using a standard report that uses Budgeting, Accounting, and Reporting System codes to standardize the data among all reporting counties and cities. This standardization, along with the availability of significant longitudinal data, makes this data set excellent for this kind of revenue analysis.

that this methodology is defensible at the planning level.

For the purposes of this report, the WSDOT data set was reconciled with Chelan County's audited transportation actuals, to correct for differences between how WSDOT and Chelan County track transportation revenues and expenditures. For those reasons, there may be nominal differences between the data provided in this report and Chelan County's audited financial statements.

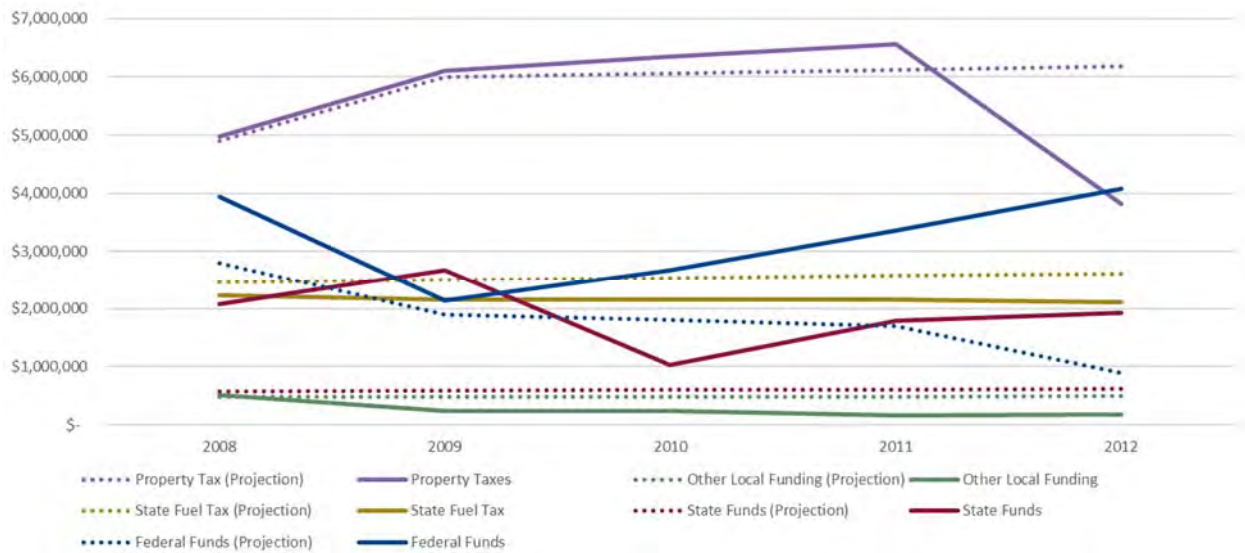
Projected Revenues and Expenditures

Future revenues and expenditures were projected on a per resident basis using the compound annual growth rates imputed from 10-year historical averages. Where they were outliers, inflation was used to override the compound annual growth rates. These projections are made on a per resident basis to reflect growth in revenue anticipated from growth in population. The land use projections from the Land Use Element were used to represent expected population growth.

These projections are intended to be both conservative and planning-level. Additionally, this projection methodology is intended to estimate the overall revenues collected over the 20-year planning period – it is not intended to estimate the revenues that might be collected in any given year.

The same projection methodology was employed in 2008 as part of the 2009 Comprehensive Plan. Projections from the previous plan were compared to actuals from the same years, and the results demonstrate

Figure 27. Comparison of Transportation Revenue Projections and Actuals, 2008 to 2012 (2016\$)



Source: "Chelan County Transportation Funding Report", Chelan County, 2009; Washington State Department of Transportation, 2016; and BERK Consulting, 2016.

DATA PRESENTATION

This section presents the data used to evaluate Chelan County's current and future financial position as it relates to transportation funding. This analysis is provided at a high level, in 2016 dollars, and rounded to communicate their only order-of-magnitude precision and in 2016 dollars.⁸

- Other Local Receipts
- General Fund Appropriations

Chelan County's total transportation revenues, including the revenues collected from each of these sources are provided in **Table 15**.

III. BASELINE FINANCIAL CAPACITY

TRANSPORTATION REVENUES

Historical Transportation Revenues

Over the last 10 years there have been six main sources of revenues available for transportation projects in Chelan County:

- Federal Revenues
- Property Taxes
- State Fuel Tax Distributions
- Other State Funds

⁸ Projected numbers are rounded to the nearest \$10,000. All of the fiscal data throughout this section is provided in 2016 dollars (2016\$). This was done by dividing year of estimate dollars (YOES) (historical actuals and future projections that reflect the expected value of a dollar [purchasing power] for those years) by a

generalized inflation factor of 3.5%. The 2016 inflation factor is 1, with each of the following years being the previous year's Consumer Price Index (CPI) factor times one, plus the future inflation assumption.

Table 15. Historical Transportation Revenues, 2006 to 2015

	Property Taxes	General Fund Appropriations	Other Local Receipts	State Fuel Tax Distributions	Other State Funds	Federal Revenues	Total Revenues
2006	\$ 4,467,820	\$ 400,000	\$ 511,117	\$ 2,227,595	\$ 1,220,155	\$ 21,517	\$ 8,848,204
2007	\$ 4,843,816	\$ 400,000	\$ 216,059	\$ 2,278,888	\$ 1,849,035	\$ 2,747,220	\$ 12,335,018
2008	\$ 4,982,551	\$ 400,000	\$ 523,542	\$ 2,235,791	\$ 2,083,728	\$ 3,927,139	\$ 14,152,752
2009	\$ 6,100,781	\$ 400,000	\$ 237,835	\$ 2,150,720	\$ 2,676,742	\$ 2,138,585	\$ 13,704,664
2010	\$ 6,342,060	\$ 400,000	\$ 229,596	\$ 2,161,793	\$ 1,029,533	\$ 2,683,436	\$ 12,846,419
2011	\$ 6,568,592	\$ 400,000	\$ 148,002	\$ 2,158,347	\$ 1,795,551	\$ 3,364,083	\$ 14,434,575
2012	\$ 3,814,661	\$ 400,000	\$ 167,920	\$ 2,114,743	\$ 1,922,140	\$ 4,085,056	\$ 12,504,520
2013	\$ 6,921,424	\$ 400,000	\$ 255,971	\$ 2,172,463	\$ 1,385,246	\$ 2,036,686	\$ 13,171,790
2014	\$ 7,104,646	\$ 400,000	\$ 380,723	\$ 2,190,019	\$ 744,807	\$ 2,047,839	\$ 12,868,033
2015	\$ 7,174,913	\$ 400,000	\$ 2,260,756	\$ 2,249,345	\$ 600,204	\$ 2,269,813	\$ 14,955,031
Total	\$ 58,321,264	\$ 4,000,000	\$ 4,931,521	\$ 21,939,704	\$ 15,307,141	\$ 25,321,374	\$ 129,821,004

