



COMPREHENSIVE PLAN

2014-2034

Adopted June 30, 2014

2015 Update

May 22, 2015

Town of Carbonado

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CARBONADO COMPREHENSIVE PLAN

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TOWN OF CARBONADO

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INTRODUCTION & COMMUNITY DESCRIPTION

Introduction

The Town of Carbonado is located in east-central Pierce County south of the City of Buckley and Town of Wilkeson approximately ten miles northwest of the Carbon River entrance to Mt. Rainier National Park. The small town has a rich history strongly influenced by coal mining activity but in more recent years has been home to a smaller population of residents who value the natural beauty of its setting, its affordability, and small town atmosphere. Carbonado was incorporated as a fourth class city, or town, in 1948.

Geographic Setting

Carbonado lies between the Cascade Mountain Range to the east and the Carbon River to the southwest. Most of the town has an elevation of 1,100 to 1,200 feet above sea level, and it is located about 400 feet above the Carbon River. Topography within the community is generally level although the surrounding region includes rolling hills and steep slopes associated with the Carbon River to the southwest. Given the extensive level of mining activity in the past, coal mining shafts are located below the town at depths typically 100-200 feet below ground level, although some shafts extend to deeper elevations. Total annual precipitation averages 55 inches and average seasonal snowfall is 13 inches. Average minimum temperature is 35 degrees Fahrenheit in the winter and the average maximum summer temperature is 70 degrees Fahrenheit. Primary access to the town is from State Route 165, which provides the main connection between more heavily developed areas of Pierce County and the Puget Sound region with the northwest quadrant of Mt. Rainier National Park.

Historic Settlement

Carbonado was founded as a coal mining town in 1880 and grew to over 1,000 people by 1900. Coal mining continued for nearly a century, and much of the coal was used for the railroad and to drive pig iron mills in Tacoma. During the 1930's as oil became a more attractive energy source the use of coal began to diminish. In 1974, mining regulations required phone lines to be installed in the mines and because of the costs involved, the mines were closed.

Only a few of the early commercial and other non-residential structures remain. Those still standing include the Carbonado Tavern and the Carbonado Historical School (founded 1881, the earliest remaining building was constructed 1928). Carbonado was a "company town" and many of the homes were constructed for miners and their families during the period 1890-1930. The scale and character of these homes and the streets on which they are located retain much of the flavor of the earlier mining era. Carbonado is now a stable bedroom community for the greater Tacoma-Pierce County area and retains its historic small town character.

Why Plan?

Retaining this character, and providing new opportunities for current and future residents of Carbonado, is one of the central purposes of this Comprehensive Plan. This Plan for the Town of Carbonado and its Urban Growth Area (UGA) is provided to meet the requirements of the Washington State Growth Management Act (GMA). The GMA was adopted by the Washington State legislature in 1990. It provided that cities and counties within certain growth areas must plan for anticipated growth. The GMA requires an inventory of the community, its facilities and needed services. The requirements of other state laws and regulatory requirements, including the Highway Act of 1991, requiring transportation management programs, the State Environmental Policy Act (SEPA), requiring environmental review of plans and permit actions, and various other statutes relating to urban growth and development are addressed by this Plan and its associated development regulations.

Planning Requirements

Washington State Growth Management Act

The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities, including Carbonado, that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

- 1) **Urban growth.** Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
- 2) **Reduce sprawl.** Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
- 3) **Transportation.** Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
- 4) **Housing.** Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
- 5) **Economic development.** 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.

- 6) **Property rights.** Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.
- 7) **Permits.** Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.
- 8) **Natural resource industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.
- 9) **Open space and recreation.** 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.
- 10) **Environment.** Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
- 11) **Citizen participation and coordination.** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.
- 12) **Public facilities and services.** Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.
- 13) **Historic preservation.** Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.

VISION 2040

VISION 2040 is the long-range growth management, environmental, economic, and transportation strategy for the central Puget Sound region adopted in April 2008 by the Puget Sound Regional Council (PSRC) General Assembly. VISION 2040 promotes an environmentally friendly growth pattern that will contain the expansion of urban growth areas, conserve farm and forest lands, support compact communities where people may both live and work, and envisions that a significant share of new employment and housing will occur in vibrant urban centers.

VISION 2040 promotes the theme of “people, prosperity, planet” as a sustainability framework. The Regional Growth Strategy set forth in VISION 2040 provides specific guidance for the distribution of future population and employment growth through the year 2040 into types of places defined as “regional geographies.” Carbonado is grouped in the “small cities” geography within Pierce County.

Multicounty Planning Policies

VISION 2040 includes a set of multicounty planning policies that provide an integrated framework for addressing land use, economic development, transportation, public facilities, and environmental issues. These multicounty planning policies establish a common region-wide framework that ensures consistency among county and city comprehensive plans adopted pursuant to RCW 36.70A.070, and countywide planning policies adopted pursuant to RCW 36.70A.210. They also provide a framework for regional plans developed within the central Puget Sound region, including regional transportation plans established under RCW 47.80.023, as well as plans of cities, counties, and others that have common borders or related regional issues as required under RCW 36.70A.100

Pierce County Countywide Planning Policies

In 1991, the State legislature amended the GMA to require that the legislative body of the County adopt countywide planning policies, in cooperation with the municipalities in the County. Countywide planning policies are statements establishing a regional framework from which county and municipal comprehensive plans are developed and adopted. The framework is intended to ensure that municipal and county comprehensive plans are consistent.

The policies and implementing strategies were developed from a growing awareness that local land use decisions often influence and impact areas outside the jurisdiction. Coordination and consistency among all levels of government are two of the most important planning tenets of the GMA embodied within the Countywide Planning Policies.

On June 30, 1992 the Countywide Planning Policies for Pierce County, Washington were adopted by the Pierce County Council, following ratification by the cities and towns and a recommendation for adoption by the Pierce County Steering Committee (the predecessor to the Pierce County Regional Council). The policies address issues that affect the County as a whole including affordable housing; agricultural lands; economic development and employment, education; fiscal impact; historic, archaeological, and cultural preservation; natural resources, open space and protection of environmentally sensitive lands; siting of public capital facilities of a countywide or state-wide nature; transportation; and urban growth areas. Amendments to the policies have been subsequently ratified and adopted, most recently on August 27, 2012. The policies, as amended, have been utilized as a guide for consistency in developing this land use element.

This comprehensive plan addresses each of the policy areas in VISION 2040, the applicable Pierce County Countywide Planning Policies, and the requirements of the Growth Management Act.

Structure of Comprehensive Plan

The Comprehensive Plan provides information on the existing conditions of the Town and provides a policy framework for decisions about the development and growth of the Town and its UGA. It is divided into several sections, as follows:

- CHAPTER 1: INTRODUCTION AND TOWN VISION** – is an introduction to the Town of Carbonado, the reasons they plan, their plan history, citizen participation and the Town Vision for the future;
- CHAPTER 2: LAND USE** – describing the Town and UGA’s current conditions, population growth forecasts, land use plan and growth management policies;
- CHAPTER 3: CRITICAL AREAS** – providing direction on how development should be regulated adjacent to and within critical areas;
- CHAPTER 4: MINING HAZARDS** – providing direction on how development should be regulated adjacent to and within mining hazard areas;
- CHAPTER 5: HOUSING** – addressing housing conditions, needs and affordability issues;
- CHAPTER 6: PARKS, RECREATION AND OPEN SPACE** -- addressing needs for public
- CHAPTER 7: UTILITIES** – inventorying the major utility providers in Carbonado and their capacities or expansion plans;
- CHAPTER 8: TRANSPORTATION** – describing town transportation needs and plans as related to land use;
- CHAPTER 9: CAPITAL FACILITIES** – linking land use information to capital improvement and public facility needs; and
- CHAPTER 10: ECONOMIC DEVELOPMENT** – providing strategies to retain and attract employers to the town.

Carbonado Plan History

The Town of Carbonado does not have a separate Planning Commission. The Town Council does all the legislative work of a Planning Commission as required by Law. The Town Council has been actively engaged in the preparation, discussion and completion of this Plan.

The Carbonado Town Plan was originally adopted by the Carbonado Town Council in September, 1993. This Plan, written by Adamson and Associates, was created as a result of the State of Washington Growth Management Act. It included all the elements of the GMA, explained the character of Carbonado, identified specific geologic hazards and created a vision for the Town. The Plan was subsequently updated as required by Law, most recently in 2008.

This current Plan can be considered a “Plan Update” required by the State of Washington pursuant to RCW 36.70A.130. It is a complete re-write of the previous 2008 Plan and includes more information and Goals and Policy direction than earlier versions.

Citizen Participation

Citizen Participation is vital to the preparation and understanding of any Comprehensive Plan. One of the primary goals spelled out in the Growth Management Act requires active participation of/by the citizens.

It is customary for the Carbonado Town Council to actively engage the citizens in the discussion of all policy and action items on the Town Council. This local custom keeps the citizens engaged and allows their active participation in discussions. This custom has held true for the preparation and adoption of the Town Plan and Updates over the years.

The Carbonado Town Council adopted the Citizen Participation Plan for this Update on March 11, 2013. It required active and continual citizen participation throughout the process.

Community Character

Town Vision

The Town Vision is how Carbonado residents would like to see their Town in the future. The Vision becomes an important planning tool and is the basis of the Goals and Policies that follow in the Town Plan.

The Town Council took extraordinary steps to assure that there was maximum participation in shaping this Town Vision. A public meeting was announced a month in advance of the meeting. The Town Clerk-Treasurer made certain that all interested parties were notified. She posted a notice on the Town bulletin board, on the Community Readerboard near the main entrance to Town on Pershing Ave, and distributed flyers through the schools and to individual residents.

On Monday, March 18, 2013, a Public Meeting was held at the Town Hall in Carbonado for the purpose of identifying those topics of importance to the Town Vision for Carbonado. The Town Vision was identified as the “ideal” Town image and services in twenty years.

About 10 people attended the Open House (about 1.5% of entire Town population) from 4:30 PM to 7:00 PM. A draft Town Vision Statement was given to all who participated. All were invited to list their thoughts on the future of the Town on a list that was then displayed on the wall of the Town Hall. 18 different items were listed. They included everything from a Town Historical Museum to cleaning up “junk” property. A complete list is included below.

1. Should be a General Store at Pershing Ave. and Highway 165.
2. Should be a Motel for tourists to stay at.
3. Should be a shooting range at the old ball field with membership.
4. Should be an Historical Museum

5. Should mark trails
6. Should be a Town Theme of “Coal Mining Town in 1870s”
7. Should be outdoor activity (biking, hiking, rock climbing, kayaking) place for enthusiasts. When people in Washington think of these activities they should think of Carbonado.
8. The Town Council should set budgetary priorities where we complete one project every year.
9. When raising any utility rates always try to think of families first. We need young families moving in to our Town.
10. Should be a playground where families want to take kids.
11. Should condemn unsightly properties/get rid of junk cars.
12. Should allow unattached (structures) as mother-in-law apartments.
13. Should allow Assisted Living Family Homes.
14. Should allow small multi-family dwellings (single people).
15. Should have better public access to trail, coal mines and fan house.
16. Should encourage “mining tourism” by partnering with developers and/or owners.
17. Should have a regional bike racing event.

Based on the input from the public and the Council the following Town Vision Statement was adopted:

CARBONADO

TOWN VISION:

THIS IS THE VISION OF CARBONADO IN 20 YEARS

(MARCH, 2030)

AS YOU ENTER CARBONADO FROM HIGHWAY 165 YOU DRIVE DOWN A WONDERFUL, TREE LINED STREET, PERSHING AVENUE. YOU IMMEDIATELY HAVE A SENSE OF CALMNESS THAT CAN ONLY COME FROM BEING IN A QUIET MOUNTAIN COMMUNITY WITH MOUNTAINS, TREES, TRAILS AND PEOPLE WHO LOVE THIS SMALL TOWN.

NEAR THE HIGHWAY 165 IS A SMALL COMMERCIAL COMPLEX CATERING TO TOURISTS AND RESIDENTS. TOURISTS ARE ENCOURAGED TO LEAVE PERSHING AVE. AND ENTER INTO THIS SMALL COMPLEX FOR ALMOST EVERYTHING THEY NEED FOR THE MOUNTAINS. IN THE COMPLEX IS A SMALL RESTAURANT, A BIKE SHOP WITH EVERYTHING YOU WOULD NEED FOR YOUR BIKE. THIS STORE IS QUITE BUSY IN THE SUMMER WITH ALL THE BIKERS FROM THE FOOTHILLS TRAIL AND THOSE GOING ON TO MT. RAINIER.

ALSO IN THIS COMPLEX IS AN OFF ROAD VEHICLE STORE. A GROCERY STORE THAT CATERS TO BOTH THE TOURISTS AND THE CARBONADO RESIDENTS IS ALSO FOUND HERE.

AS YOU PROCEED DOWN PERSHING YOU SEE A MIXTURE OF NEW AND TRADITIONAL HOUSING ON BOTH SIDES OF THE STREET. THERE ARE BIKE CORRIDORS AND PEDESTRIAN TRAILS CONNECTING TOWN WITH THE FOOTHILLS TRAIL, RESIDENTIAL AREAS, SCHOOLS AND PARKS. VIEW CORRIDORS ARE PRESERVED AND ENHANCED BY THESE CORRIDORS.

SOME HISTORIC STRUCTURES HAVE BEEN PRESERVED. THE HISTORICAL SOCIETY IS WORKING WITH THE FOOTHILLS TRAIL GROUP, THE NATIONAL PARK SERVICE AND INTERESTED RESIDENTS TO PRESERVE THE COAL MINING TRADITION.

BEHIND PERSHING AVENUE YOU SEE THE 8TH AVE. PARK AND PLAYGROUND WITH LOT OF MOMS AND YOUNGER CHILDREN. BEYOND THAT IS THE SCHOOL COMPLEX WITH ITS MIXTURE OF NEW AND OLD BUILDINGS, INCLUDING CLASSROOMS, A GYMNASIUM AND PLAYING FIELDS FOR SPORTS. THIS SCHOOL AND PLAYGROUND IS USED YEAR AROUND BY THE COMMUNITY. THE CARBONADO SCHOOL IS KNOWN THROUGHOUT THE PUGET SOUND AREA FOR ITS HIGH QUALITY OF EDUCATION IN TECHNICAL SUBJECTS.

AS YOU PROCEED NORTH, THE TOWN HAS GROWN SOMEWHAT SINCE 2013, BY ABOUT 500 PEOPLE. NEW HOUSES ARE INTERSPERSED WITH SOME SMALL DUPLEXES AND TOWNHOUSES. SOME ARE OWNER OCCUPIED AND SOME ARE USED AS ADULT FAMILY HOMES. THE SENIORS AND ALL RESIDENTS LOVE CARBONADO FOR ITS SMALL TOWN ATMOSPHERE, IT EXCELLENT EMERGENCY SERVICES AND THE FRIENDLINESS OF EVERYONE. THE FIRE STATION HOUSES BOTH FIRE ENGINES AND A FULL TIME AMBULANCE CREW.

YOU REALIZE THAT CARBONADO IS A SMALL MOUNTAIN TOWN WITH A GOOD MIXTURE OF PEOPLE WHO LIVE HERE FOR THE LIFESTYLE. THESE PEOPLE COME FROM ALL PROFESSIONS, INCLUDING EVERYTHING FROM TECHNICAL TO LABORING PROFESSIONS. THIS UNIQUE MIXTURE GIVES CARBONADO THE FLAVOR OF A SMALL, FRIENDLY SMALL TOWN.

TOWN OF CARBONADO

LAND USE ELEMENT

LAND USE ELEMENT

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Land Use Element

Introduction

Planning Requirements

Washington State Growth Management Act

The Washington State Growth Management Act (GMA), Section RCW 36.70A.070 (1) requires that all comprehensive plans contain a land use element with information as follows:

"A land use element designating the proposed general distribution and general location and extent of the uses of land, where appropriate, for agriculture, timber production, housing, commerce, industry, recreation, open spaces, public utilities, public facilities, and other land uses. The land use element should include population densities, building intensities, and estimates of future population growth. The land use element should provide for protection of the quality and quantity of ground water used for public water supplies. Where applicable, the land use element should review drainage, flooding, and storm water runoff in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound."

Thirteen planning goals are contained in the GMA. This land use element responds to those concerning land use, including:

- Clustering urban growth where adequate public facilities exist;
- Reducing low-density urban sprawl;
- Promoting locally appropriate economic opportunities for all citizens;
- Protecting property rights from arbitrary and discriminatory practices;
- Encouraging retention of open space and development of recreational opportunities;
- Protecting the environment and enhancing quality of life;
- Ensuring concurrence between the availability of public facilities and services and the occupation of new development;
- Processing permit applications in a timely and predictable manner; and
- Providing for coordination between communities and jurisdictions to ensure land use consistency and to reconcile conflicts.