Note: General fund appropriations includes an amount of \$400,000 that is transferred from the general fund to repay \$400,000 of county road levy capacity used for general purposes.

Source: Chelan County Public Works, 2016; Washington State Department of Transportation, 2016; and BERK Consulting, 2016.

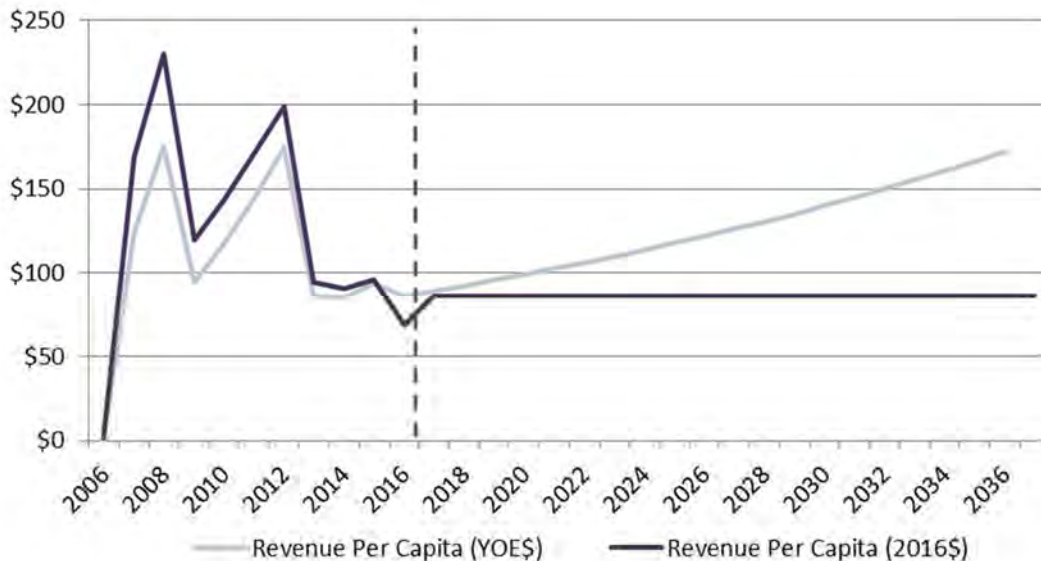
Baseline Revenues for Transportation

To estimate Chelan County's financial capacity for transportation over the 20-year planning program, revenues are projected based on current financial policies. In this case, that means projecting available revenues based on the County's six current transportation funding sources.

Current Source 1: Federal Revenues (Figure 28)

Federal transportation grants are funded through the federal portion of the Fuel Excise Tax. The federal gas tax rate has fluctuated between \$0.183 and \$0.184 per gallon since 1994. The majority of these funds are deposited into the Highway Trust Fund and disbursed to the states through the Highway and Mass Transit Accounts.

Figure 28. Federal Revenues - Per Capita Historical Actuals and Future Revenue Projection, 2006 to 2036 (2016\$)



Source: Washington State Department of Transportation, 2016 and BERK Consulting, 2016.

Federal transportation grants are awarded through a competitive process, and, therefore, not guaranteed. Historical data can provide a window into Chelan County's past success in obtaining a share of these funds. In addition, it is known that the County will not receive Secure Schools funding in 2017 and potentially into the future, so we have chosen to exclude that source from these projections (which accounts for the significant reduction in anticipated funds relative to historical receipts as shown in the figure). While Chelan County's receipt of federal grants increased between 2006 and 2015, the later years showed a drop in federal grants. For this analysis, it was conservatively estimated that federal revenues will remain flat over the 20-year planning period.

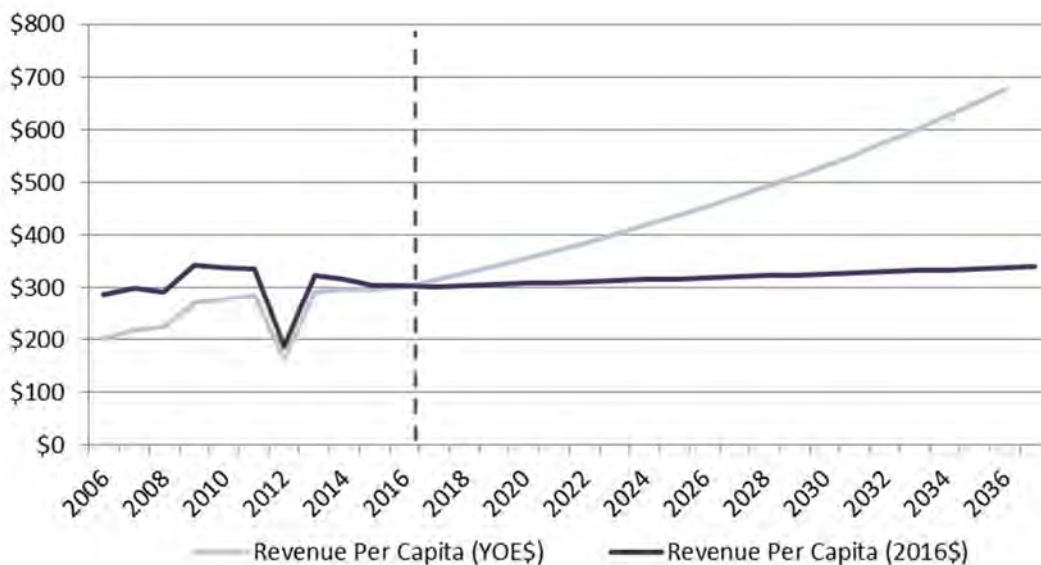
by Chelan County for transportation funding. Chelan County currently levies a property tax of \$1.32 / \$1,000 of Assessed Value (AV), which is below the \$2.25 per \$1,000 of AV allowed for "proper county road purposes."