Finally, the GMA provides a mandatory framework for several other planning principles and techniques in the land use element:

- Establishment of urban growth areas (UGAs) for which municipalities assume

responsibility for long-term planning of urban services

- Identification of lands useful for public purposes and a process for siting essential public facilities
- Protection of critical areas from inappropriate development and to retain vital components of a healthy natural ecosystem

Organization of the Land Use Element

The land use element is divided into five sections. The first section summarizes mandated population, housing unit and employment targets and the provisions of the buildable lands program that are used to demonstrate Comprehensive Plan consistency with these targets. The second section lists goals and policies that shape how the Carbonado community lives on the land and how Carbonado's government officials and citizens will manage the processes of making land use decisions. The goals and policies also respond to the requirements, goals, and planning principles of the GMA while providing for the protection and enhancement of Carbonado's community character. The third section of the land use element identifies and defines land use designations and their applicability to the community. The fourth section contains required information such as population density, building intensity and estimates of future growth. The fifth section examines planned land use in adjacent jurisdictions to ensure consistency.

Population, Housing Unit and Employment Targets for 2030

The Growth Management Act requires Pierce County to designate urban growth areas based upon the urban growth management population projection made for the County by the Office of Financial Management. Counties have the authority, as regional governments, to allocate population and employment to the cities within their boundaries. In addition, VISION 2040 requires Pierce County and its cities and towns to adopt housing unit and employment targets, taking into account PSRC's Regional Growth Strategy regional geographies and their respective growth shares for population and employment. Data generated by periodic Buildable Lands analyses may be used to demonstrate the extent to which these targets may be achieved.

Buildable Lands -- Background Requirements of RCW 36.70A.215

RCW 36.70A.215 requires six counties, including Pierce County, to evaluate whether a county and its municipalities are achieving urban densities within urban growth areas. To do this, the counties and municipalities are to compare growth and development assumptions, targets, and objectives contained in the Countywide Planning Policies and each jurisdiction's comprehensive plan with actual growth and development that has occurred. At a minimum, the evaluation is to determine if there is sufficient suitable land to accommodate the countywide population projection and determine the density of housing that has been constructed and amount of land developed for commercial and industrial uses within the urban growth area. Detailed procedures, standards, and definitions for implementing this policy and complying with RCW 36.70A.215

are found in the current report titled *Pierce County Buildable Lands, Procedures for Collecting and Monitoring Data (Procedures Report)*.

Buildable Lands Countywide Planning Policy Summary

Pierce County, in cooperation with other cities and towns within the County, has established a Pierce County Buildable Lands Program (Program) to provide a Countywide monitoring and analysis mechanism to meet the requirements of RCW 36.70.A.215. The Program is coordinated through Pierce County Planning and Land Services. The focus of the Program is an analysis of annual development data related to locally adopted comprehensive plan goals and policies, the calculation of residential and employment land capacity as compared to the 20-year need, and identification of actions to rectify inconsistencies.

The primary product of the Program is the publication of a Buildable Lands Report by Pierce County every five years, the first being issued in 2002 and the most recent being the 2012 edition issued as a draft report in June 2014 . Each municipality within Pierce County is to provide information on land development activities to the County and assist in an inventory of buildable lands. Carbonado and other municipalities are to follow the guidelines specified in the *Procedures Report* for the collection, monitoring, and analysis of development activity and potential residential/employment capacity.

Pierce County, in consultation with its municipalities, conducts an analysis of inventoried buildable lands to evaluate the County's ability to accommodate its 20-year population and employment land needs. The Buildable Lands Report includes a summary of development activity by zoning classification and detailed assumptions incorporated in the residential and employment capacity analysis for each jurisdiction.

Targets for 2030

Pursuant to Pierce County Ordinance No. 2011-36s, the Pierce County Council has established population, housing unit, and employment targets for the year 2030 consistent with state and regional requirements and local considerations. The adopted targets for Carbonado are summarized in the table, below.

GMA Population, Housing Unit and Employment Targets			
Population	Estimated 2008 Population (OFM)	2008-2030 Population Growth	2030 Total Population Allocation
	655	145	800
Housing Unit	Estimated 2008 Housing Units (OFM)	2008-2030 Housing Unit Growth	2030 Total Housing Unit Allocation
	218	80	298
Employment	2008 Total Employment Estimate	2008-2030 Total Employment Growth	2030 Total Employment Target
	63	5	68

The Town must demonstrate it can accommodate this growth during this planning horizon by identifying that it has enough developable land zoned at sufficiently high enough densities and intensities to be able to achieve these targets. Land use designations and development assumptions adopted in the Land Use Element, which allow slightly higher densities and intensities compared with previous designations and assumptions used in the 2012 Buildable Lands Report analysis, will accommodate the housing unit and employment growth targets adopted for Carbonado by Pierce County.

Goals and Policies

The land use goals contained in this comprehensive plan are:

- Consistent land use management
- Residential uses
- Commercial uses
- Parks and recreation
- Public facilities
- Industrial uses
- Environmental quality
- Water resources
- Community character
- Development regulations and permit processing
- Interjurisdictional planning

Detailed goal statements and associated policies follow in this section.

Goal 1: Consistent Land Use Management

All development and redevelopment should conform to the land use map and associated land use designations described in the land use element of this comprehensive plan. Development guidelines and regulations should conform to the goals and policies set forth in this comprehensive plan.

Goal 2: Residential Uses

Carbonado should remain a predominantly residential community that encourages a mix of housing types, land uses and amenities that serve the needs of residents.

Policies:

- 2.1 Development regulations should accommodate and encourage a wide range of housing types to meet the needs of residents through various life stages. Housing choice should be expanded beyond detached single-family dwellings to enable residents to remain living in the community as their housing needs or preferences change over time, and to attract new residents to the community.
- 2.2 The mix of housing within the community should include detached and attached single-family dwellings, small-scale multi-family dwellings including townhomes, accessory dwelling units, residential care facilities for those who are unable to maintain independent living arrangements, and other innovative housing that is compatible with the type, scale and character of surrounding residential development.
- 2.3 Innovation in site and building design should be encouraged in and adjacent to critical areas in accord with comprehensive plan goals and policies. For example, portions of undeveloped residential tracts containing critical areas may exceed the maximum allowable dwelling units per acre if this facilitates placement of the development away from the critical areas and provided that *overall* density of a site does not exceed the maximum allowable dwelling units per acre. Appropriate buffering, design features, and amenities must be included in all innovative designs.
- 2.4 Manufactured homes should be allowed in low density residential and medium density residential areas, subject to applicable federal and state siting requirements and local health and safety regulations
- 2.5 To expand local economic opportunities for Carbonado's residents, home occupations that are compatible with the surrounding residential area should be encouraged.
- 2.6 Residential density will be consistent with the ranges specified for each residential land use designation in the land use element. However, residential densities in specific areas may be modified to ensure the protection of critical areas, establish natural buffers, or preserve or establish open space. Proposed average residential densities for Carbonado and its UGA are 4.0 to 6.0 dwelling units per gross acre in low density residential areas and 6.0 to 8.0 dwelling units per gross acre in medium density residential areas.

Goal 3: Commercial Uses

The proportion of land designated for commercial use should be expanded where a clear benefit to Carbonado's residents is demonstrated. Carbonado should encourage the retention and revitalization of existing commercial areas and the development of newly designated commercial areas that harmonize with the historic mining town character of the community. Commercial areas should be developed in conformance with this goal and its associated policies.

Policies:

- 3.2 Commercial businesses that serve the daily needs of Carbonado's residents for retail items or professional services should be encouraged. Commercial businesses that support the needs of Foothills Trail users and tourists visiting Mt. Rainier National Park or other scenic, historic and recreational areas should also be encouraged.
- 3.3 Carbonado should encourage locally owned and operated businesses to be established and remain in Carbonado.
- 3.3 Commercial and mixed use buildings should conform to design guidelines that support a "historic coal mining town" character and be of a scale and architectural style that is compatible with surrounding development. Where commercial rehabilitation, development, or redevelopment occurs in an area with historic significance, it should be sensitive to the historic significance of the area.
- 3.4 Commercial strip development should be discouraged. Automobile-oriented businesses such as restaurants with drive-up windows may be allowed subject to compliance with screening and other development standards intended to minimize impacts on neighboring properties.
- 3.5 Buildings and off-street parking should be sited so that the streetscape is enhanced and pedestrian orientation encouraged. Parking should be located to the rear or side of buildings. Buildings should have an obvious pedestrian entrance, pedestrian-level windows, weather protection, and architectural details and pedestrian-scale signage on the street.
- 3.6 Commercial and mixed use development should incorporate landscaping, seating, and other pedestrian-oriented amenities to provide pleasant and comfortable resting, socializing, and picnicking areas for employees, residents, tourists and shoppers.
- 3.7 Commercial and mixed use development should include high quality, safe, and contiguous facilities for pedestrians, bicyclists, and disabled persons. Site designs should also accommodate and support users of public transit services with appropriate facilities in the event these services become available in Carbonado in the future. Commercial and mixed use development should be designed to take into consideration the connections, both vehicular and pedestrian, to adjoining sites to reduce personal automobile trips. Sidewalks and internal pathways should be incorporated to enhance pedestrian circulation.

- 3.8 Lighting scale, placement, and design should facilitate safety while minimizing light impacts on the surrounding neighborhood and night sky.
- 3.9 Appropriate proportions and types of vegetative landscaping in commercial and mixed use development should be installed consistent with landscaping regulations.
- 3.10 Limited residential uses in the form of accessory apartments and upper-floor dwelling units associated with commercial uses should be allowed in commercial areas. The design should ensure the privacy of residents.
- 3.11 The visual appearance of commercial areas should be improved through public and private measures for beautification, design strategies, maintenance, and streetscape improvements.
- 3.12 The adoption of maximum automobile parking standards should be considered for various types of commercial development. Shared parking facilities should be encouraged. Parking facilities should conform to the parking-related policies of the transportation element.
- 3.43 Commercial uses that are low in their impact on adjacent areas should be preferred immediately adjacent to residential land uses. Potential impacts on adjacent uses should be mitigated through compliance with adopted performance standards.

Goal 4: Inter-jurisdictional Planning

The Town should take steps to ensure that decisions, policies, and activities of other governmental and advisory agencies that may affect Carbonado are consistent with the goals and policies of Carbonado's comprehensive plan. Carbonado should encourage cooperative, coordinated inter-jurisdictional efforts that are consistent with this goal.

Policies:

- 4.5 The Town should participate in various county and regional organizations concerned with the implementation of the Growth Management Act and the planning and funding of transportation projects.
- 4.6 The Town should support the development of interjurisdictional programs that address regional problems and issues that affect Carbonado and the Puget Sound region. Examples of regional issues include affordable housing, transportation, health care, open space corridors, and economic growth.
- 4.7 The Town should seek to develop and adopt interlocal agreements to address concerns relating to land use, new development, and redevelopment. The Town should attempt to reach agreements with adjacent jurisdictions to ensure that land uses adjacent to Carbonado are compatible with Carbonado land uses. The Town should also seek agreements with adjacent jurisdictions to minimize and mitigate the negative impacts to Carbonado of land uses and development in adjacent jurisdictions.
- 4.4 The Town should work with adjacent jurisdictions to identify and protect natural habitat networks that cross jurisdictional boundaries. Networks should link large, protected, or

significant blocks of fish and wildlife habitats within and between jurisdictions to achieve a continuous countywide network.

- 4.5 The Town should work with adjacent jurisdictions to coordinate watershed/aquatic restoration planning and implementation activities within a watershed.

Goal 5: Essential Public Facilities and Other Public Facilities

Essential public facilities shall be allowed in locations appropriate for the services provided and the people served. Essential public facilities shall harmonize with the surrounding development and with the natural features of the surrounding land and vegetation.

Policies:

- 5.1 Small public facilities intended to serve a few neighborhoods may be located within a neighborhood. Examples of these facilities include neighborhood parks, drainage facilities, and electrical transformer boxes.
- 5.1 Public facilities intended to serve the entire community should be located to provide convenient access for residents who must frequent them. Examples of such facilities include community parks, schools, government offices, and similar facilities. Large facilities that serve the entire community and are not frequented by citizens should be located where they will not disrupt the town landscape or disturb residential and commercial areas with noise, glare, dust, or other pollution. Examples of such facilities include power substations, water wells, and sewage treatment facilities.
- 5.2 Public facilities that have service areas extending substantially beyond the Town boundaries should be sited at a location appropriate to meet the transportation needs of the users of the facilities. Facilities that generate a significant amount of truck, automobile, or foot traffic should be located along arterial streets and convenient to public transit facilities, if available. School facilities should be given flexibility to locate on non-arterial streets. Developers of these facilities should be required to make infrastructure improvements to support the facilities. These improvements may include, but are not limited to, street construction, signage, sidewalks, streetlights, transit shelters, benches, parking, bicycle racks, utility lines, and similar improvements.
- 5.3 Carbonado recognizes that some federal, state, regional, and county facilities may impose detrimental effects on the community if located within the Town. Such facilities should be packaged with accompanying facilities or programs having clear benefits for the community. The Town should seek mitigation of disproportionate financial and other burdens resulting from the siting of essential public facilities in Carbonado.
- 5.4 Siting proposals by federal, state, regional, and county agencies should include clear justification for the need for the facility and for its location within Carbonado. Alternate sites not in Carbonado should be explored through a cooperative inter-jurisdictional approach. If the final site selected is within Carbonado, the site should be consistent with the provisions of all of Carbonado's comprehensive plan elements.
- 5.5 All public facilities should be sited, designed, and buffered to fit in harmoniously with the surrounding neighborhood. Facility design and buffering should conform to the

provisions of the urban landscaping and environmental goals and policies of this comprehensive plan. In addition, special attention should be given to minimizing the noise, light, glare, dust, and traffic associated with essential public facilities.

- 5.6 A public review process should be established by the state for essential public facilities that are difficult to site and should include ample opportunities for Carbonado's citizens to participate in the site selection process.
- 5.7 Proposals for public facilities that are not difficult to site should be processed using the minimum permitting procedures required to ensure the facilities conform to the goals and policies of this comprehensive plan and have adequate opportunity for public input.

Goal 6: Environmental Quality

Land uses and development and redevelopment projects should be managed to preserve and improve the natural environment as well as the built environment.

Policies:

- 6.1 The Town should enforce standards that will achieve environmentally sensitive development when it occurs within and adjoining critical areas, natural buffers, and areas designated as open space.
- 6.2 To allow reasonable use of property while protecting the environment, reduction or variation of residential lot sizes, density transfers and bonuses, planned developments, clustering of housing, and innovative development techniques should be considered when designed to preserve open space, protect critical areas, or provide vegetative buffers.
- 6.3 Performance standards should be considered as a regulatory alternative to fixed zoning regulations in and around environmentally sensitive areas.
- 6.4 Town facility projects, maintenance and operating procedures, and programs should be structured to minimize and mitigate environmental damage, restore and improve the environment if possible, and increase the environmental education and awareness of Town employees and citizens.
- 6.5 To minimize maintenance costs, conserve water, and provide vegetation with the maximum usefulness as wildlife habitat, urban landscaping should emphasize the use of indigenous plants that are drought tolerant during the summer months. Landscaping may also include non-native plant species that are well adapted to growing and providing wildlife habitat with minimal human intervention in the local climate and soils.
- 6.6 The Town should seek to protect wildlife habitat resources by preventing the indiscriminate and unnecessary removal of native trees, shrubs, and ground covers; and by promoting the protection of areas that provide food, cover, resting, and nesting areas for wildlife.
- 6.7 The Town should ensure that there is “no net loss” of wetlands by function and values.

- 6.8 The Town should ensure that development is properly located and constructed with respect to the limitations of the underlying soils, geological hazards, and areas subject to flooding.
- 6.9 Town facilities, services, programs, and procedures should be designed and managed to conserve resources and to reduce demand for facilities with significant environmental impacts. Similarly, procedures, programs, and rate structures should encourage citizens to conserve resources and to minimize the negative environmental impacts of their use of facilities and services.
- 6.10 Development activities and land uses within Carbonado should be managed to minimize noise; light and glare; and water, soil, and air pollution. The Town should work with adjacent jurisdictions and property owners to minimize transmission of pollutants from development activities and industrial, commercial, and public facility land uses near Carbonado's boundary.

Goal 7: Water Resources

Surface, ground, storm, and waste waters should be managed in an ecologically responsible manner and as interconnected components of the region's watershed.