Over the 20-year planning period, revenues from the county road levy (property taxes) are expected to make up the majority of available funds for roadway maintenance and transportation projects. While most cities and counties are seeing a decline in property tax purchasing power, Chelan County's growth assumptions are sufficient to maintain a very slight increase in property tax revenue over the planning period.

Current Source 2: Property Tax (Figure 29)

Property taxes are used by counties and cities as one primary transportation funding source. The county road levy is a property tax collected

Figure 29. Chelan County Road Levy (Property Taxes) – Per resident Historical Actuals and Future Revenue Projection, 2006 to 2036 (2016\$)



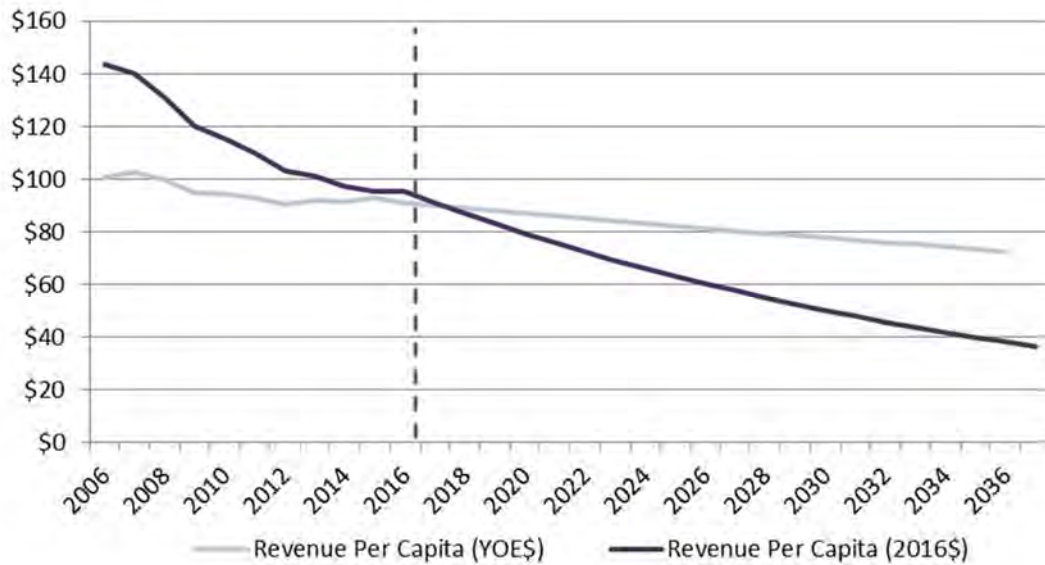
Source: Washington State Department of Transportation, 2016 and BERK Consulting, 2016.

Current Source 3: State Fuel Tax Distributions (Figure 30)

Although historical per capita fuel tax dollars have been increasing in nominal numbers, when adjusted for inflation it is clear that per

capita revenues have been declining over time. This trend is becoming more pronounced in very recent history due to large increases in the price of gasoline and a significant shift toward more fuel efficient vehicles.

Figure 30. State Fuel Tax Distributions - Per Capita Historical Actuals and Future Revenue Projection, 2006 to 2036 (2016\$)



Source: Washington State Department of Transportation, 2016 and BERK Consulting, 2016.

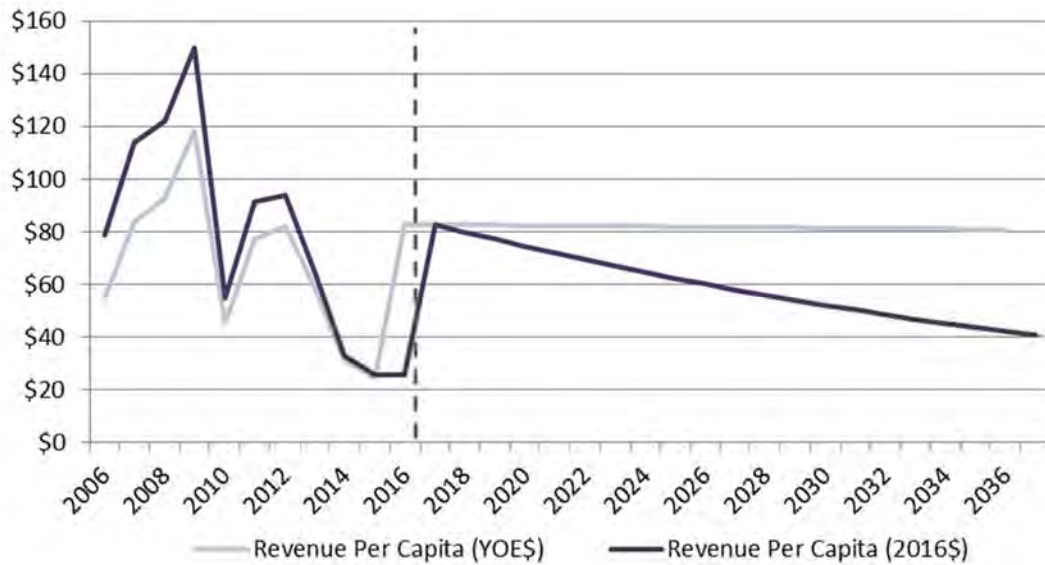
Chelan County's state fuel tax distributions are expected to continue to decline over the 20-year planning period, for the reasons mentioned above. It is unknown whether this trend will level off. However, it is worth noting that there is significant statewide concern regarding the long-term viability of fuel tax as the fleet mix continues to shift toward ever more fuel efficient vehicles and automakers focus on meeting the new Corporate Average Fuel Economy standards. The state legislature has conducted several studies to explore options to replace the gas tax, but no new funding packages have yet been approved. In looking forward, there will continue to be uncertainty around revenues from this tax source.

road administration board (CRAB) funding including the county arterial preservation account (CAPA) fund allocations and other state grants, including those from the traffic safety commission.