Policies:

- 7.1 Private and public development projects should be conducted in a way that preserves or improves the viability of each component of the water ecosystem and of the entire ecosystem.
- 7.2 The quality of stormwater runoff should be improved, flooding due to stormwater runoff should be minimized, and the erosion of land by stormwater runoff should be minimized, in order to maintain natural aquatic communities and beneficial uses. Development regulations should be enforced to minimize stormwater runoff as a result of development projects by limiting grading and clearing of a development site only to the extent reasonably needed to accommodate the development project, minimizing roadways and other impervious surfaces in the completed project, and encouraging the use of natural vegetation and ground covers during development and in the completed project.
- 7.3 Where removal of trees or other vegetation may result in runoff and erosion, the Town should require effective erosion control during and after the tree or vegetation removal. Where extensive removal of trees or other vegetation occurs, the Town may require restoration and replanting consistent with landscaping guidelines and significant tree retention and protection standards.
- 7.4 All new development and redevelopment should be required to use the sanitary sewer system. Development currently using septic systems should be required to convert to sanitary sewer when any portion of the on-site system fails, functions improperly, or needs replacement, or whenever the Town's sewer system is extended by local improvement methods or becomes reasonably available by other means. Where property is adjacent to presently existing accessible sewer mains, connections should be made within a specified time period established by Town ordinance.

- 7.5 Town procedures and programs should be structured to minimize pollutants entering storm, surface, ground, and stream waters from Town-owned and Town-maintained properties. Town procedures and programs should encourage the Town's citizens to minimize non-point pollutants contributed from buildings, landscapes, automobiles, and similar sources.
- 7.6 The quality of ground water should be monitored closely and protective measures maintained or increased to ensure an uncontaminated water supply. Regulations should be implemented with regard to installation, inspection, maintenance, and removal of above ground and below ground tanks designed to store potentially contaminating materials such as heating oil and industrial chemicals. Other protective regulations should be developed as appropriate to protect ground water.
- 7.7 Town procedures, programs, and water rates should be structured to minimize the Town's consumption of water and to improve the water conservation habits of Carbonado's citizens.
- 7.8 The Town should adopt and implement the latest version of the Department of Ecology's Stormwater Management Manual for Western Washington.

Goal 8: Community Character

Carbonado's community character should be preserved and enhanced through application of historic mining town design guidelines and other design standards to new development and redevelopment in a manner that strengthens the historic fabric and reinforces the development pattern found throughout much of the Town. Design strategies and approaches should be utilized to ensure that changes to the built environment preserve and enhance the community's distinctive identity in recognition of the economic value of sense of place.

Policies:

- 8.8 "Historic Coal Mining Town" design guidelines for commercial mixed use areas should be implemented in cooperation with business proprietors to ensure that future development and redevelopment conforms to Carbonado's unique vision.
- 8.2 Goals and policies in the housing element and other elements of this comprehensive plan should promote preservation of historic structures and culturally significant features within the community.
- 8.3 All new development and redevelopment in commercial, residential, and park and recreation areas should be at the human, pedestrian scale. Development and redevelopment of public facilities should be at the human, pedestrian scale to the greatest extent possible, in particular where they are located in close proximity to street frontages or visible from the street. Pedestrian safety features should be incorporated into all designs.
- 8.4 Repetitious building forms should be avoided in new development and redevelopment.
- 8.5 To maintain and enhance the existing landscape within Carbonado, the Town should encourage property owners to retain existing trees. Existing significant trees should be

- retained to the maximum extent possible at development and redevelopment sites. Where property owners elect to remove existing trees for safety or other reasons, Carbonado should encourage the property owner to replace removed trees with species and varieties that are safe, appropriate, and beneficial in the town environment.
- 8.6 Sign regulations should ensure that new and modified signage is unobtrusive and does not result in visual pollution throughout the community. Signage should be appropriately sized and placed for pedestrians and bicyclists as well as motorists. Commercial signage should be consolidated for uses within a single project to reduce sign clutter.
- 8.7 Subdivisions and other new development and redevelopment should include rights-of-way and facilities designed for the safe and convenient passage of pedestrians, bicyclists, and disabled persons as well as of motorized vehicles, where appropriate. Pedestrian and bicycle facilities should be added to streets as necessary to complete non-motorized circulation routes that connect destinations throughout the community with the Foothills Trail extension. Pedestrian and bicyclist facilities should provide contiguous paths that are accessible to disabled persons throughout the community. All pedestrian and bicycle facilities should include adequate street and path lighting. Wherever feasible and appropriate, a landscaped strip containing street trees should provide a physical separation between automobile traffic and pedestrians.
- 8.8 Public facilities should be identified by similar signage and facility entry treatments throughout the community.
- 8.9 Arterial entrances to the Town should be upgraded with distinctive visual treatments unique to Carbonado to enable people to identify that they are entering (or leaving) the community. Landscaping of development in entrance vicinities should be compatible with entrance treatments.
- 8.10 As the Town's street network is extended, the streets should be laid out in a grid pattern that features relatively short block lengths, frequent street intersections, and alleys where appropriate. This pattern will reinforce Carbonado's historic development pattern, provide more alternative routes for pedestrian and vehicle traffic, and slow traffic – thereby enhancing public safety. The street grid may be adjusted to reflect topographic constraints, avoid environmentally sensitive areas, and respond to the presence of other significant physical features, as warranted.
- 8.11 The Town shall identify the presence of federal, state, and local historic, archaeological and cultural lands, sites, and structures, of significance within its boundaries.
- 8.12 The Town shall encourage or accomplish the preservation of significant lands, sites, and structures through any one or a combination of the following techniques, as determined to be appropriate:
- Designation;
 - Incentives for preservation;
 - Loans and grants;
 - Public purchase;
 - Non-development easement;

- Development rights transfer;
 - Restrictive covenants;
 - Regulations for protection, maintenance, and approval of appropriate development;
 - Plans/policies/standards for preservation as set by the U.S. Department of the Interior;
 - Certified Local Government designation.
- 8.13 The Town shall encourage public education programs regarding historic, archaeological, and cultural lands, sites, and structures as a means of raising public awareness of the value of maintaining those resources.
- 8.14 Public buildings and public spaces should be designed to contribute to the unique sense of community and a sense of place.

Goal 9: Development Regulations and Permit Processing

Carbonado should develop and implement a permit process for development and other local government approvals that is timely and fair to all affected parties.

Policies:

- 9.1 Development regulations should be periodically reviewed and revised to ensure that they are consistent with and relate directly to implementation of the comprehensive plan and other state and federal mandates. Duplicate and unnecessary regulations should be eliminated.
- 9.2 In the event of conflict between development regulations and this comprehensive plan, the provisions of this comprehensive plan take precedence. This policy applies immediately upon adoption of this comprehensive plan. Development regulations that are significantly inconsistent with this comprehensive plan should be given high priority for rapid revision.
- 9.3 Procedures for processing permits should be periodically reviewed and modified to ensure uniform processing for all permit applications, enhance communication with applicants, combine and simplify processing steps, and minimize processing time.
- 9.4 Input from developers, business proprietors, residents, and other interested parties should be solicited concerning updates to regulations and permit processing procedures.
- 9.5 Permit applications for minor projects of a routine nature should be processed at the staff level and should not require public hearings. However, the streamlining of permit processing procedures should not be done at the expense of public input concerning permit applications of a non-routine, major, or controversial nature. The public should be given ample opportunity to review and comment on major, non-routine, or controversial development permit applications.
- 9.6 The Town should consider the impact of land use ordinances and policies on the rights of private property owners. The Town should take steps to ensure the rights of private property owners are protected through a cost effective and timely appeal process.

Land Use Designations

Land use designations for this comprehensive plan have been determined primarily by existing land uses. Carbonado includes historic areas that were developed beginning over a century ago, are largely developed, and provide limited infill development opportunities. The Town also includes larger tracts of land surrounding the historic core of the community that are vacant or underdeveloped. Thus, goals and policies not only address infill development and redevelopment, they focus on the ongoing maintenance, refinement, and improvement of the existing community. This comprehensive plan emphasizes maintaining and enhancing Carbonado's community character through land use designations and goals and policies that cultivate the presence of desirable features in existing development, redevelopment, and infill development. Land use designations for Carbonado and its UGA include:

- Low Density Residential
- Medium Density Residential
- Commercial Mixed Use
- Parks, Recreation, and Open Space
- Community Facilities

The remainder of this section defines each land use designation for Carbonado and its UGA.

Low Density Residential

Allowable Uses

The Low Density Residential (LDR) designation generally applies to areas of the community that have previously been platted and developed for single-family dwellings. LDR areas will include the following housing types:

- Single family attached and detached dwelling units;
- Attached and detached accessory dwelling units; and
- Small group homes, assisted living facilities, residential care facilities, residential treatment facilities, and retirement homes in accord with the applicable goals and policies of this comprehensive plan.

Additional uses in Low Density Residential areas include public facilities that support residential neighborhoods. For example, streets, sidewalks and other pedestrian facilities, bike paths and associated facilities, and utilities, will be allowed. Infrastructure for utilities may include, but is not limited to, storm drainage, power, water, sewer, and telecommunications facilities. In addition, other small public facilities compatible with the surrounding neighborhood will be allowed. Home occupations that are compatible with the surrounding neighborhood will be allowed.

Building Intensity

A building intensity of four to six dwelling units per acre will be achieved in Low Density Residential areas depending on the development pattern. Allowable building intensity, as measured by the coverage of land with impervious surface and other factors, is specified in the Town's zoning regulations (Title 18 CMC).

Population Density

Assuming an average household size of 2.93 persons¹ and four to six units per acre, LDR areas will accommodate approximately 11 to 17 persons per acre.

Medium Density Residential

Allowable Uses

The Medium Density Residential (MDR) designation generally applies to areas of the community that contain single-family dwellings on individual platted lots interspersed with larger, un-platted vacant and underdeveloped properties having the potential to accommodate a mix of housing types at higher densities. MDR areas will include the following housing types:

- Single family attached and detached dwelling units;
- Attached and detached accessory dwelling units;
- Multifamily dwelling units, with no more than four dwelling units per building allowed; and
- Small group homes, assisted living facilities, residential care facilities, residential treatment facilities, and retirement homes in accord with the applicable goals and policies of this comprehensive plan.

Additional uses in Medium Density Residential areas include public facilities that support residential neighborhoods. For example, streets, sidewalks and other pedestrian facilities, bike paths and associated facilities, and utilities, will be allowed. Infrastructure for utilities may include, but is not limited to, storm drainage, power, water, sewer, and telecommunications facilities. In addition, other small public facilities compatible with the surrounding neighborhood will be allowed. Home occupations that are compatible with the surrounding neighborhood will be allowed.

Building Intensity

A building intensity of six to eight dwelling units per acre will be achieved in Medium Density Residential areas depending on the development pattern. Allowable building intensity, as measured by the coverage of land with impervious surface and other factors, is specified in the Town's zoning regulations (Title 18 CMC).

Population Density

Assuming an average household size of 2.93 persons² and six to eight units per acre, MDR areas will accommodate approximately 17 to 23 persons per acre.

Parks, Recreation, and Open Space

Allowable Uses

The Parks, Recreation and Open Space (PROS) designation applies to publicly owned parks and open space lands. Currently, these include the 8th Avenue Park (an active park), the Tubbs Road Park (a recreational area with ball fields), and the Carbon River canyon open space area located adjacent to Hillside Drive. In addition, the PROS designation applies to the vacated Burlington Northern Railroad ROW consistent with the goal of extending the regional Foothills Trail through the community.

Lands designated as Parks, Recreation, and Open Space may include tracts that are publicly or privately owned. Allowed uses in Parks, Recreation, and Open Space areas, subject to critical area and sensitive lands restrictions where applicable, will include:

- Neighborhood parks designed to meet the active recreational needs of residents and employees in the immediate area;
- Community parks designed to meet the active and passive recreational needs of the entire Carbonado community;
- Recreational buildings including facilities such as gymnasiums, basketball courts, community kitchens, banquet halls, indoor stages, meeting rooms, etc.;
- Outdoor recreational facilities such as swings, climbing toys, picnic areas, spray parks, golf and Frisbee golf courses, ball fields, volleyball courts, bocce ball facilities, outdoor stages, etc.;
- Trails and paths for pedestrians and bicyclists; and
- Preserved natural areas characterized by native vegetation and wildlife.

Building Intensity

Building intensity for Parks, Recreation, and Open Space areas will vary widely. There will be no building intensity in preserved natural areas. For other park and recreation facilities, building intensity will be determined by the purpose of the facility. Because park and recreation facilities may occur in conjunction with other land uses, any park or recreation facility that is proposed must harmonize with surrounding development and must not exceed the building intensity of the surrounding area. Ideally, park and recreation facilities will provide visual relief in the town landscape by having a significantly lower building intensity than the surrounding development.

For more information on park, recreation and open space facilities, see Chapter 6 Parks, Recreation and Open Space Element.

Commercial Mixed Use

Allowable Uses

The Commercial Mixed Use (CMU) designation is intended to accommodate a wide range of retail, office, and attached residential uses. Currently, commercial development in Carbonado is limited to the historic tavern located at the southwesterly end of Pershing Avenue. In the future the area at the intersection of Highway 165 and Pershing Avenue should also be designated as CMU. In the future this area will become the commercial center of Carbonado.

Commercial Mixed Use areas will allow retail businesses, offices and services for which the primary clientele will most likely be Carbonado residents, local employees and tourists. Examples of such businesses include appropriately sized grocery stores and pharmacies, health care and other professional offices, tourist-oriented gift shops, bike and outdoor recreation equipment shops, small bakeries, clothiers, beauty shops, coffee shops, restaurants, small financial institutions, etc. Businesses and organizations that are culturally enriching will also be allowed. Examples of such businesses and organizations include art galleries, bookstores, dance studios, museums, live theaters, senior centers, etc. Commercial strip development should be discouraged. Automobile-oriented businesses such as restaurants with drive-up windows may be allowed subject to compliance with screening and other development standards intended to minimize impacts on neighboring properties and de-emphasize their auto orientation.

In addition, limited residential uses in the form of accessory apartments and upper-floor dwelling units of vertical mixed use buildings will be allowed in CMU areas. Project designs should ensure the privacy of residents. Public and quasi-public facilities that support development in the commercial areas and are compatible with the surrounding development will be allowed.

Building Intensity

New development and redevelopment in Commercial Mixed Use areas will incorporate sufficient landscaping and alternatives to impervious surface (such as pervious pavement) to limit the impervious surface coverage on a project-by-project basis to less than 75% of a site. Other limitations on building intensity are specified in the Town's zoning regulations (Title 18 CMC).

Community Facilities

Allowable Uses

The Community Facilities designation applies to municipal buildings, major utility facilities, schools, religious institutions, libraries, cemeteries and other similar uses and facilities. Quasi-

public facilities include private organization facilities offering services complementing or supplementing services typically offered by government agencies. Currently, public and quasi-public uses and facilities include the town hall, post office, fire station, wastewater treatment plant, cemetery, and Carbonado School.

To improve visual clarity on the land use map, public facilities that occur throughout the Town, such as streets and utilities, are not shown on the land use map. Such facilities are discussed in the transportation, utilities, and capital facilities elements of this comprehensive plan.

Building Intensity

Building intensity for a public or quasi-public facility depends upon the purpose of the facility. Because public facilities may occur in conjunction with other land uses, any public facility that is proposed must harmonize with surrounding development and must not exceed the building intensity of the surrounding area. All public and quasi-public facilities must be appropriately sited and buffered in accord with the goals and policies of this comprehensive plan.

Population and Land Use

Population

In 2010, Carbonado had 208 households and a population of 610 persons³. The latest population estimate issued by the Washington State Office of Financial Management (OFM) for April 1, 2014 estimated the Town continued to have 610 persons residing within the city limits⁴. Population has remained generally stable since the last substantial increase occurred, from 1994 (545 persons) to 1995 (624 persons)⁵.

POPULATION

Year	Population
1970	394
1980	456
1990	495
1995	624
2000	621
2005	645
2010	610
2013	610
2014	610

Sources: U.S. Census Bureau – Decennial Census for 1970, 1980, 1990, 2000, and 2010.

Washington State Office of Financial Management – Inter-census estimates 1995, 2005, 2013 and 2014.