Current Source 4: Other State Funds (Figure 31)

This category is primarily state grants, like those from the Department of Ecology; Urban Arterial Board; Transportation Improvement Board; Department of Community, Trade, and Economic Development; and WSDOT. Other funds in this category may include state county

Figure 31. Other State Funds - Per Capita Historical Actuals and Future Revenue Projection, 2006 to 2036 (2016\$)



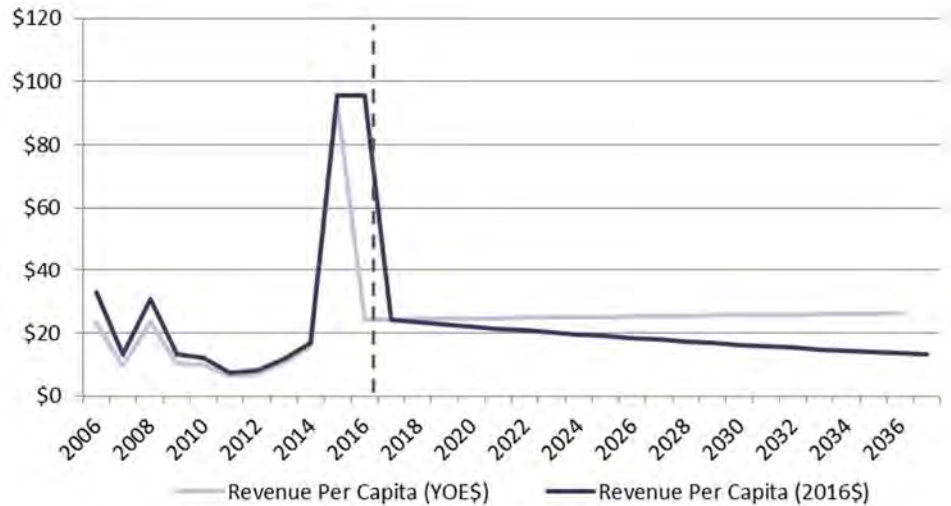
Source: Washington State Department of Transportation, 2016 and BERK Consulting, 2016.

Like federal grants, state grants are a particularly volatile funding source, so this projection presents a “best guess” based on historical data and precedent. Changes in Washington state legislative administration in 2017 could lead to changes in policy that affect this projection. Therefore, it is difficult to predict the magnitude of revenues to expect from this funding category.

Current Source 5: Other Local Receipts (Figure 32)

Local sources of transportation funding include several miscellaneous sources like impact fees and transfers-in for distressed counties. They also include a number of fees or other reimbursements collected by Public Works, including from the sale of maps and publications, for engineering services, for road and street maintenance services, and reimbursements from utilities or related to construction projects.

Figure 32. Other Local Receipts - Per Capita Historical Actuals and Future Revenue Projection, 2006 to 2036 (2016\$)



Source: Washington State Department of Transportation, 2016 and BERK Consulting, 2016.

Current Source 6: General Fund Appropriations

Because general fund revenues have few restrictions on how they are spent and the County has a dedicated county road levy for transportation, it is relatively unusual for these funds to be used for transportation purposes. In recent history, Chelan County has appropriated approximately \$500,000 per year to transportation to offset the portion of county road levy capacity transferred annually to the general expense levy. These dollars are primarily made up of Real Estate Excise Tax 2 (REET 2) funds. Historically, this has been a volatile source of funding for

transportation in the county, with consistent divestment of these funds from that purpose, and, therefore, has contributed a relatively small share of total revenues for transportation.

Total Baseline Revenues for Transportation

Table 16 shows the expected baseline revenues for transportation based on projections for the County's sources of transportation revenue described above.

Based on current transportation funding policies the County expects approximately \$304.4 million in transportation revenues between 2017 and 2036.⁹

Table 16. Total Baseline Revenues for Transportation, 2017 to 2036 (2016\$)

	2017 - 2022	2023 - 2026	Total, 2017 - 2026	2027 - 2036	Total, 2017 - 2036
	(Years 1 - 6)	(Years 7 - 10)	(Years 1 - 10)	(Years 11 - 20)	(Years 1 - 20)
Federal Revenues	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Property Taxes	\$ 47,400,000	\$ 34,090,000	\$ 81,490,000	\$ 93,610,000	\$ 175,100,000
State Fuel Tax Distributions	\$ 11,930,000	\$ 6,630,000	\$ 18,560,000	\$ 12,740,000	\$ 31,300,000
Other State Funds	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Other Local Receipts	\$ 3,350,000	\$ 2,010,000	\$ 5,360,000	\$ 4,290,000	\$ 9,650,000
General Fund Appropriations (REET 2)	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
Total Revenues	\$ 90,210,000	\$ 60,570,000	\$ 150,780,000	\$ 153,580,000	\$ 304,360,000

Source: BERK Consulting, 2016.

⁹ These projections are conservative and planning level.

TRANSPORTATION PROGRAMMATIC EXPENDITURES

Transportation spending falls in two main categories: programmatic and capital. Capital expenditures for transportation are mainly from construction of new facilities, such as roads, sidewalks, and traffic signals. The County also has significant programmatic costs for running its existing system, including administration, operation, maintenance of existing facilities, preservation, and capital outlay, which account for the majority of its regular expenditures. More specifically, programmatic expenditures support things like pavement improvement, bridge retrofitting and rehabilitation, and other roadway elements, like guardrails, signs, concrete barriers, and pedestrian and drainage facilities.