Age Distribution

Age	Number	Percent
Total population	610	100.0
Under 5 years	42	6.9
5 to 9 years	40	6.6
10 to 14 years	49	8.0
15-19 years	61	10.0
20 to 64 years	355	58.2
65 to 69 years	31	5.1
70 to 74 years	13	2.1
75 to 79 years	8	1.3
80 to 84 years	7	1.1
85 years and over	4	0.7
Median age	34.2	N/A

Source: U.S. Census Bureau

Current Land Use

Historically, the boundaries and configuration of Carbonado have been shaped by the presence of the Burlington Northern Railroad (and its predecessor) and SR165 to the north and east of the community, the Carbon River canyon to the southwest, and other topographical features. The Town contains 242 acres, of which 184 acres are developed or occupied, leaving 58 acres vacant or undeveloped.

The community is predominantly residential in nature, and roughly half of the existing homes were constructed prior to 1940. Some of these single-family dwellings were constructed for miners' families by Crocker Mines. Another large share of the homes in Carbonado was built during a period of renewed growth for the community during the 1980s and 1990s.

Public and quasi-public land uses, in particular open space, street and railroad rights-of-way, and a wastewater treatment facility, comprise the next largest portion of the Town's acreage. The railroad right-of-way has been vacated and the tracks removed, creating an opportunity to accommodate an extension of the Foothills Trail, a regional bicycle / pedestrian trail that currently runs between Puyallup and South Prairie through Orting and also includes a separate segment running south from Buckley. Current land uses are summarized below:

Current Land Use – Acreage and Percentage

Current Land Use	Carbonado	UGA	Combined	Percent**
Residential	85	1	86	40
Commercial	1		1	.4
Park and open space				
Parks	1		1	.4
Open Space	33		33	13
Vacated Railroad ROW	18		18	7
Public/quasi-public				
Government	1		1	.4
Schools	4		4	2
Street ROW	28		28	11
Cemetery	3		3	1
Wastewater	10		10	4
Vacant	58	3	61	25
Total	242	4	246	100

**Percentages are rounded for each category, may not equal 100%

Urban Growth Area

The current Urban Growth Area for Carbonado encompasses three acres outside the town limits located east of SR165 and accessed by Forrest Drive. A one acre parcel is developed with a single-family residence and an additional parcel is the Town's water collection point, where a well house and pumping station are located. The remaining land is vacant. Based on Carbonado's average household size of 2.93 people in 2010 (U.S. Census), an estimated three persons reside within the UGA.

Urban Service Area

Carbonado, by contract, provides municipal water and fire protection services to an area north of the Town limits. In addition, the Town provides municipal water services, only, to an area east and south of the Town limits. Carbonado envisions that sometime in the future, these areas will be added to its UGA and beyond that, will be annexed to the Town.

Future Land Use

The Town and UGA are designated for future land uses generally consistent with existing land uses for developed properties. For vacant properties, land use designations reflect the community's vision statement, which envisions expanded opportunities for commercial and mixed use development, and a greater accommodation of a mix of housing types, than was afforded by the 2008 Plan. Land use designations are summarized in the table below and

illustrated in Appendix A.

Land Use Designations

Designation	Acres -- Carbonado plus UGA	Uses and zoned densities	Percent of total designated land
LDR: Low Density Residential	122	Single family and two-family units at 4 to 6 units per acre	50
MDR: Medium Density Residential	17.5	Single-family, two-family and multi-family units at 6 to 8 units per acre	7
CMU: Commercial Mixed Use	5	Retail, office and mixed use development, including attached residential units	2
PROS – Parks, Recreation and Open Space	52	Parks, open space, and recreational facilities including bicycle/pedestrian trails	21
CF: Community Facilities	46	Municipal buildings, utility facilities, schools, religious institutions, cemetery, watershed area	19
Total	242		100 (rounded)

Excludes street rights-of-way

Planned Land Use in Adjacent Jurisdictions

The future land use designations in Carbonado's UGA and surrounding area in which Pierce County currently has jurisdiction over land use designations and regulatory authority over development are those indicated in the *Pierce County Comprehensive Plan* and the Pierce County Future Land Use Map.

The Pierce County Future Land Use Map has designated the area surrounding Carbonado as a number of Rural classifications, ranging from Rural 40 to Designated Forest Land. Most of this area to the north, east and west that is not currently built is not suitable for residential development. Some of the area to the south is suitable for further residential use. However, the Future Land Use Map shows that only large acreage development is planned. . Adjacent land use designations are summarized in this comprehensive plan to identify potential inconsistencies and incompatibilities with Carbonado land uses. Carbonado will coordinate with other jurisdictions as appropriate to address consistency and compatibility issues.

Major Characteristics of Adjacent Land Use Designations

The table below summarizes the primary permitted uses for each land use designation located in close proximity to Carbonado within Pierce County jurisdiction and identifies the most similar land use designation in Carbonado.

Permitted by Pierce County Designations	Permitted by Carbonado Designations
<i>Rural 20</i> : Single-family dwellings, accessory dwelling units; one dwelling unit/20 acres or 2 dwelling units/20 acres when 50% or more of lot is dedicated to open space	No comparable designation in terms of density. In terms of use -- <i>Low Density Residential</i> : Attached and detached single family dwellings, accessory dwelling units, 4 to 6 dwelling units/acre
<i>Rural 10</i> : Single-family dwellings, accessory dwelling units; one dwelling unit/10 acres or 2 dwelling units/10 acres when 50% or more of lot is dedicated to open space	No comparable designation in terms of density. In terms of use -- <i>Low Density Residential</i> : Attached and detached single family dwellings, accessory dwelling units, 4 to 6 dwelling units/acre
<i>Park and Recreation</i> : Park, recreation and open space facilities	<i>Parks, Recreation and Open Space</i> : Park, recreation and open space facilities
<i>Moderate Density Single Family</i> : Attached and detached single-family dwellings, 4-6 dwelling units/acre. Applies to Carbonado UGA.	<i>Low Density Residential</i> : Attached and detached single family dwellings, accessory dwelling units, 4 to 6 dwelling units/acre

References

1. *US Census Bureau*
2. *US Census Bureau*
3. *U.S. Census Bureau, 2010 Census*
4. *Washington State Office of Financial Management*
5. *Washington State Office of Financial Management*
6. *Pierce County Comprehensive Plan*

TOWN OF CARBONADO
CRITICAL AREAS ELEMENT

CRITICAL AREAS

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Critical Areas

Introduction

Wetlands, critical aquifer recharge areas, geologically hazardous areas, frequently flooded areas and fish and wildlife habitat conservation areas are defined as critical areas by the State of Washington. Chapter 3 attempts to identify and map the known critical areas within and around the Town boundaries of Carbonado. This chapter also contains goals and policies on how development should be regulated adjacent to and within the critical areas.

Relationship to Regulations

How land is to be developed within and around critical areas is specified in the development regulations. The critical areas development regulations must be consistent with the Comprehensive Plan and be designed to implement the goals and policies set forth in this chapter. Critical areas development regulations must be reviewed every seven years and updated to reflect changes in State laws and regulations. Further, the critical areas development regulations must be based on scientific standards and must contain language that makes use of the best available science.

Wetlands

Wetlands are transitional areas between upland and aquatic environments where water is present long enough to form distinct soils and where specialized "water loving" plants can grow. Wetlands include marshy areas along major water bodies such as lakes, inland swamps, and seasonal watercourses. Wetlands are typified by water table that usually is at or near the surface, and there may be standing water all or part of the year. Soils that are present in wetlands are known as "hydric soils". Certain plant species, including trees, shrubs, grasses, and grass-like plants have adapted to the low oxygen content of wetland soils. These plants are known as "hydrophytes".

Another distinguishing characteristic of wetlands, in addition to soils and plants, is known as hydrology. Wetland hydrology refers to wetness of the wetland- how often is the soil saturated or flooded with water and how long does it last?

Functions and Values

In their natural state, wetlands perform functions which are impossible or difficult and costly to replace. Wetlands provide erosion or sediment control – the extensive root systems of wetland vegetation stabilize stream banks, floodplains, and shorelines. Wetlands improve water quality by decreasing the velocity of water flow, resulting in the physical

interception and filtering of waterborne sediments, excess nutrients, heavy metals, and other pollutants. Wetlands also provide food and shelter, essential breeding, spawning, nesting and wintering habitats for fish and wildlife, including migratory birds, anadromous fish, and other commercially and recreationally valuable species.

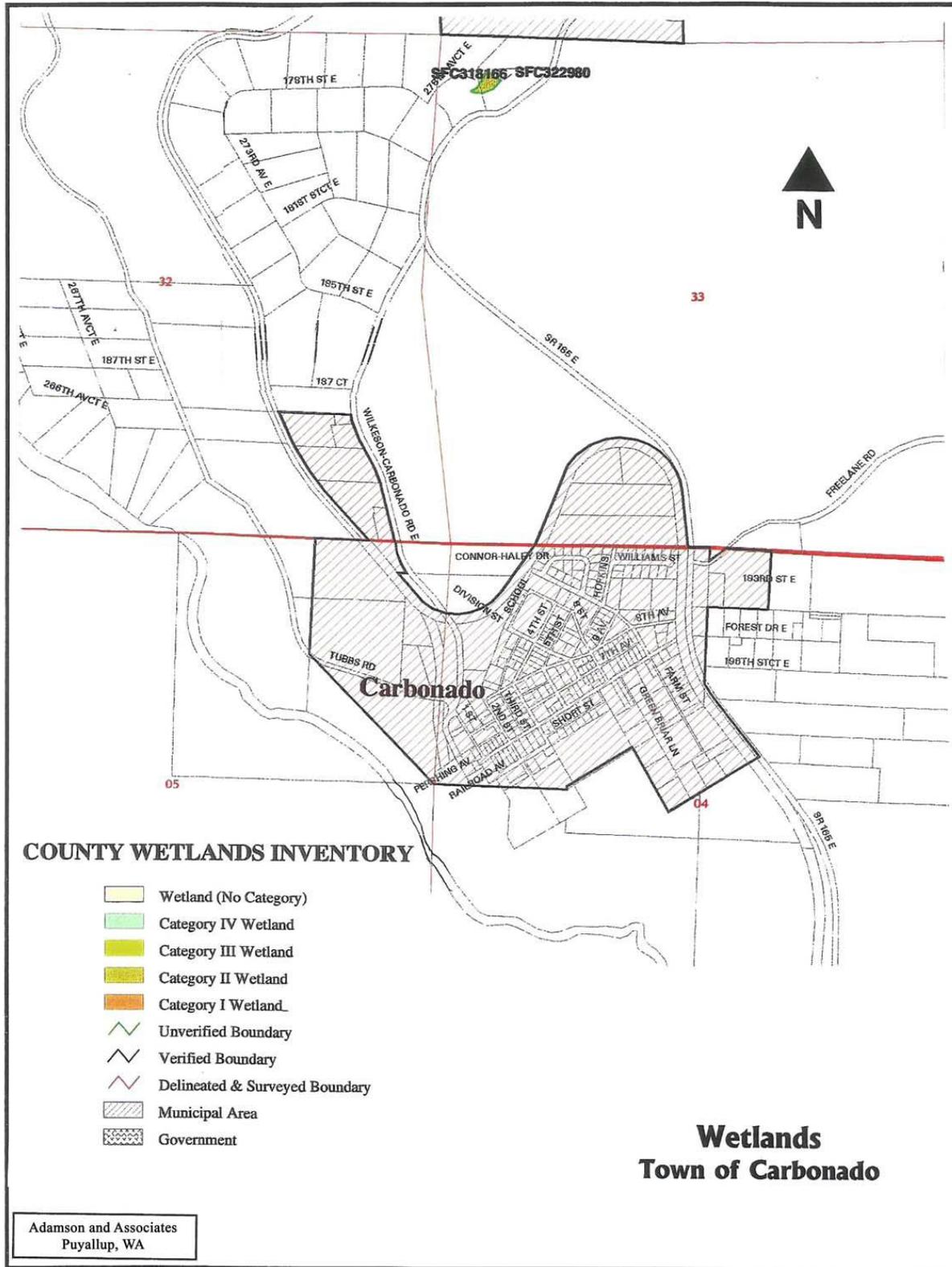
Classification

Wetlands in Washington State are classified as Category I, II, III or IV wetlands. The criteria for establishing wetlands categories are based on current Washington State Department of Ecology "Washington State Wetlands Rating System for Western Washington".

- **Category I Wetlands.** Category I wetlands are those regulated wetlands of exceptional resource value based on significant functional value and diversity, wetland communities of infrequent occurrence, and other attributes which may not be adequately replicated through creation or restoration.
- **Category II Wetlands.** Category II wetlands are those regulated wetlands of significant resource value based on significant functional value and diversity, wetland communities of infrequent occurrence, and other attributes which may not be adequately replicated through creation or restoration.
- **Category III Wetlands.** Category III wetlands are those regulated wetlands which have important resource value based on vegetative diversity.
- **Category IV Wetlands.** Category IV wetlands are those regulated wetlands of ordinary resource value based on monotypic vegetation of similar age and class, lack of special habitat features and isolation from other aquatic systems.

Identification and Mapping

The U.S. Fish and Wildlife Service prepares a set of maps entitled the National Wetland Inventory Maps. The U.S. Fish and Wildlife Service National Wetlands Inventory Maps do not show any wetlands in the Town of Carbonado. Pierce County has also prepared wetland maps in addition to those wetlands identified in the National Wetland Inventory Maps. Pierce County prepared wetlands maps do not show any wetlands in Carbonado. This does not mean that there are no wetlands in Carbonado. Wetlands may be discovered in the course of approving a building permit or a subdivision permit. The Town of Carbonado, in the course of regulating development, from time to time may require that the developer provide the Town with a wetland delineation and assessment report. Once delineated and mapped, those wetland maps are kept on file at the Town Hall and used in subsequent development reviews. Wetlands around the Town of Carbonado, as mapped by Pierce County, are shown on the next page.



Wetland Buffers

Wetlands need to be buffered to protect them from neighboring development. Wetland buffer widths increase along with the quality and function of the wetland. In Carbonado, wetlands are buffered, ranging from 40-225 feet, depending on the category of wetland and its habitat function. Buffer widths may be modified in certain situations. Non-intrusive development may be permitted in wetland buffer zones, such as walking trails, etc.

Development Regulations

Development in the wetlands environment is regulated by the Town of Carbonado. The wetlands section of the Critical Areas Ordinance specifies what type of development can take place in the wetlands environment and under what conditions. The applicant may be required to prepare a wetlands delineation and assessment report, prepared by a professional wetlands biologist. Wetlands can be filled by 'first getting a permit from the U.S. Corps of Engineers. Any impact on the wetlands caused by new development must be mitigated. The regulations must allow "reasonable" use and limited set of exceptions.

Best Available Science

The Growth Management Act requires cities and counties to "include the best available science" when drafting development regulations – RCW 36.70A.172. The Growth Management Act does not require communities to go out and conduct new scientific studies, but to include the best science that is available. To locate locally appropriate science, the Town of Carbonado will rely on Washington State Commerce Department's "Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas".

Goals and Policies

The Town of Carbonado has a number of goals and policies, if implemented, will lead to zero net loss of values and functions of wetlands. The goals and policies are listed below:

Goal CA-1

Provide for the long-term protection and "no net loss" of values and functions of wetlands.

Policies

1. Identify and map all wetland areas, including both private and public lands where regulated wetlands exist in the Town of Carbonado.
2. Protect the natural ability of wetlands to improve the quality of storm water runoff by holding and gradually releasing stormwater.

3. Protect the natural ability of wetlands to function as producers of plant matter, provide habitat for fish and wildlife, provide recreational opportunities and provide historical and cultural values.
4. Provide educational opportunities that increase public understanding of the values and functions of wetlands and measures which Town residents can take to maintain wetlands on their properties.
5. When impacts on wetlands cannot be avoided, development of wetlands may occur where impacted wetlands are replaced at a ratio exceeding the impacted wetlands and taking into consideration the values and functions of impacted wetlands.
6. Review and when necessary amend the Town of Carbonado Wetland Management Regulations to provide wetland protection in accordance with the Comprehensive Plan.

Critical Aquifer Recharge Areas

As precipitation reaches earth it becomes part of a snow pack, enters into lakes, streams, rivers, oceans, wetlands, seeps into the soil to be taken up by plant roots, or seeps into the ground and becomes groundwater. As groundwater moves through the ground it may discharge to surface water features, such as lakes, streams, or rivers, which will in turn recharge the groundwater. The water that remains in the ground will make up the aquifer.

Aquifers discharge water naturally through springs and seeps, streams, lakes, wetlands, and undersea springs. Man-made wells create additional discharge points which influence groundwater flow patterns. This flow, or movement, is generally very slow.

As aquifers discharge they in turn are recharged. Recharge occurs primarily as a result of the infiltration of rainfall and secondly by the movement of water from adjacent aquifers or water bodies. The rate and quantity of water entering the ground depends on several factors. Natural factors include amount of precipitation, soil type conditions, vegetation, and topography. Man-made factors include impervious surfaces associated with development, the channeling of runoff, changes in soil condition such as compaction, and removal of vegetation. Aquifers can also be affected by contamination. A hazardous waste spill can have severe adverse impacts on an aquifer, possibly making the water unusable for years. There are no known aquifer recharge areas in Carbonado. This does not mean that they do not exist. If one is found and mapped by Pierce County, the above outlined goals and policies will apply.

Goals and Policies

The following goal and policies, if implemented, will result in the protection of aquifer recharge areas.

Goal CA- 2

Prioritize and protect aquifer recharge areas to ensure that water quality and quantity are maintained or improved.

Policies:

1. Identify and map aquifer recharge areas.
2. Take active measures to ensure adequate recharge of aquifers utilized by the Town of Carbonado residents for domestic water supplies, and to protect the quality of water in those aquifers.
3. Develop performance standards and regulate land uses for activities which can adversely impact water quality or quantity in aquifers, consistent with state and federal laws and regulations.
4. Require that new development meets the performance standards and that existing facilities be retrofitted, where feasible, to meet the standards.
5. Pursue both natural and engineered solutions to maintain aquifer recharge quality. Natural solutions (e.g., maintaining undisturbed vegetation) are preferred.
6. Provide for aquifer recharge through the use of stormwater management technologies which best protect water quality.

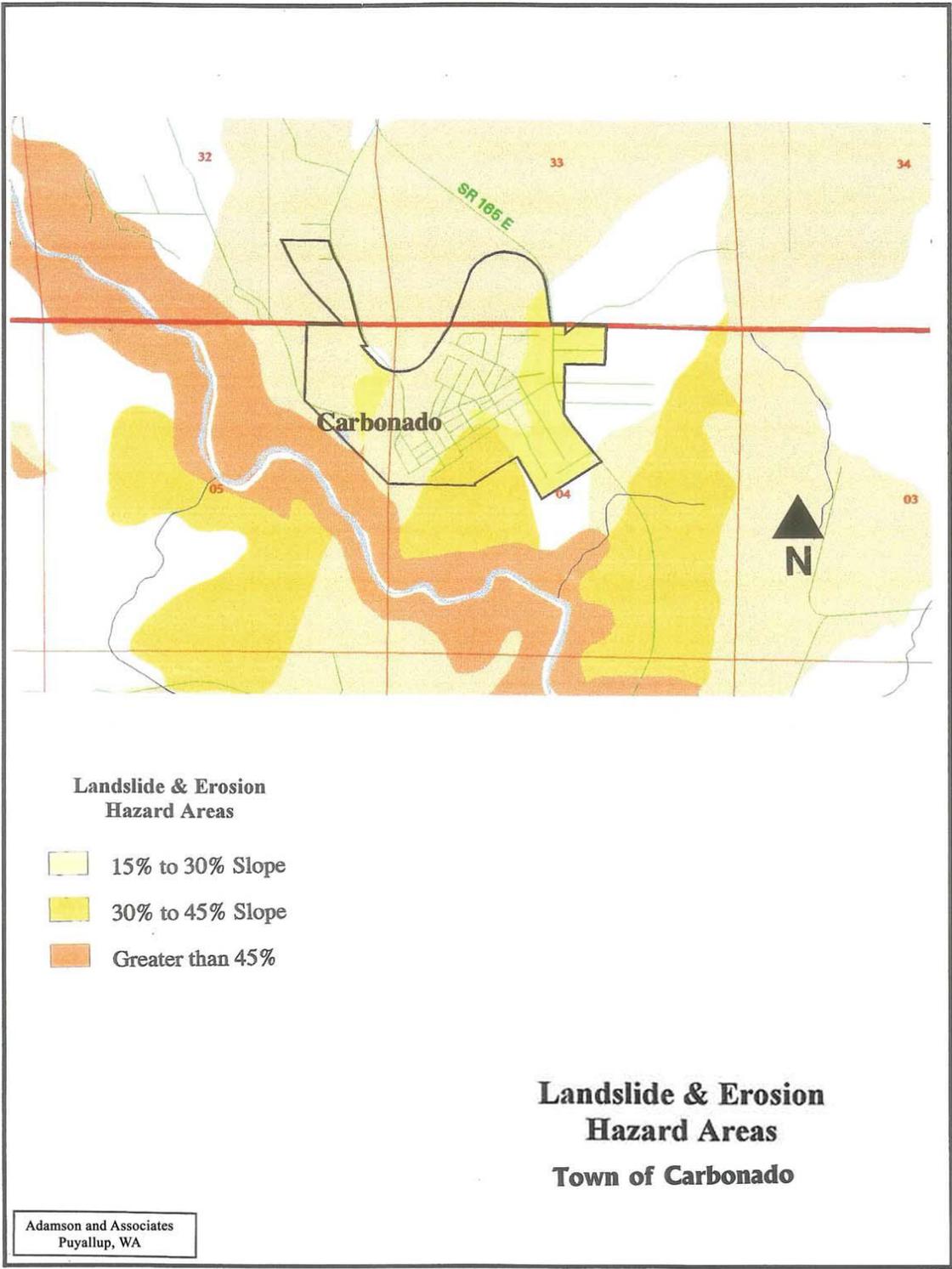
Geologically Hazardous Areas

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Geologically hazardous areas also have an important function in maintaining habitat integrity. Mass wasting events, such as landslides and debris flows, contribute needed sediment and wood for building complex instream habitats, estuarine marshes, and beaches important for fisheries, wildlife, and recreation. At the same time, mass wasting events can harm habitat and lead to the need for stream restoration.

Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided. Areas that are susceptible to one or more of the following types of hazards should be classified as a geologically hazardous area:

- Erosion hazard (including river and streambank erosion areas and channel migration areas);
- Landslide hazard;
- Seismic hazard; and
- Areas subject to other geological events such as coal mine hazards and volcanic hazards including: mass wasting, debris flows, rock falls, and differential settlement.

Geologically hazardous areas in and around the Town of Carbonado are shown on the attached map. Because most geologically hazardous events occur in steep slope areas, Figure 3-2 shows slopes in excess of 15 to 30 percent, 30 to 45 percent and slopes in excess of 45 percent. The development regulations go into great detail about the conditions of permitting development to occur on slopes in excess of 15 percent, considering the identified specific geologic hazard.



Erosion Hazard Areas

Geologically hazardous erosion, such as those areas with high probability of streambank erosion as well as channel migration areas, should be designated as critical area. Erosion hazard areas may also include those areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service as having a "severe" rill (a rill is a long narrow trench or valley) and inter-rill erosion hazard.

Landslide Hazard Areas

Landslide hazard areas are potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. Landslide hazard areas include any areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these areas may include, but are not limited to the following:

- Areas of historic failures, such as those areas delineated by the U.S. Department of Agriculture Natural Resources Conservation Service as having a "severe" limitation for building site development; or areas designated as quaternary slumps, earth flows, mudflows, lahars, or landslides on maps published by the U.S. Geological Surveyor Washington State Department of Natural Resources Division of Geology and Earth Resources.
- Areas with all three of the following characteristics:
 - Slopes steeper than 15 percent.
 - Hillsides intersecting geologic contacts with relatively permeable sediment overlying a relatively impermeable sediment or bedrock.
 - Springs or ground water seepage.
- Areas that have shown movement during the ice age (from 10,000 years ago to the present) or which are underlain or covered by mass wastage debris of that epoch.
- Slopes that are parallel or sub parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials.
- Slopes having gradients steeper than 80 percent subject to rock fall during seismic shaking.
- Areas potentially unstable as a result of rapid stream incision, and/or stream bank erosion.
- Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.

- Any area with a slope of 40 percent or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.

Seismic Hazard Areas

Seismic hazard areas include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. In Washington, ground shaking is the primary cause of earthquake damage and the strength of ground shaking is primarily affected by:

- The magnitude of an earthquake.
- The distance from the source of an earthquake.
- The type of thickness of geologic materials at the surface.
- The type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesion-less soil of low density, typically in association with a shallow ground water table.

Goals and Policies

The following goal and policies, if implemented, will result in the protection of geologically hazardous areas.

Goal CA – 3

Avoid the endangerment of lives, property, and resources in geologically hazardous areas.

Policies:

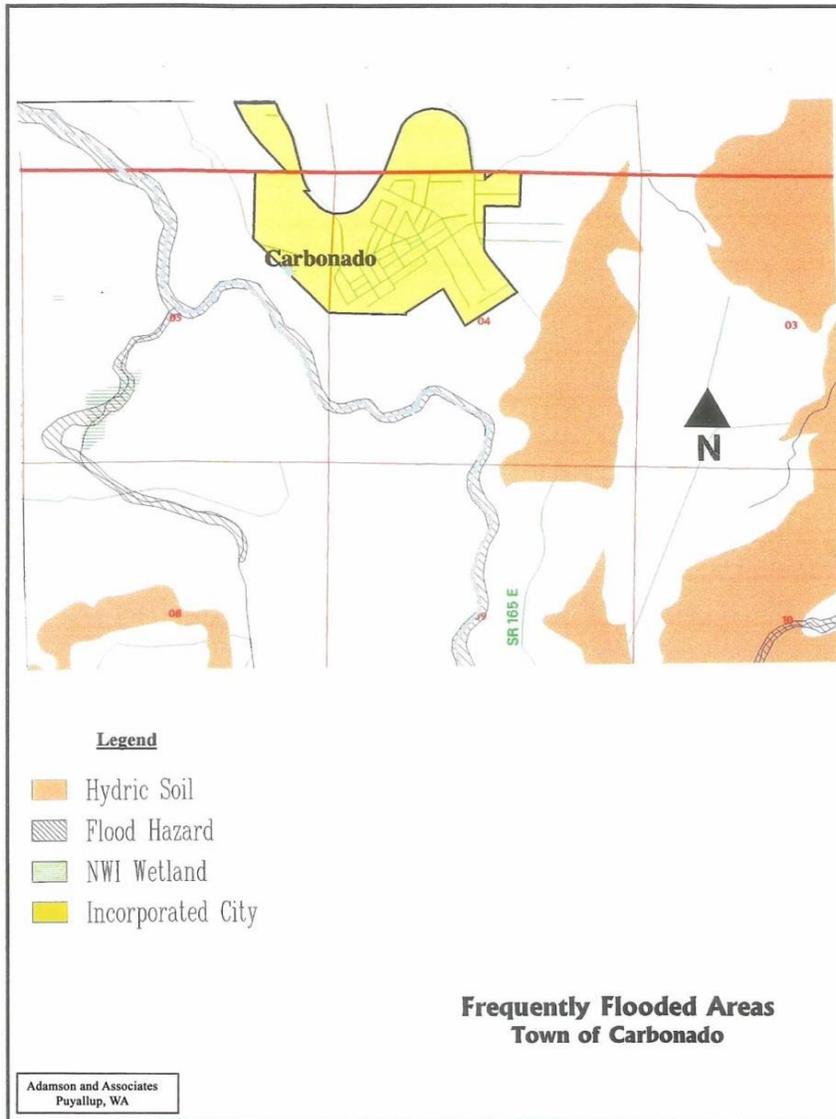
1. Identify and map all geologically hazardous areas.
2. Establish land use practices in geologically hazardous areas so that development does not cause or exacerbate natural processes which endanger lives, property, and resources of the citizens of the Town of Carbonado.
3. Ensure that property owners in geologically hazardous areas are educated and notified about the presence of hazardous areas and the threat which they pose.
4. Geologically hazardous area should be utilized as open space whenever possible.

5. Where the effects of geologic hazards can be mitigated, require appropriate standards for site development and for the design of structures in areas of geologic hazards.
6. Require geotechnical studies and mitigation for development activities in erosion, landslide, and seismic hazard areas, with the amount of information required based on the severity of the hazard or hazards at the development site.

Frequently Flooded Areas

The 100-year flood plain is the area that has a 1 percent probability of inundation in any given year. Within the flood plain lies the floodway, which has higher velocity flow and substantially greater hazard. The area within the flood plain and outside the floodway is called the flood fringe. A flood fringe is generally associated with standing water rather than rapidly flowing water. To avoid the devastating and costly damage which, historically, results from flooding, the utilization of the floodway and flood fringe must be in accordance with the Town of Carbonado adopted development ordinances. There are no frequently flooded areas in Carbonado. Flood areas do occur around Carbon River which is outside the corporate boundary of Carbonado. However, in the event, the Town were to expand and annex land that would include a portion of Carbon River, the goals and policies outlined in this chapter would apply.

The areas subject to flooding around the Town of Carbonado have been identified and mapped. The areas subject to flooding include the 100- year flood plain identified and mapped by the Federal Emergency Management Agency, commonly known as FEMA. The National Flood Insurance Program utilizes the FEMA flood plain designation maps in its administration of the insurance program.



Any development in the floodway should be prohibited unless the development consists of such facilities as stream bank stabilization, dams, diversion facilities, stormwater facilities, and bridges. Development in the flood fringe should be limited to low intensity uses. Sewer lines within the flood fringe must be designed and constructed in a way to keep floodwater from entering the sewer system. Septic systems should not be allowed to be constructed in the flood fringe. The following goal and policies, if implemented, will result in the protection of properties and development in the flood fringe areas.

Goal CA- 4

Establish land use practices in frequently flooded areas so that development does not cause or exacerbate natural processes which endanger the lives, property, and resources of the citizens of the Town of Carbonado.

Policies:

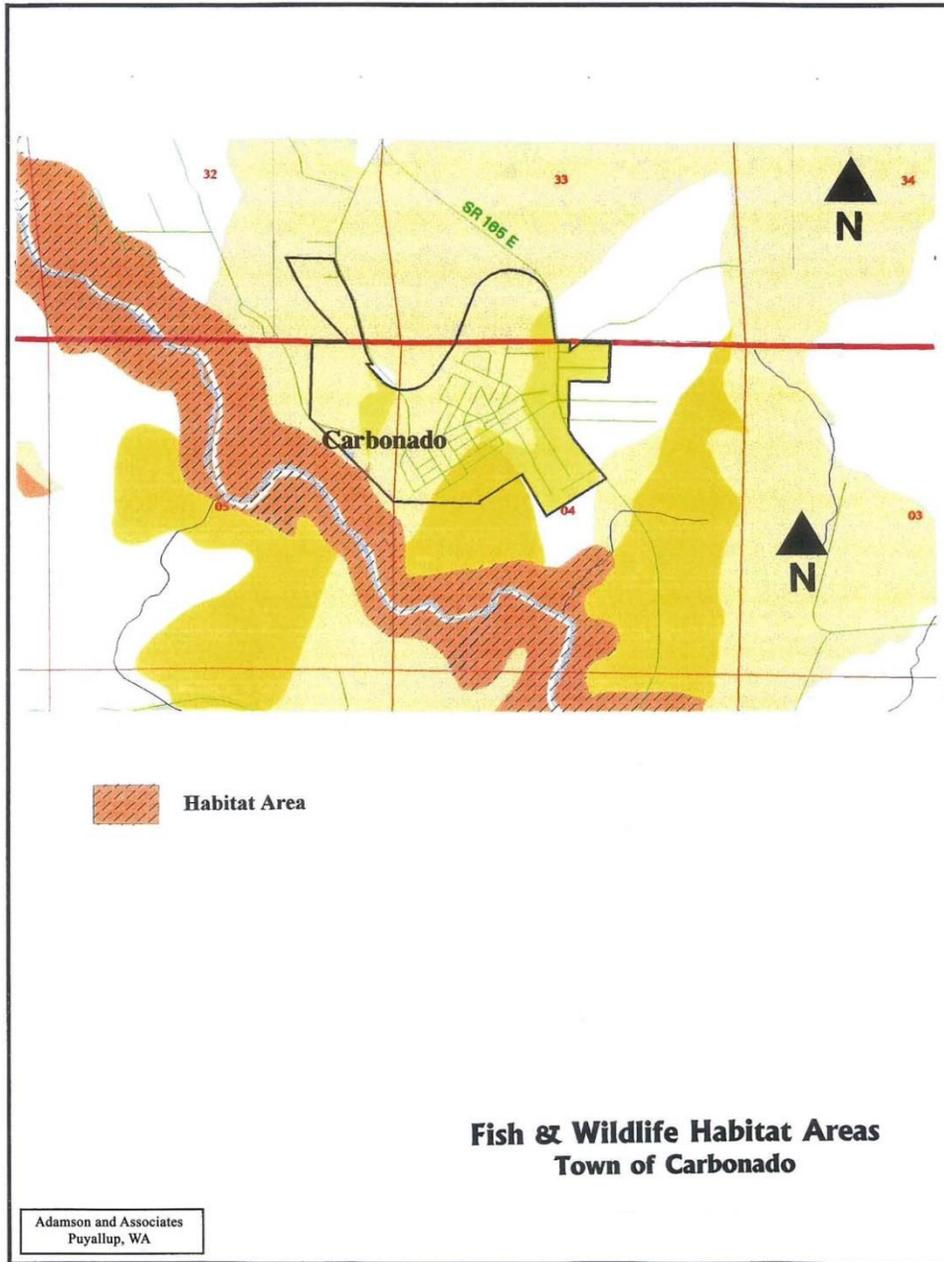
1. Encourage low intensity land use activities, including recreational land uses in floodplain areas.
2. Direct critical facility development away from areas subject to frequent flooding where the effects of hazards cannot be mitigated.
3. Where the effects of hazards can be mitigated, require appropriate standards for site development and for the design of structures in areas subject to flood hazard.