Historical Transportation Programmatic Expenditures

There are four categories of activities in transportation programmatic expenditures:

- **Administration and Facility Operations.** General administration covers public works transportation administration and support. Operations accounts for engineering and planning services that support transportation capital projects.
- **Preservation.** Routine improvements like pavement overlays and bridge repairs/replacement.
- **Maintenance.** Routine and ongoing activities to ensure facility utility, e.g. pothole repair, and snow and ice control.
- **Capital Outlay for Facilities.** Costs of building and maintaining facilities that support the transportation program.

Chelan County expenditures for each category between 2006 and 2015 are shown in **Table 17**.

Table 17. Historical Transportation Programmatic Expenditures, 2006 to 2015

	Preservation	Maintenance	Administration & Facility Operations	Capital Outlay for Facilities	Total Programmatic Expenditures
2006	\$	\$ 6,305,543	\$ 1,659,964	\$ 15,123	\$ 7,980,630
2007	\$	\$ 7,432,486	\$ 2,193,314	\$	\$ 9,625,800
2008	\$	\$ 5,342,218	\$ 2,349,098	\$ 129,475	\$ 7,820,791
2009	\$ 1,121,213	\$ 5,090,481	\$ 2,358,031	\$	\$ 8,569,725
2010	\$ 1,473,810	\$ 4,658,762	\$ 2,076,978	\$	\$ 8,209,550
2011	\$ 1,430,599	\$ 4,700,316	\$ 2,384,530	\$	\$ 8,515,445
2012	\$ 1,193,949	\$ 5,031,611	\$ 2,492,566	\$	\$ 8,718,126
2013	\$ 2,020,342	\$ 4,913,515	\$ 2,893,629	\$ 78,647	\$ 9,906,133
2014	\$ 2,472,675	\$ 4,930,081	\$ 2,492,189	\$ 74,129	\$ 9,969,074
2015	\$ 1,163,702	\$ 5,543,230	\$ 2,719,765	\$ 18,767	\$ 9,445,464
TOTAL	\$ 10,876,290	\$ 53,948,243	\$ 23,620,064	\$ 316,141	\$ 88,760,738

Note: Before 2008 preservation costs were included with maintenance, and were not tracked separately.

*During 2014 and 2015, approximately \$9,300,000 in capital improvement projects that would be generally included as part of preservation programmatic expenditures were completed. These numbers do not reflect these additional expenditures.

Source: Chelan County Public Works, 2016.

Baseline Programmatic Expenditures for Transportation

This baseline projection for transportation programmatic expenditures estimates the costs of providing the same services that occurred during the historical period (2006 to 2015).

Table 18. Total Baseline Programmatic Expenditures for Transportation, 2017 to 2036 (2016\$)

	2017 - 2022	2023 - 2026	Total, 2017 - 2026	2027 - 2036	Total, 2017 - 2036
	(Years 1 - 6)	(Years 7 - 10)	(Years 1 - 10)	(Years 11 - 20)	(Years 1 - 20)
Administration & Facility Operations	\$ 15,110,000	\$ 10,550,000	\$ 25,660,000	\$ 27,790,000	\$ 53,450,000
Maintenance	\$ 46,290,000	\$ 32,320,000	\$ 78,610,000	\$ 85,090,000	\$ 163,700,000
Preservation	\$ 7,340,000	\$ 5,120,000	\$ 12,460,000	\$ 13,490,000	\$ 25,950,000
Capital Outlay for Facilities	\$ 1,530,000	\$ 1,070,000	\$ 2,600,000	\$ 2,810,000	\$ 5,410,000
Total Programmatic Expenditures	\$ 70,270,000	\$ 49,060,000	\$ 119,330,000	\$ 129,180,000	\$ 248,510,000

Source: BERK Consulting, 2016.

BASELINE FINANCIAL CAPACITY FOR TRANSPORTATION

Using these projections, a baseline picture was generated of the average annual revenue

availability based on current financial policies for the next six and 20 years.

Table 19. Baseline Transportation Financial Capacity for Additional Programmatic Expenditures and Capital Projects, 2017 to 2036 (2016\$)

	2017 - 2022 (Years 1 - 6)	2023 - 2026 (Years 7 - 10)	Total, 2017 - 2026 (Years 1 - 10)	2027 - 2036 (Years 11 - 20)	Total, 2017 - 2036 (Years 1 - 20)
Total Revenue	\$ 90,210,000	\$ 60,570,000	\$ 150,780,000	\$ 153,580,000	\$ 304,360,000
Administration & Facility Operations	\$ 15,110,000	\$ 10,550,000	\$ 25,660,000	\$ 27,790,000	\$ 53,450,000
Maintenance	\$ 46,290,000	\$ 32,320,000	\$ 78,610,000	\$ 85,090,000	\$ 163,700,000
Preservation	\$ 7,340,000	\$ 5,120,000	\$ 12,460,000	\$ 13,490,000	\$ 25,950,000
Capital Outlay for Facilities	\$ 1,530,000	\$ 1,070,000	\$ 2,600,000	\$ 2,810,000	\$ 5,410,000
Total Programmatic Expenditures	\$ 70,270,000	\$ 49,060,000	\$ 119,330,000	\$ 129,180,000	\$ 248,510,000
Remaining Revenue for Capital Projects	\$ 19,940,000	\$ 11,510,000	\$ 31,450,000	\$ 24,400,000	\$ 55,850,000

Source: Washington State Department of Transportation, 2016 and BERK Consulting, 2016.

Based on revenue projections, approximately \$55.8 million will be available for transportation programs and projects beyond current activities during the planning horizon, as shown in **Table 19**.

However, it is important to also consider the flexibility of revenue sources, including statutory restrictions limiting funding for either programmatic or capital purposes. Some of the County's transportation revenue sources are specifically earmarked for capital purposes. These include REET 2, state revenues (grants), federal revenues (grants), and any maintenance of effort or matching funds to support those grants (an average of about 20%

per grant). To fully illustrate funds that may be restricted to capital, we estimated the expected maintenance of effort and matching funds for grants by multiplying the total grant amount by 20%, as it is expected that those amounts will average about 20%.