Fish and Wildlife Habitat Conservation**Fish Habitat Areas**

The designated Fish Habitat Conservation Areas in the vicinity of the Town of Carbonado is the Carbon River Canyon. The designated Fish Habitat Conservation Areas are shown in Figure 3-4. These water bodies have been identified by the Washington State Fish and Wildlife Department as containing Chinook, Coho, Steelhead and Chum Salmon. Chinook salmon is a federally listed species under the Endangered Species Act (ESA):

Wildlife Habitat Areas

Wildlife habitat can be described as the geographic area containing the necessary combination of food, water and protective cover for the survival and propagation of a species of animals. Habitats differ between species, but are closely related to the plant communities. A single plant community such as a wetland, for example, may provide all the necessary habitat requirements for certain small mammals or amphibians. Larger mammals may require more than one plant community to complete their habitat, such as forest cover and wetland for food and water. Wildlife conservation habitat areas, in the vicinity of the Town of Carbonado, have been identified by the Washington State Department of Fish and Wildlife and are shown below.



Goals and Policies

The following goal and policies, if implemented, will result in the protection of fish and wildlife conservation habitat areas.

Goal CA- 5

Provide for the maintenance and protection of habitat areas for fish and wildlife.

Policies:

1. Identify and map all areas, including both private and public lands, where critical fish and wildlife habitat areas exist in and around the Town of Carbonado.
2. Require that buffers of undisturbed vegetation be retained for all new development activities along water bodies that have been identified to carry endangered or threatened species of fish.
3. Evaluate existing regulations and policies to determine whether they adequately protect critical fish and wildlife habitat areas. Where necessary, amend existing regulations and policies or develop new strategies to protect critical habitat areas while maintaining consistency with all goals of the Comprehensive Plan.
4. Require that new development proposals on or near critical habitat areas be assessed to determine impacts on fish and wildlife. If impacts are likely, require the preparation of habitat management plans which mitigate these impacts.
5. Encourage subdivision dedication of critical fish and wildlife habitat areas as open space.
6. Evaluate the Town of Carbonado development regulations to determine their effectiveness in providing for critical fish and wildlife habitat areas and corridors.

TOWN OF CARBONADO

MINING HAZARDS ELEMENT

MINING HAZARDS

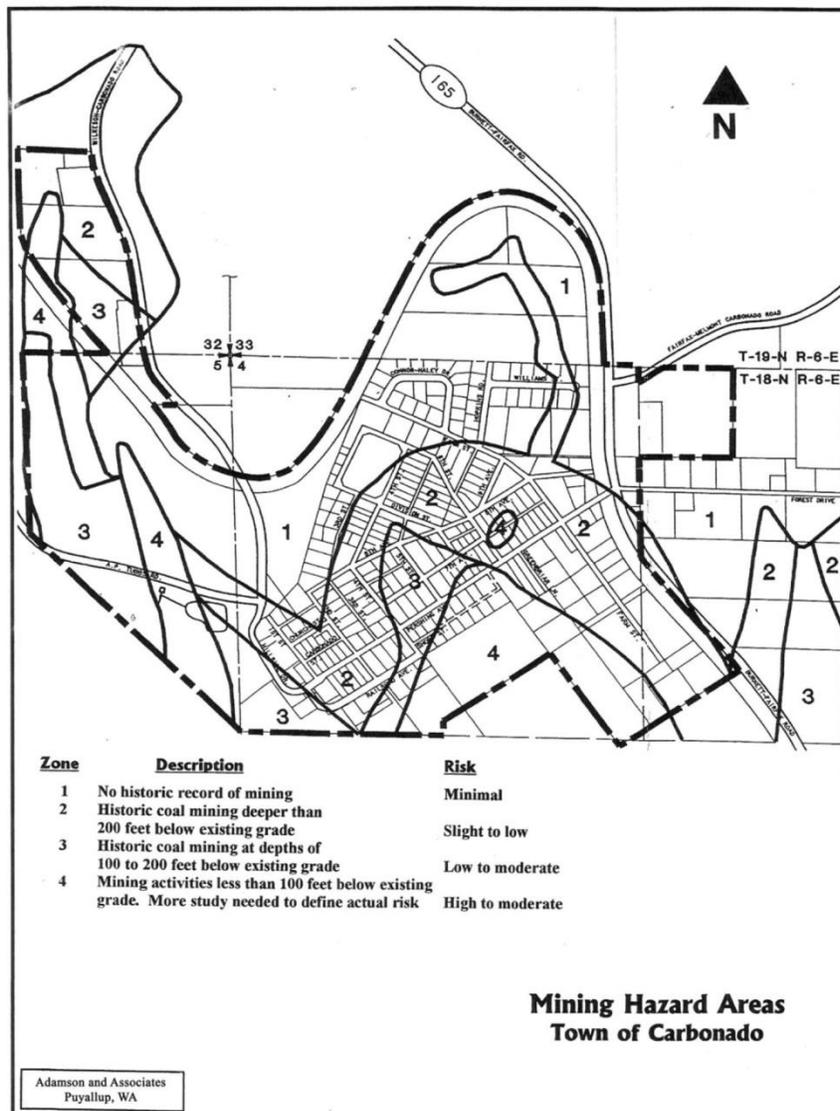
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MINING HAZARDS

Mining hazard areas are areas directly underlain, adjacent to, abutting, or affected by mine workings such as aduts, tunnels, drifts, or air shafts. The historical mining activity in Carbonado constitutes some hazards at various locations in the Carbonado Planning area. Some of the mining activity was beneath the existing residential section of Carbonado.

To address the concerns, the Town Council commissioned Terra Associates to prepare a Mining Hazard Map and Report for the Town. This report and map (see figure 1) were part of the original Town of Carbonado Comprehensive Plan and is available from the Town Clerk. (Geologic Review; Abandoned Coal Mine Inventory; Critical Areas Evaluation; Carbonado, Washington, Terra Associates, Inc. October 8, 1993.) The Map is reproduced below.



- Zone 1: No historic record of mining activities. Risk due to ground movements is none to minimal.
- Zone 2: Historic mining activities at depth greater than 200 feet. No surficial openings are anticipated to exist in Zone 2. Risk of land surface subsiding is treated as slight to low.
- Zone 3: Coal workings within 100 to 200 feet of the land surface. The potential for land subsidence in this zone ranges from low to moderate.
- Zone 4: Coal workings with less than 100 feet of cover. The potential for land subsidence and damage to structures range from moderate to high.

The report describes the geology of the area and the mining activities under and near Carbonado. It states that coal mining began in the 1880's and continued until 1937. Also, one local miner continued to work alone until 1963. The report states:

“The entryways and haulways were driven into the coal layers beneath the Town with a slight slope up from the river to allow for drainage by gravity. The coal was then removed from above the haulways...In general, the development practices consisted of extending a series of chutes up the dip of the coal and leaving a series of pillars or breasts in between the chutes to support the roof...It has been described that a fifty foot barrier was left at the uppermost portions of the workings to prevent the ground surface from collapsing into the mine. This prevented the resource and protected both the miners and the Town of Carbonado.”

Risk Assessment

Describing the present risk of subsidence from the mines, the Terra Report states:

“No reports of mining-induced subsidence have been reported to the DNR (Department of Natural resources) within the existing or proposed area of Carbonado. However, it should be noted numerous examples of crop falls, air shaft backfill failures, and other subsidence features exist in the hills east of Carbonado, and are probable in the hills west and south of the Town across the Carbon River.”

The report concludes:

“The examination of mine maps held by the Town of Carbonado and the Department of Natural Resources all indicate that earlier workings were inaccessible and caved...Reports indicate that the roof pressure crushed timber supports following coal extraction. Thus, we conclude that the bulk of subsidence due to elastic and plastic strain with the overlaying roof material occurred relatively rapidly following the completion of mining...Due to the small size of the openings and the thickness of cover, in our opinion, the rock tunnels and exploratory drifts that were excavated beneath Carbonado will present minimal risk with regard to potential surface movement.”

TOWN OF CARBONADO

HOUSING ELEMENT

HOUSING ELEMENT

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Introduction

Requirements of Growth Management Act

The Washington State Growth Management Act mandates that counties and cities encourage the availability of affordable housing to all economic segments of the population, promote a variety of residential densities and housing types, and encourage preservation of the existing housing stock. [RCW 36.70A.020(4)] The term "affordable housing" is not defined, but the context in which it appears suggests that its meaning was intended to be broadly construed to refer to housing of varying costs, since the reference is to all economic segments of the community.

The GMA requires the adoption of countywide planning policies for affordable housing in order to establish a consistent county-wide framework from which county and city comprehensive plans are developed and adopted. These policies are required to, at a minimum, "consider the need for affordable housing, such as housing for all economic segments of the population and parameters for its distribution" [RCW 36.70A.210(3)(e)].

The GMA also identifies mandatory and optional plan elements. [RCW 36.70A.070 and .080]. A Housing Element is a mandatory plan element that must, at a minimum, include the following [RCW 36.70A.070(2)]:

- An inventory and analysis of existing and projected housing needs that identifies the number of housing units necessary to manage projected growth;
- A statement of goals, policies and objectives, and mandatory provisions for the preservation, improvement and development of housing, including single-family residences;
- Identification of sufficient land for housing, including, but not limited to, government assisted housing, housing for low income families, manufactured housing, multi-family housing, group homes, and foster care facilities; and
- Adequate provisions for existing and projected housing needs of all economic segments of the community.

Because the Comprehensive Plan must be an internally consistent document [RCW 36.70A.070] and all plan elements must be consistent with the future land use map prepared as part of the required land use element [RCW 36.70A.070], these other plan elements dictate, to a great extent, what is in the housing element. Thus, the land use element, relying upon estimates of future population, growth, average numbers of persons per household, and land use densities, indicates how much (and where) land needs to be made available to accommodate the identified housing needs. The capital facilities, transportation and utilities elements indicate when and how public facilities will be provided to accommodate the projected housing, by type, density and location.

VISION 2040 Multicounty Planning Policies (MPPs)

VISION 2040 recognizes that to meet the demands of a growing and changing population in the central Puget Sound, the region needs to develop vibrant communities that offer a diverse and well-distributed mix of homes affordable to both owners and renters in every demographic and income group. VISION 2040 encourages housing production that will meet the region's needs and places a major emphasis providing residences that are safe and healthy, attractive, and close to jobs, shopping, and other amenities. The Multicounty Planning Policies address 1) housing diversity and affordability, 2) jobs-housing balance, and 3) best practices for home construction. These Multicounty Planning Policies place an emphasis on preserving and expanding housing affordability, incorporating quality and environmentally responsible design in homebuilding, and offering healthy and safe home choices for all the region's residents.

Pierce County Countywide Planning Policy

The GMA's housing affordability requirements are expounded upon in greater detail in Pierce County's *County-Wide Planning Policy* on the "Need for Affordable Housing for All Economic Segments of The Population and Parameters for its Distribution".

This policy directs Carbonado to:

- Determine the extent of the need for housing for all economic segments of the population, both existing and projected, over the planning period. (Affordable Housing Policy AH1)
- Explore and identify opportunities to reutilize and redevelop existing parcels where rehabilitation of the buildings is not cost-effective, provided the same is consistent with the countywide policy on historic, archaeological, and cultural preservation. (Affordable Housing Policy AH2)
- Encourage the availability of housing affordable to all economic segments of the population. (Affordable Housing Policy AH3)
 - AH3.1 The following definitions shall apply:
 - AH3.1.1 "Affordable housing" shall mean the housing affordable to households earning up to 80 percent of the countywide median income.
 - AH3.1.2 "Low income households" shall mean households earning 80 percent or less of the countywide median income.
 - AH 3.1.3 "Moderate income households" shall mean households earning 80 to 120 percent of the countywide median income.
 - AH 3.1.4 "Special Needs Housing" shall mean supportive housing opportunities for populations with specialized requirements, such as the physically and mentally disabled, the elderly, people with medical conditions, the homeless, victims of domestic violence, foster youth, refugees, and others.

- AH3.2 Affordable housing needs not typically met by the private housing market should be addressed through a more coordinated countywide approach/strategy.
 - AH3.2.1 Each jurisdiction may adopt plans and policies for meeting its affordable and moderate income housing needs in a manner that reflects its unique demographic characteristics, comprehensive plan vision and policies, development and infrastructure capacity, location and proximity to job centers, local workforce, and access to transportation.
- AH3.3 It shall be the goal of each jurisdiction in Pierce County that a minimum of 25% of the growth population allocation is satisfied through affordable housing.
- AH3.4 Each jurisdiction should provide a sufficient supply of special needs housing opportunities that is equitably and rationally distributed throughout the County.
- Support efforts by the County and each municipality in the County to establish a countywide program by an organization capable of long-term consistent coordination of regional housing planning, design, development, funding, and housing management. All jurisdictions should be represented in directing the work program and priorities of the organization. (Affordable Housing Policy AH4)
- Meet its affordable and moderate-income housing needs goal by utilizing a range of strategies that will result in the preservation of existing, and production of new, affordable and moderate-income housing that is safe and healthy. (Affordable Housing Policy AH5)
 - AH5.1 Techniques to preserve existing affordable and moderate-income housing stock may include repair, maintenance, and/or rehabilitation and redevelopment in order to extend the useful life of existing affordable housing units.
 - AH5.1.1 Jurisdictions should seek and secure state funds such as the Housing Trust Fund, and federal subsidy funds such as Community Development Block Grant, HOME Investment Partnership, and other sources to implement housing preservation programs.
 - AH5.2 Jurisdictions should promote the use of reasonable measures and innovative techniques (e.g., clustering, accessory dwelling units, cottage housing, small lots, planned urban developments, and mixed use) to stimulate new higher density affordable and moderate-income housing stock on residentially-zoned vacant and underutilized parcels.
 - AH5.3 To promote affordable housing and ensure access to services and jobs, jurisdictions should consider the availability and proximity of public transportation, governmental and commercial services necessary to support residents' needs.
 - AH5.4 Jurisdictions should consider providing incentives to developers and builders of affordable housing for moderate- and low-income households, such as but not limited to:

- AH5.4.1 A menu of alternative development regulations (e.g., higher density, reduced lot width/area and reduced parking stalls) in exchange for housing that is ensured to be affordable.
 - AH5.4.2 A toolkit of financial incentives (e.g., permit and fee waivers or multifamily tax exemptions) and grant writing assistance, through the regional housing organization, that may be dependent on the amount of affordable housing proposed.
 - AH5.4.3 A toolkit of technical assistance (e.g., mapping, expedited processing and permit approval) to affordable housing developers that may be dependent on the amount of affordable housing proposed.
- AH5.5 Jurisdictions should consider inclusionary zoning measures as a condition of major rezones and development.
- Work with the County, and each municipality in the County, to cooperatively maximize available local, state, and federal funding opportunities and private resources in the development of affordable housing for households. (Affordable Housing Policy AH6)
 - AH6.1 All jurisdictions should jointly explore opportunities to develop a countywide funding mechanism and the potential for both voter approved measures (bond or levy), and nonvoter approved sources of revenue to support the development of affordable housing.
 - AH6.2 All jurisdictions should pursue state legislative changes to give local jurisdictions the authority to provide tax relief to developers of affordable housing.
 - AH6.3 All jurisdictions should explore opportunities to dedicate revenues from sales of publicly owned properties, including tax title sales, to affordable housing projects.
 - AH6.4 All jurisdictions should explore the feasibility of additional resources to facilitate the development of affordable housing such as a new countywide organization (based on inter-local agreements), expansion of existing nonprofit partnerships, increased coordination with local public housing authorities, a county-wide land trust, as well as future involvement of larger County employers, in the provision of housing assistance for their workers.
- Explore and identify opportunities to reduce land costs for non-profit and for-profit developers to build affordable housing. (Affordable Housing Policy AH7)
 - AH7.1 Jurisdictions should explore options to dedicate or make available below market rate surplus land for affordable housing projects.
 - AH7.2 All jurisdictions should explore and identify opportunities to assemble, reutilize, and redevelop existing parcels.
 - AH7.3 All jurisdictions should review and streamline development standards and regulations to advance their public benefit, provide flexibility, and minimize costs to housing.

- Periodically monitor and assess its success in meeting the housing needs to accommodate its 20-year population allocation. (Affordable Housing Policy AH8)

Organization of the Housing Element

This housing element contains the following sections:

- Introduction
- Housing inventory;
- Household characteristics;
- Housing costs;
- Affordability; and
- Goals and policies.

Housing Inventory

The GMA requires the housing element to include an inventory to “identify sufficient land for housing, including government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group homes and foster care facilities”. (RCW 36.70A.070(2)(c)).

This section identifies how much land currently is available for residential development in Carbonado. It demonstrates how the Town will meet the 2030 population and housing unit allocations assigned to Carbonado by the Pierce County Council for GMA planning purposes. And, it summarizes the range of housing types supported by Plan provisions.

Residential Land Capacity

Pierce County Ordinance No. 2011-36s establishes GMA population, housing unit and employment targets for cities, towns and unincorporated areas of Pierce County for 2030. These targets are based on allocations contained in VISION 2040, Office of Financial Management projections, actual growth trends, and regional, county and city policies.

Pierce County has assigned Carbonado a housing target of 298 units for 2030. According to the US Census Bureau, the Town had a total of 218 housing units in 2010. The difference between existing units and the 2030 target represents 80 additional units over a two decade period.

The 2012 Pierce County Buildable Lands Report (June 2014 Draft) identifies that an additional 19 displaced units need to be factored in to recognize that some of the Town’s underutilized parcels will be unavailable for redevelopment due to site-specific circumstances. As a result, the report states that Carbonado’s 2030 housing need is 99 additional units. The Buildable Lands Report also states that current residential land capacity is 257 units, based on an assumed density

of 2 units per acre for the Town’s R-1 zone and 4 units per acre for the R-2 zone, which were in effect in 2012. This capacity exceeds the number of units required to meet the 2030 housing target by 158 units.

Number and Type of Existing Dwellings

The predominant housing type in Carbonado is the detached single-family dwelling, followed by mobile homes. In 2010, there were no multi-family dwellings or group living facilities within Carbonado or its UGA. The following table shows the number of residential dwellings and their types for Carbonado and its UGA according to the US Census count for 2010.

Area	Detached Single Family	Attached Single Family	Mobile Home	Total
Dwelling units in Carbonado's current corporate boundaries	201	4	13	218
Dwelling units in UGA	1	0	0	1
Total number dwelling units in all areas	202	4	13	219

Future Housing Types and Intensities

The Town anticipates increasing its residential land capacity beyond that identified in the 2012 Buildable Lands Report during its update of zoning regulations. Consideration will be given to reducing minimum lot sizes, increasing maximum densities, and increasing the amount of land zoned to accommodate housing types other than detached single-family dwellings. Such revisions will assist the Town in encouraging greater housing choice and more affordable options for a range of housing types. This Comprehensive Plan supports increased choice and development of additional housing types, including:

- Attached and detached accessory dwelling units;
- Multifamily dwelling units, up to a maximum of four dwelling units per building; and
- Small group homes, assisted living facilities, residential care facilities, residential treatment facilities, and retirement homes.

Condition of Housing Stock

Housing in Carbonado and its UGA ranges from relatively new to over 100 years in age. Roughly half of the homes were built prior to 1940 and roughly one-third of the homes were built during the 1980s and 1990s, which coincided with the last new subdivision activity in the community. Area residents are generally attentive to home maintenance; well-maintained yards and homes are a source of pleasure and pride to many residents. However, as with most communities, there is a small number of homes in fair to poor condition.

Household Characteristics

Household Size and Type

The table below shows the types of households in Carbonado in 2010. Nearly 74 percent of households were family groups of two or more members. Nonfamily households, which include households with people living alone and households that do not have any members related to the householder, comprise the remainder. Carbonado's average household size in 2010 was 2.93 members, which is somewhat higher than the County's average of 2.59. Average household size for owner-occupied dwelling units was the same as for renter-occupied dwelling units.

HOUSEHOLD TYPES

Type	Number	Percent
Total households	208	100.0
Family households	153	73.6
Nonfamily households	55	26.4
Households with individuals under 18 years	83	39.9
Households with individuals 65 years and older	45	21.6
Average household size	2.93	N/A
Average family size	3.37	N/A

Source: U.S. Census Bureau

Owners, Renters, and Vacancies

The table below identifies that 86 percent of Carbonado's dwellings were occupied by owners in 2010. Research from a variety of sources has indicated that home ownership ratios of 60 percent or higher bring stability to neighborhoods.⁴ In 2010, Carbonado also had a low vacancy rate of 4.6 percent, which may reflect a measure of neighborhood stability as well as desirability.

OWNERS, RENTERS AND VACANCIES

Type	Number	Percent
Total housing units	218	100.0
Occupied housing units	208	95.4
Vacant housing units	10	4.6
Homeowner vacancy rate	--	1.6
Rental vacancy rate	--	3.3
Owner occupied housing units	179	86.1
Renter occupied housing units	29	13.9

Source: U.S. Census Bureau

Affordability

The GMA states that comprehensive plans must:

"Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock."

The GMA also states that comprehensive plans must contain:

"A housing element recognizing the vitality and character of established residential neighborhoods. . . ."

The following subsections examine the meaning of these requirements and their relationships to housing and demographic conditions in Carbonado.

Housing Values, Costs and Affordability

The table below identifies that in 2010, Carbonado had a median house value of \$204,000 and a median selected monthly owner cost of \$1,587. Nearly one-third of Carbonado homeowners have monthly housing costs exceeding 30% of household income.

HOUSING VALUES, COSTS AND AFFORDABILITY

Value	Number	Percent
Less than \$50,000	3	2.0
\$50,000 to \$99,999	7	4.6
\$100,000 to \$149,999	6	3.9
\$150,000 to \$199,999	58	38.2
\$200,000 to \$299,999	41	27.0
\$300,000 to \$499,999	37	24.3
\$500,000 or more	0	0
Median (dollars)	\$204,000	
Selected monthly owner costs for units with a mortgage		
\$500 to \$699	3	2.5
\$700 to \$999	2	1.7
\$1,000 to \$1,499	45	38.1
\$1,500 to \$1,999	33	28.0
\$2,000 or more	35	29.7
Median (dollars)	\$1,587	
Selected monthly owner costs as percentage of household income		
Less than 20.0%	42	35.6
20.0 to 24.9%	15	12.7
25.0 to 29.9%	25	21.2
30.0 to 34.9%	17	14.4
35.0 percent or more	19	16.1

Source: U.S. Census Bureau 2010

Cost of Rental Units

Carbonado has a limited number of rental units, 16, that provide an alternative to owner-occupied housing. The table below identifies that in 2010, the median monthly rent was \$1,063. Three quarters of the renters paid more than 30 percent of their household income for rent.

RENTAL COSTS AND AFFORDABILITY

Gross rent	Number	Percent
\$750 to \$999	7	43.8
\$1,000 to \$1,499	9	56.3
Median (dollars)	\$1,063	
Gross rent as percentage of household income		
Less than 15.0%	0	0.0
15.0 to 19.9%	4	25.0
20.0 to 24.9%	0	0.0
25.0 to 29.9%	0	0.0
30.0 to 34.9%	5	31.3
35% or more	7	43.8

Source: U.S. Census Bureau 2010

Maintenance Costs

Carbonado has a large proportion of existing homes that are aging; hence, maintenance and repair costs will figure significantly among the housing costs incurred by residents in the future. Because Carbonado has a large proportion of homeowners, it is likely that many residents will be aging along with their dwellings. The reduction in income associated with becoming elderly will have an impact on home maintenance in Carbonado.

A constructive response to housing maintenance and repair needs may be the single most important factor through which Carbonado can ensure continued housing adequacy at a reasonable cost for Carbonado's current generations *and* availability of high quality homes having historic significance for Carbonado's future generations. This comprehensive plan includes policies that facilitate the maintenance necessary to retain existing housing stock for the benefit of current and future generations.

Households in Need

A household is generally defined to be living in housing affordable *to that household* if it is paying no more than 30 percent of its gross income on housing costs, including utilities. This definition treats all households equally, regardless of income level. Hence, a household with a gross income of \$150,000 per year that is spending \$50,000 on housing costs is living in "unaffordable" housing. The housing issues for such a household differ significantly from those of a household with a gross income of \$15,000 per year and spending \$5,000 on housing costs.

As noted in the housing affordability tables above, over 30 percent of homeowners in Carbonado who have mortgages (representing 77.6% of homeowners according to the U.S. Census in 2010) are spending more than 30 percent of gross income on housing costs. Seventy-five percent of renters in Carbonado are spending more than 30 percent of gross income on housing. Clearly, a gap exists between average ownership costs or rents and the ability of many households in Carbonado to cover these expenditures without being cost-burdened.

Affordability and Community Character

The affordability requirements of the GMA pose a special challenge for Carbonado. The predominantly single family residential character of the community, and home ownership and demographic patterns, preclude simple answers to housing problems. The community's adopted *Vision Statement* does, however, express support for expanding the types of housing beyond detached single-family dwellings to help meet future housing needs. Affordable housing policies developed for the comprehensive plan must, at a minimum:

- Meet the unique needs of Carbonado residents now and in the future;
- Preserve or improve neighborhood character; and
- Contribute to the overall quality of life of the entire community

Because land use in Carbonado is already dominated by housing, this housing element is vital to ensuring that Carbonado remains an attractive and distinctive place to live. Neighborhood character is of great importance to Carbonado residents. To ensure neighborhoods continue to meet the expectations of residents, issues must be addressed concerning home ownership versus renting, the appropriate mix of single family and other types of dwellings, the simultaneous aging of Carbonado's middle-aged population and housing stock, and increasing housing costs.

Goals and Policies

The housing goals contained in this comprehensive plan are:

- Encouraging long-term residency
- Accommodating households of many types
- Accommodating households at all economic levels
- Maintaining or improving neighborhood desirability
- Promoting resource-conserving neighborhoods

Detailed goal statements and associated policies follow in this section.

Goal 1: Encourage Housing Affordable to All Economic Segments of the Population.

To ensure that Carbonado can continue to accommodate households as their financial situations change over time, Carbonado shall encourage a mix of housing opportunities that are suitable for households at all economic levels and that facilitate maintaining a supply of desirable housing for households with low to moderate incomes. To the extent practicable, Carbonado shall implement policies consistent with the *Affordable Housing Policies* contained in the Pierce County Countywide Planning Policies.

Policies:

- 1.1 Carbonado should explore and identify opportunities to reutilize and redevelop existing parcels where rehabilitation of the buildings is not cost-effective, provided the same is consistent with the countywide policy on historic, archaeological, and cultural preservation – consistent with Affordable Housing Policy AH2.
- 1.2 Carbonado should encourage the availability of housing affordable to all economic segments of the population – consistent with Affordable Housing Policy AH3.
- 1.3 Carbonado should encourage the development of housing affordable to low to moderate income households by exploring developer incentives that reflect its unique demographic characteristics, comprehensive plan vision and policies, development and infrastructure capacity, location and proximity to job centers, local workforce, and access to transportation -- consistent with Affordable Housing Policy AH3.3.
- 1.4 Carbonado should strive toward achieving a minimum of 25% of the Town’s growth population allocation through affordable housing -- consistent with Affordable Housing Policy AH3.3.
- 1.5 Carbonado should support opportunities for the provision of special needs housing -- consistent with Affordable Housing Policy AH3.4.
- 1.6 Carbonado should support efforts by the County and other municipalities in the County to establish a countywide program by an organization capable of long-term consistent coordination of regional housing planning, design, development, funding, and housing management. Carbonado should be represented in directing the work program and priorities of the organization to the extent feasible – consistent with Affordable Housing Policy AH4.
- 1.7 Carbonado should meet its affordable and moderate-income housing needs goal by utilizing a range of strategies that will result in the preservation of existing, and production of new, affordable and moderate-income housing that is safe and healthy -- consistent with Affordable Housing Policy AH5.
- 1.8 Carbonado should use techniques to preserve existing affordable and moderate-income housing stock, including repair, maintenance, and/or rehabilitation and redevelopment in order to extend the useful life of existing affordable housing units -- consistent with Affordable Housing Policy AH5.1.

- 1.9 Carbonado should seek and secure state funds such as the Housing Trust Fund, and federal subsidy funds such as Community Development Block Grant, HOME Investment Partnership, and other sources to implement housing preservation programs, when feasible -- consistent with Affordable Housing Policy AH5.1.
- 1.10 Carbonado should promote the use of reasonable measures and innovative techniques (e.g., clustering, accessory dwelling units, cottage housing, small lots, planned developments, and mixed use) to stimulate new higher density affordable and moderate-income housing stock on mixed use- and residentially-zoned vacant and underutilized parcels -- consistent with Affordable Housing Policy AH5, while ensuring compatibility with Carbonado's community character.
- 1.11 Carbonado should consider providing incentives to developers and builders of affordable housing for moderate- and low-income households -- consistent with Affordable Housing Policy AH5.4, such as but not limited to:
 - Alternative development regulations that reduce development cost in exchange for housing that is ensured to be affordable -- consistent with Affordable Housing Policy AH5.4.1.
 - Financial incentives -- consistent with Affordable Housing Policy AH5.4.2.
 - Technical assistance to affordable housing developers -- consistent with Affordable Housing Policy AH5.4.3.
- 1.12 Carbonado should consider inclusionary zoning measures as a condition of major rezones and development -- consistent with Affordable Housing Policy AH5.5.
- 1.13 Carbonado should work with the County and other municipalities in the County to cooperatively maximize available local, state, and federal funding opportunities and private resources in the development of affordable housing for households – consistent with Affordable Housing Policy AH6.
- 1.14 Carbonado should explore and identify opportunities to reduce land costs for non-profit and for-profit developers to build affordable housing – consistent with Affordable Housing Policy AH7.
- 1.15 Carbonado should periodically monitor and assess its success in meeting the housing needs to accommodate its 20-year population allocation – consistent with Affordable Housing Policy AH8.
- 1.16 Carbonado should take advantage of using volunteers; social service organizations; and county, state, and federal programs as much as possible when implementing policies that facilitate housing affordability for low- to moderate-income households.

Goal 2: Encourage Long-Term Residency

To maintain neighborhood stability and a sense of community, existing households and their familial generations will be encouraged to remain in Carbonado.

Policies:

- 2.1 To facilitate stable succession of home ownership through familial generations, Carbonado will encourage the development of accessory dwelling units that allow elderly home owners to remain living on their established properties within close proximity to younger households. Proposed units should harmonize with the character of the existing neighborhood. The single family character of the property shall be retained through the use of design techniques such as ensuring that the entrance to the accessory dwelling unit is not as prominent visually as the main structure's entrance, including landscaping and architectural elements that visually integrate the accessory dwelling unit with the main structure, and limiting the amount of impervious pavement on the lot.
- 2.2 To increase home ownership opportunities, development and redevelopment of affordable owner-occupied units such as condominiums and manufactured modular homes (with full foundations) will be encouraged, as long as the units are compatible with the surrounding neighborhood.
- 2.3 Households that are renting in Carbonado should be given consideration commensurate with households that own homes in Carbonado when making decisions related to land use, housing, quality of life, transportation, utilities, and capital facilities. Notification procedures concerning development and civic matters should include steps designed to reach rental households as well as property owners.

Goal 3: Accommodate Households of Many Types

To ensure that Carbonado can continue to accommodate households as their compositions change over time, Carbonado shall encourage the preservation and development of a variety of residential dwelling units that accommodate households of many types in a socially and economically integrated community.

Policies:

- 3.1 Carbonado will encourage the continued presence of housing affordable to many different economic segments of the community throughout the Town.
- 3.2 Carbonado shall encourage fair housing provisions for all households regardless of household members' race, sex, age, disability, marital status, religious belief, profession, or other potentially distinguishing characteristics.
- 3.3 In all residential areas, group homes, foster homes, assisted living facilities, residential care facilities, and residential treatment facilities shall be allowed as long as they are compatible with the character and scale of the surrounding neighborhood.
- 3.4 Retirement housing compatible with the scale and character of the surrounding neighborhood will be permitted in all residential areas. The Town will encourage the development of retirement housing that provides a range of living styles and services from independent living to convalescent care. Retirement housing development that integrates services for elderly living at differing levels of independence will be especially encouraged. When siting retirement housing, the proximity of services shall be

considered. The Town may consider reductions in parking requirements for those retirement facilities that offer transportation services to residents.