Due to these statutory restrictions in funding, only \$200 million of the \$248 million needed for programmatic expenditures is available, as shown in **Table 20**. This is a starting deficit of almost \$48 million for programmatic activities. However, almost \$104 million is available for capital projects.

Table 20. Baseline Transportation Financial Capacity for Additional Programmatic Expenditures and Capital Projects with Consideration of Fund Restrictions, 2017 to 2036 (2016\$)

	2017 - 2022	2023 - 2026	Total, 2017 - 2026	2027 - 2036	Total, 2017 - 2036
	(Years 1 - 6)	(Years 7 - 10)	(Years 1 - 10)	(Years 11 - 20)	(Years 1 - 20)
All Future Revenues					
Federal Revenues	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Property Taxes	\$ 47,400,000	\$ 34,090,000	\$ 81,490,000	\$ 93,610,000	\$ 175,100,000
State Fuel Tax Distributions	\$ 11,930,000	\$ 6,630,000	\$ 18,560,000	\$ 12,740,000	\$ 31,300,000
Other State Funds	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Other Local Receipts	\$ 3,350,000	\$ 2,010,000	\$ 5,360,000	\$ 4,290,000	\$ 9,650,000
General Fund Appropriations (REET 2)	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
Total Revenues	\$ 90,210,000	\$ 60,570,000	\$ 150,780,000	\$ 153,580,000	\$ 304,360,000
Capital Only Funds					
REET 2	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
State Revenues (Grants)	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Federal Revenues (Grants)	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Estimated Minimum Match for Grants (20%)	\$ 4,910,000	\$ 3,170,000	\$ 8,070,000	\$ 7,590,000	\$ 15,660,000
Total Available for Capital (Capital Restricted)	\$ 32,440,000	\$ 21,010,000	\$ 53,440,000	\$ 50,530,000	\$ 103,970,000
Total Available for Programmatic Expenditures	\$ 57,770,000	\$ 39,560,000	\$ 97,340,000	\$ 103,050,000	\$ 200,390,000
Baseline Programmatic Expenditures	\$ 70,270,000	\$ 49,060,000	\$ 119,330,000	\$ 129,180,000	\$ 248,510,000
Projected Programmatic Expenditures Surplus	\$ (12,500,000)	\$ (9,500,000)	\$ (21,990,000)	\$ (26,130,000)	\$ (48,120,000)

Source: BERK Consulting, 2016.

IV. BALANCING FINANCIAL CAPACITY WITH FUTURE FUNDING NEEDS

When comparing total available revenues for transportation with expected maintenance costs over the 20-year study period, revenues fall short of paying for even the current estimated programmatic costs, before considering policy changes that would increase those programmatic costs. This makes sense when considering that the main revenues used for transportation are increasing at a relatively slow rate, while costs are increasing more quickly. Although spending is currently balanced, the increase in costs begins to outpace the increase in revenues in the very near term.

There are two main types of strategies that can be used to balance this implementation plan:

1. **Increase revenue**, through increases in existing funding tools or implementation of new tools.
2. **Decrease expenses** by decreasing programmatic activities or further prioritizing capital projects.

Significant use of the latter strategy was used in the development of this plan.

FUTURE FUNDING NEEDS

Programmatic Needs

County staff evaluated state of repair to determine whether the status quo (baseline programmatic expenditures) was sufficient to support desired level of service of existing facilities. It was identified that status quo is not sufficient to support desired level of service, and that additional preservation spending, specifically additional monies for pavement, roadway elements, and bridges, would be required to meet programmatic needs, as shown in **Table 21**. These costs were extrapolated over the 20-year period based on additional, expected annual costs determined to be needed as part of the good state of repair evaluation.

Table 21. Additional Preservation-related (Roads and Bridges) Programmatic Expenditures, 2017 to 2036 (2016\$)

	2017 - 2022	2023 - 2026	Total, 2017 - 2026	2027 - 2036	Total, 2017 - 2036
	(Years 1 - 6)	(Years 7 - 10)	(Years 1 - 10)	(Years 11 - 20)	(Years 1 - 20)
Total Needed Preservation Expenditures	\$ 28,170,000	\$ 13,980,000	\$ 42,150,000	\$ 34,950,000	\$ 77,100,000
Baseline Preservation Expenditures	\$ 7,340,000	\$ 5,120,000	\$ 12,450,000	\$ 13,490,000	\$ 25,940,000
Additional Preservation Expenditures (Beyond Baseline)	\$ 20,830,000	\$ 8,860,000	\$ 29,700,000	\$ 21,460,000	\$ 51,160,000

Source: Chelan County, 2016.

An additional \$51 million for preservation-related programs, beyond what would be needed to support baseline preservation levels, is needed over the 20-year planning period. Allocation of additional resources to these activities is a policy decision.

Additionally, County staff identified the need for a fund that supports unanticipated and upgrade needs, beyond existing programs. The proposed costs of this reserve are outlined in **Table 22**, below.

Table 22. Additional Programmatic Reserve-related Programmatic Expenditures

	2017 - 2022	2023 - 2026	Total, 2017 - 2026	2027 - 2036	Total, 2017 - 2036
	(Years 1 - 6)	(Years 7 - 10)	(Years 1 - 10)	(Years 11 - 20)	(Years 1 - 20)
Bridge Repairs	\$ 900,000	\$ 600,000	\$ 1,500,000	\$ 1,500,000	\$ 3,000,000
Drainage Upgrades	\$ 6,000,000	\$ 1,000,000	\$ 7,000,000	\$ -	\$ 7,000,000
Guardrail Infill	\$ 450,000	\$ 310,000	\$ 760,000	\$ 750,000	\$ 1,510,000
ADA Compliance Projects	\$ 600,000	\$ 400,000	\$ 1,000,000	\$ 1,000,000	\$ 2,000,000
Slope/Wall Stabilization	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 2,500,000	\$ 7,500,000
Hazardous Tree Removal	\$ 900,000	\$ 200,000	\$ 1,100,000	\$ 500,000	\$ 1,600,000
Response to Regulatory Mandates	\$ 180,000	\$ 120,000	\$ 300,000	\$ 300,000	\$ 600,000
Total Programmatic Reserve	\$ 12,030,000	\$ 4,630,000	\$ 16,660,000	\$ 6,550,000	\$ 23,210,000

Source: Chelan County, 2016.

In sum, between both additional preservation expenditures beyond baseline and additional programmatic reserve-related programmatic expenditures, an additional \$74.4 million will be needed to support these additional programmatic expenditures. Again, allocation of additional resources to these activities is a policy decision.

Capital Needs

County staff have already heavily prioritized the capital projects that appear in this Transportation Element. However, additional prioritization is still a tool for balancing the plan if additional revenue options are not available.

The countywide cost of the transportation capital project list is \$102 million as shown in **Table 23**.

Table 23. Additional Financial Capacity Beyond Baseline Needed for Transportation Capital Projects, 2017 to 2036 (2016\$)

	2017 - 2022	2023 - 2026	Total, 2017 - 2026	2027 - 2036	Total, 2017 - 2036
	(Years 1 - 6)	(Years 7 - 10)	(Years 1 - 10)	(Years 11 - 20)	(Years 1 - 20)
Total Available for Capital (Capital Restricted)	\$ 32,440,000	\$ 21,010,000	\$ 53,440,000	\$ 50,530,000	\$ 103,970,000
Capital Project Expenditures	N/A	N/A	N/A	N/A	\$ 102,050,000
Revenue Surplus	N/A	N/A	N/A	N/A	\$ 1,920,000

Source: Chelan County, 2016; Fehr & Peers, 2016; and BERK Consulting, 2016.

This financial analysis suggests that approximately \$104 million is available for capital projects over the life of the plan. This is actually nominally more than needed. As it is expected that there will be additional capital projects that the County desires to complete over the 20-year period, it is expected that additional capital revenues will be needed.

FUTURE FUNDING STRATEGIES

While there is a surplus in capital funds, there is an estimated \$122.5 million programmatic

funding deficit over the 20-year planning horizon, as shown in **Table 24** and **Table 25**.

Table 24. Total Transportation Financial Capacity for Capital Projects with Consideration of Fund Restrictions, 2017 to 2036 (2016\$)

	2017 - 2022 (Years 1 - 6)	2023 - 2026 (Years 7 - 10)	Total, 2017 - 2026 (Years 1 - 10)	2027 - 2036 (Years 11 - 20)	Total, 2017 - 2036 (Years 1 - 20)
All Future Revenues					
Federal Revenues	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Property Taxes	\$ 47,400,000	\$ 34,090,000	\$ 81,490,000	\$ 93,610,000	\$ 175,100,000
State Fuel Tax Distributions	\$ 11,930,000	\$ 6,630,000	\$ 18,560,000	\$ 12,740,000	\$ 31,300,000
Other State Funds	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Other Local Receipts	\$ 3,350,000	\$ 2,010,000	\$ 5,360,000	\$ 4,290,000	\$ 9,650,000
General Fund Appropriations (REET 2)	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
Total Revenues	\$ 90,210,000	\$ 60,570,000	\$ 150,780,000	\$ 153,580,000	\$ 304,360,000
Capital Only Funds					
REET 2	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
State Revenues (Grants)	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Federal Revenues (Grants)	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Estimated Minimum Match for Grants (20%)	\$ 4,910,000	\$ 3,170,000	\$ 8,070,000	\$ 7,590,000	\$ 15,660,000
Total Available for Capital (Capital Restricted)	\$ 32,440,000	\$ 21,010,000	\$ 53,440,000	\$ 50,530,000	\$ 103,970,000

Source: BERK Consulting, 2016.

Table 25. Total Transportation Financial Capacity for Additional Programmatic Expenditures with Consideration of Fund Restrictions, 2017 to 2036 (2016\$)

	2017 - 2022 (Years 1 - 6)	2023 - 2026 (Years 7 - 10)	Total, 2017 - 2026 (Years 1 - 10)	2027 - 2036 (Years 11 - 20)	Total, 2017 - 2036 (Years 1 - 20)
All Future Revenues					
Federal Revenues	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Property Taxes	\$ 47,400,000	\$ 34,090,000	\$ 81,490,000	\$ 93,610,000	\$ 175,100,000
State Fuel Tax Distributions	\$ 11,930,000	\$ 6,630,000	\$ 18,560,000	\$ 12,740,000	\$ 31,300,000
Other State Funds	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Other Local Receipts	\$ 3,350,000	\$ 2,010,000	\$ 5,360,000	\$ 4,290,000	\$ 9,650,000
General Fund Appropriations (REET 2)	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
Total Revenues	\$ 90,210,000	\$ 60,570,000	\$ 150,780,000	\$ 153,580,000	\$ 304,360,000
Capital Only Funds					
REET 2	\$ 3,000,000	\$ 2,000,000	\$ 5,000,000	\$ 5,000,000	\$ 10,000,000
State Revenues (Grants)	\$ 11,240,000	\$ 6,560,000	\$ 17,800,000	\$ 13,500,000	\$ 31,300,000
Federal Revenues (Grants)	\$ 13,290,000	\$ 9,280,000	\$ 22,570,000	\$ 24,440,000	\$ 47,010,000
Estimated Minimum Match for Grants (20%)	\$ 4,910,000	\$ 3,170,000	\$ 8,070,000	\$ 7,590,000	\$ 15,660,000
Total Available for Capital (Capital Restricted)	\$ 32,440,000	\$ 21,010,000	\$ 53,440,000	\$ 50,530,000	\$ 103,970,000
Total Available for Programmatic Expenditures	\$ 57,770,000	\$ 39,560,000	\$ 97,340,000	\$ 103,050,000	\$ 200,390,000
Baseline Programmatic Expenditures	\$ 70,270,000	\$ 49,060,000	\$ 119,330,000	\$ 129,180,000	\$ 248,510,000
Additional Preservation and Program-reserve Expenditures (Beyond Baseline)	\$ 32,860,000	\$ 13,490,000	\$ 46,360,000	\$ 28,010,000	\$ 74,370,000
Projected Programmatic Expenditures Surplus	\$ (45,360,000)	\$ (22,990,000)	\$ (68,350,000)	\$ (54,140,000)	\$ (122,490,000)

Source: BERK Consulting, 2016.

County staff and Commissioners considered a detailed list of options for increasing transportation funding to support baseline programmatic activities, as well as additional desired programmatic activities beyond current level of funding:

- Reserve regional funding sources to fund programmatic activities related to operation and maintenance of existing County-wide transportation facilities.
- Direct funding sources to specific projects (or categories of projects) that best relate the costs of those projects to their primary beneficiaries.
- Require new development to pay its fair share of expanding/upgrading transportation facilities in the County.

Other considerations for funding strategies to balance the implementation plan include:

- Feasibility
- Taxpayer/resident support
- Order of magnitude of potential funding
- Considerations around revenue options:
 - Volatility of the revenue source
 - Levy and debt capacity impacts

Following is the list of options for balancing this implementation plan.

- Increase Revenues through Existing Funding Tools:
 - County Roads Levy (Property Taxes)
 - General Fund Appropriations
 - Sale of Existing Capital Assets
- Increase Revenues through New Funding Tools:
 - \$20 Motor Vehicle Excise Tax (MVET) levied via a Transportation Benefit District
 - 0.02% Sales and Use Tax (SUT) levied via a Transportation Benefit District
 - Levy Lid Lift
 - Transportation Impact Fees
 - Road Improvement District (RID)
 - Local Option Fuel Tax

- Increase Revenues through New Financing Tools:
 - Limited Tax General Obligation (LTGO) Bonds
 - Unlimited Tax General Obligation (UTGO) Bond

BALANCING FINANCIAL CAPACITY WITH FUTURE FUNDING NEEDS

County Staff and Board of Commissioners, with input from stakeholders, identified use of, one or both, a Levy Lid Lift of the County Roads Levy and/or the Local Option Fuel Tax as potential tools for filling the funding gap over the 20-year period. Each of these potential tools is discussed following.

Potential Funding Option 1: County Road Levy

As discussed previously, the County currently levies a county road levy (property tax) of \$1.32 / \$1,000 of Assessed Value (AV). The County Road Fund is limited to collecting no more than \$2.25 per \$1,000 of assessed value to be used for “proper county road purposes.” Currently some of the levy capacity (approximately \$400,000 per year) on the County Road Fund has been shifted to the Current Expense Fund. However, the Road fund is repaid through general fund appropriation during the year through the general fund.

The County does not have banked capacity (levy capacity reserved by levying less than the maximum allowable rate for any given year) to increase collections from the County Roads Levy. However, the County could use a Levy Lid Lift, a tool used by taxing districts without banked capacity, to increase its property taxes beyond the 1% limit; RCW 84.55. This occurs when taxing jurisdictions with a tax rate less than their statutory maximum ask voters to increase the tax rate to an amount equal to or less than the statutory maximum rate, effectively lifting the lid on the levy rate. With simple majority voter approval, Chelan County could install either a one-year or multi-year (up to six years) levy lid lift, allowing the County to

exceed the 1% revenue growth limit for that period. However, the property tax levy rate with the levy lid lift, still must be within the county's statutory rate limit, \$1.80/\$1,000 AV, limiting the extent to which the County can exceed the 1% revenue growth limit

Both one-year and multi-year Levy lid lifts can be permanent or temporary, as permanence does not relate to the term of the levy lid lift. Rather, if permanent, the revenue collected during the lid lift is used as the base to calculate the revenue limit for future levies. If temporary, the revenue limit for future collections is calculated as if the lid lift had not occurred. If the purpose of a permanent lid lift is to repay bonds, increased levies can be collected for up to nine years.

Lid lift ballots must be voted on in the August Primary or the November General Election. The ballot measure title must identify if the lid lift is permanent. The purpose for a multi-year lid lift must be stated in the ballot title. One-year lid lift ballot titles are not required to specify a purpose. The County can put a levy lid lift on the ballot for reauthorization after the initial period (either one or six years) concludes.

In 2015, Chelan County levied a \$1.2559/\$1,000 AV general levy and mental health levy. The County can levy a general and mental health levy of up to \$2.475/\$1,000 AV so long as the sum of the general levy and county road levy do not exceed \$4.05/\$1,000 AV.

The difference between the County's levy and the statutory limit is \$1.22/\$1,000. Assuming the assessed value stays constant at the 2015 level, the County could generate up to \$11 million dollars a year. Over a 20-year period, the County could generate approximately \$235 million, well beyond the current \$122.5 million unmet need to fund programmatic expenditures.

According to the Municipal Research and Services Center Local Ballot Measure Database,¹⁰ two fire protection districts in Chelan County passed levy lid lifts in 2014. Both levy lid lifts were 10-year (multi-year) levies, that were permanent, meaning that the revenue collected during the lid lift will be used as the base to calculate the revenue limit for future levies.

Potential Funding Option 2: Local Option Fuel Tax

Counties may, with voter approval, levy a local option motor vehicle fuel tax for local transportation purposes. The maximum rate is 10% of the state rate (i.e., 10% of the state rate is currently 4.9cents per gallon). A Regional Transportation Improvement District (RTID) may not levy the tax if the RTID is already levying a local option fuel tax. Chelan County does not fall within a RTID.

The local option motor vehicle fuel tax must be imposed countywide. The tax is collected by the state treasurer and distributed to the County and its cities through a revenue sharing formula, wherein the population in the unincorporated areas is multiplied by 1.5 and counties get a share based on that amount of the total population (where total population is 1.5 times the unincorporated population plus incorporated population). The collected tax dollars must be used for "highway purposes."

Currently, Chelan County does not levy a local option motor vehicle fuel tax. The statewide regular motor vehicle fuel tax collected over \$1.5 billion in 2016, so depending on the share of those sales that occurred in Chelan County, this could be a sizable funding source, if voters were willing to authorize it.

¹⁰ MSRC Local Ballot Measure Database, 2016.
<http://mrsc.org/Elections.aspx?ft=11#results>.

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