Goal 4: Maintain or Improve Neighborhood Desirability

Carbonado shall encourage the presence of desirable neighborhoods for households in all economic segments.

Policies:

- 4.1 Residential uses should be screened from incompatible commercial land uses and from principal arterial roadways (SR-165) by vegetative and open space buffering.
- 4.2 Single family neighborhoods should incorporate residentially-oriented amenities such as neighborhood parks, shared open space, sidewalks and bike paths, street and overhead lighting, vegetative landscaping, and sidewalk benches.
- 4.3 Multifamily housing areas should incorporate residentially-oriented amenities such as recreational facilities, sidewalks and bike paths, street and overhead lighting, vegetative landscaping, picnic areas, and shaded off-street parking sufficient to meet the needs of the population density planned for the area. In addition, private outdoor living space should be provided for each dwelling unit.
- 4.4 Carbonado shall enforce development standards that ensure desirable housing and safe, pleasant neighborhoods. The Town should encourage architectural design, particularly for multifamily housing and mixed use development, which provides a sense of place for projects and a sense of individuality and identity for individual dwelling units. The Town may limit the number of individual dwelling units allowed per building to ensure the scape of multifamily housing is compatible with existing community character.
- 4.5 When determining the suitability of a proposed site for development or redevelopment of affordable housing, Carbonado should consider the site's proximity to public services that may be useful to households in need. The Town may require the developer to construct or fund appropriately located complementary facilities.
- 4.6 Vegetative landscaping standards should be applied as appropriate to ensure a pleasant small town/urban landscape throughout all neighborhoods.
- 4.7 Innovative site and building designs will be encouraged as long as they facilitate achievement of affordability or energy efficiency, dedication of park land or open space, implementation of vegetative landscaping, or continuation of historic development patterns. Innovative designs should be compatible with the surrounding neighborhood.
- 4.8 Development regulations should facilitate the continuation of historic development patterns and should not unnecessarily restrict the development potential of unusual lots.
- 4.9 Carbonado should enforce nuisance regulations that promote safe and pleasant neighborhoods while not infringing upon the rights of individual property owners to independently manage their properties in a safe and responsible manner.

- 4.10 Carbonado should explore and facilitate opportunities for community volunteers and county programs to assist elderly and disabled householders with routine and emergency property maintenance and repairs.
- 4.11 Carbonado should encourage private reinvestment in older residential neighborhoods and private rehabilitation of housing by completing related public works projects and by keeping the streets, sidewalks, and other municipal systems in good repair.
- 4.12 Rehabilitation and improvement of homes in established neighborhoods built to previous standards should be encouraged by reviewing development standards and regulations to ensure there are not unnecessary barriers to home improvements.
- 4.13 Carbonado should require demolition of structures that have so deteriorated that rehabilitation is impossible. Dangerous structures should be demolished as soon as possible after recognition of dangers posed to the public. Property owners should be required to install barriers to access to dangerous structures while awaiting demolition.

Goal 5: Promote Resource-Conserving Neighborhoods

Carbonado shall encourage the development of energy-efficient housing and neighborhoods. Carbonado shall promote programs and rehabilitation that increase the energy efficiency of existing development.

Policies:

- 5.1 Carbonado should promote the use of weatherization programs in existing housing. Weatherization modifications should integrate harmoniously with the original architectural design of historic homes or other homes of architectural merit.
- 5.2 Carbonado should develop and maintain code provisions promoting energy and water conservation. Developers should be encouraged to use solar energy elements in residential structures.
- 5.3 Standards for residential housing design and orientation, streets, pedestrian and bicycle facilities, parking lots, and landscaping should include provisions for reducing heat loss in the winter and providing natural cooling or shade during the summer.
- 5.4 Carbonado should encourage private property owners to landscape with native or locally adapted plants that require a minimum of water and energy resources to thrive. Neglect of one's property such that noxious weeds proliferate or nesting places for disease-carrying animals develop should not be allowed; neglect should not be confused with the attentive cultivation of plants that are desirable in small town/urban areas.

References

1. Hare, Patrick H. and Jolene N. Ostler, *Creating an Accessory Apartment*, New York, N.Y., McGraw-Hill.

TOWN OF CARBONADO

**PARK, RECREATION AND
OPEN SPACE ELEMENT**

PARK, RECREATION AND OPEN SPACE ELEMENT

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Park, Recreation and Open Space Element

Introduction

Intent

The Park, Recreation and Open Space Element serves as an expression of the community's goals, objectives, needs and priorities for recreation planning. In all communities, recreation provides an important personal, as well as social, outlet. Park, recreation and open space facilities are common areas that Carbonado residents, as well as visitors, can enjoy. They provide places for exercise, sports, children's playgrounds, relaxation, and community gatherings. These areas also enhance the aesthetic qualities of the community. They serve as important community centers and are among the most heavily used and enjoyed places within Carbonado.

As with other facilities and services provided by the Town, park, recreation and open space facilities must be planned for to meet the changing demands that occur with growth. When the population increases, the demand placed upon existing facilities may increase, as well. As such, park, recreation and open space areas and facilities may need to be expanded to meet the growing needs. Adequate land must be set aside for these purposes, and capital funds must be made available to develop the facilities. This Element is intended to ensure that provisions will be made to prepare for future needs so that the citizens of Carbonado will continue to enjoy a high level of park, recreation and open space services into the future.

Planning Requirements

Background - Requirements of Growth Management Act

The Washington State Growth Management Act identifies the following planning goal:

“Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.” [RCW 36.70A.020(9)]

The GMA also identifies mandatory and optional plan elements. [RCW 36.70A.070 and .080]. A Park and Recreation Element is a mandatory plan element that must, at a minimum, implement, and be consistent with, the capital facilities plan element as it relates to park and recreation facilities. [RCW 36.70A.070(8)]. The element shall include:

- Estimates of park and recreation demand for at least a ten-year period;
- An evaluation of facilities and service needs; and
- An evaluation of intergovernmental coordination opportunities to provide regional approaches for meeting park and recreational demand.

Pierce County Countywide Planning Policy

The Countywide Planning Policies for Pierce County includes a *Countywide Planning Policy on Natural Resources, Open Space, Protection of Environmentally-Sensitive Lands, and the Environment*. Open space, for the purpose of this policy, includes parks, recreation areas, greenbelts/natural buffers, scenic and natural amenities or unique geological features or unique resources.

This policy directs Carbonado to:

- Develop a plan for the provision and designation of open space considering a number of factors, including the following:
 - Open space is defined in conjunction with recreation and facilities;
 - Open space and environmentally sensitive lands that create linkages across jurisdictional boundaries and coordination with these entities;
 - Encourage open space cluster design; and
 - Encourage natural buffering as part of development design.
- Consider making the following uses of open space:
 - Recreational areas, including parks (golf courses, picnic areas, bicycle, equestrian, and walking trails) and general recreation;
 - Uses as considered on a case-by-case basis; and
 - Uses derived from community definition (i.e., greenbelts).
- Encourage new housing to locate in a compatible fashion (i.e., clustered design) with open space designations or outside of designated open spaces.
- Regulate open space through tools such as:
 - Zoning and subdivision ordinances, including but not limited to cluster and minimum lot size zoning, overlay zones and adequate off-site public facility regulations;
 - Development impact fees for park and open space acquisition;
 - Dedication of land or money in-lieu of land;
 - Designation of open space corridors;
 - Wetlands, shorelines, floodplain or other environmentally sensitive lands ordinances; and
 - Development agreements.
- Cooperatively inventory existing and potential open space by creating local and regional planning inventories.
- Authorize the following methods of retention of open space land or wildlife corridors:

- Public acquisition of property in fee simple or through development easement acquisition;
- Private acquisition with covenants, conditions and/or restrictions limiting the use of the property to open space;
- Alternatives to public purchase, including, but not limited to:
 - Flexible zoning, subdivision and regulatory approaches designed for protection or preservation;
 - land trust;
 - conservation easement;
 - transfer of development rights, purchase of development rights, and other compensable regulatory approaches;
 - rails-to-trails;
 - donations;
 - preferential assessments;
 - planned developments;
 - dedications;
 - impact fees;
 - view easements; and
 - use value assessments.
- Retention of existing open space through:
 - Required open space preservation within and without Urban Growth Boundaries established by Pierce County;
 - Preserving, and enhancing significant regional open space networks and linkages across jurisdictional boundaries.

Organization of the Park, Recreation and Open Space Element

The park, recreation and open space element is divided into six sections. The first section summarizes the intent for the element and the applicable planning requirements. The second section provides an inventory of existing facilities while the third section identifies proposed facilities. The fourth section describes the classification system for park, recreation and open space facilities. The fifth section establishes level of service standards for the park categories described in the fourth section. The sixth section provides a needs assessment and identifies the extent to which current demand and projected needs for park and recreation facilities are, or will be, met based on current assumptions. Goals and policies for managing park, recreation and open space facilities are contained in the Land Use Element.

Existing Park, Recreation and Open Space Facilities

Existing park, recreation and open space facilities, and proposed improvements to these facilities, are summarized below. The locations of these facilities are shown on the PROS Facility map (Figure 6-1).

Existing Park, Recreation and Open Space Facilities and Proposed Improvements

Facility	Description
8 th Avenue Park	Town-owned and operated park providing opportunities for picnicking and other passive recreational activities. This 0.58 acre site includes a covered picnic shelter and a big toy.
	Proposed: Playground equipment for older children; horseshoe pits
Tubbs Road Park	Passive and active recreational park that includes ball fields on 16.35 acre site owned by the Town.
	Proposed: No improvements proposed at this time.
Carbon River Canyon Open Space	Undeveloped and generally unusable open space located within the Carbon River canyon adjacent to Hillside Drive. Not useable for recreation, but simply as open space.
Carbonado School	Carbonado School District-owned operated facility located on the 3.96 acre school campus. Facilities include a gymnasium, athletic field with an area for youth baseball, and basketball and tennis courts. The school provides public recreational opportunities within the Town when school is not in session.
	Proposed: Expanded playground facilities for all ages.
Mt. Rainier National Park and adjacent National Forest land	Federally-owned national park operated by the National Park Service. Carbonado is the closest incorporated municipality to the park, located 8 miles from the Carbon River entrance. Mt. Rainier National Park and surrounding forest land provide recreational opportunities on a regional level, including hiking, camping, fishing, mountaineering, backcountry skiing and snowshoeing, and other outdoor activities. The adjacent National Forest has an Off road vehicle Park that is extensively used.
	Proposed: The National Park Plan proposes to maintain this entrance to the Park as a “walk/hike-in” only access. No improved vehicle access is proposed.

Proposed Park, Recreation and Open Space Facilities

Pursuant to RCW 36.70A.160, Carbonado has identified an open space corridor that consists of the vacated Burlington Northern Railroad ROW. This corridor is proposed to be developed as an extension of Foothills Trail system, which provides a regional bicycle and pedestrian pathway that will extend from Tacoma to Carbonado via Puyallup, Orting, South Prairie and

other communities, upon completion. The location of this proposed facility is shown on the PROS Facility map, below.

Classification System

For the purpose of identifying level of service standards, the existing park types within Carbonado, and those which are not within the Town but provide service to its residents, are categorized below. The classification system utilized by the Town is intended to serve as a guide for the identification of the variety of recreational opportunities and for the provision of a well-balanced park and open space system. An important consideration is to provide a variety of park types that satisfies the broad range of community recreational needs.

Regional Parks

Regional parks/reserves are areas of natural quality for resource-oriented outdoor recreation, such as viewing and studying nature, hiking, fishing, boating, camping, and swimming. These areas may include active play areas, but typically at least 80 percent of a site is managed for natural resource protection. Regional parks and reserves service a multi-community area with a one-hour drive time to the park.

Community Parks

Community Parks are defined as recreation areas capable of supplying a broad range of active and passive activities. Community parks typically contain both natural settings and developed play areas. Facilities normally provided at community parks include: swimming pool or beach, field and court games, picnicking and nature study. They also serve as nodes for communitywide pathway systems.

Neighborhood Parks

Neighborhood Parks are defined as recreation areas providing primarily active recreation opportunities. Facilities may include: softball and baseball diamonds, playground equipment, basketball and tennis courts, and other facilities that support intensive activities. Passive recreation opportunities may also be provided if a natural setting exists.

School Sites

School Sites provide facilities that support intensive recreational activities that also serve to fulfill recreational needs for a community. They are similar in size and function to neighborhood parks, and help to satisfy the demand for park and recreation facilities.

Open Space Sites

Open Space Sites are generally undeveloped areas that serve a variety of uses. These lands may

include, but are not limited to, wetlands, wetland buffers, public access sites, and wildlife habitat areas. These sites rarely provide recreational improvements and facilities and are managed to conserve the resource on the site.

Level of Service Standards

The Town applies level of service (LOS) standards derived from the standards of the National Recreation and Park Association (NRPA), the Statewide Comprehensive Outdoor Recreation Plan (SCORP), and other communities with similar demographic profiles and physical attributes.

A universally accepted standard methodology is to use a per capita acreage LOS standard. A per capita acreage standard, expressed as the number of acres of a specific park category of a specific type per thousand population, is intended to determine whether the overall volume of park and recreation facilities is sufficient to satisfy recreational demands. The recommended per capita acreage requirements for the Town's various park classifications are shown below.

Recommended LOS Standard

Park Type	Level of Service (LOS) Standard
Regional Park	5-10 acres / 1,000 population
Community Park	8 acres / 1,000 population
Neighborhood Park	2 acres / 1,000 population
School Site	None specified
Open Space Site	None specified

Assessment of Needs

The assessment of need for park and recreation facilities is based on the LOS standards established above, and the Town population, existing and projected. This needs assessment is based on the Town's 2013 population and 2030 population target. This allows for current deficiencies, as well as future planning needs, to be identified.

The 2013 population estimate for Carbonado, according to the Washington State Office of Financial Management, was 610 persons. The population target assigned to Carbonado by the Pierce County Council, as summarized in the Buildable Lands discussion in the Land Use Element, is 800 persons. The 2013 and 2030 park and recreation demand and need for Carbonado are shown below.

Assessment of Demand and Need

Park Type	LOS Standard acres / persons	Existing Acreage	2013 Demand	2030 Need
Regional Park	5-10 acres / 1,000	*	*	*
Community Park	8 acres / 1,000	16.35	4.88	6.4 acres
Neighborhood Park	2 acres / 1000	0.58	1.22	1.6 acres

* The Town's small size precludes its provision of a regional park.

The demand and needs assessment indicates there is an existing and future unmet need for neighborhood parks within Carbonado. Currently, there are 0.58 acres of this park type at the 8th Avenue Park, whereas the current demand and projected need are 1.22 and 1.60 acres respectively. Existing community park acreage at Tubbs Road Park, 16.35 acres, exceeds both current demand and projected need. Mt. Rainier's location in close proximity to Carbonado enables it to provide adequate service to meet the Town's current demand and projected need for regional park acreage.

In order to meet current demand and projected need for neighborhood park land, the provision of approximately one additional acre would be required. Various options exist for meeting this LOS standard, including acquisition of additional acreage by the Town, and private sector dedication of acreage in conjunction with future residential development. The Town may take into account the existing 16.35 acres of community park property, which represents more than double the current demand and projected need for this park type, in determining that it has sufficient park and recreation land to meet its long-term needs. The Town may also rely on the following opportunities for partially meeting its park and recreation needs, either through future intergovernmental coordination efforts or by virtue of the existing proximity and accessibility of these facilities to residents:

- Carbonado School District – existing 3.96 acre school campus site for meeting active recreation needs;
- Mt. Rainier and surrounding National Forest lands – existing national park and forest for meeting regional park, recreation and open space needs; and
- Foothills Trail – future extension of existing regional bicycle and pedestrian trail corridor through the community for meeting all levels of recreation needs.

Goal and Policies

A goal statement and associated policies relating to park, recreation and open space facilities and their management are contained in the Land Use Element and reiterated below.

Goal 1: Parks, Recreation, and Open Space

Carbonado's park facilities, recreation programs, and open space should be maintained, increased, and improved to serve the needs of all of Carbonado's citizens.

Policies:

1.1 To enhance Carbonado's landscape and provide habitat for wildlife, the Town should encourage an increase in the amount of property permanently dedicated for open space uses with preference given to properties having the greatest significance as critical areas, properties that can act as buffers between different land use types and intensities, and properties that represent a valuable natural or aesthetic asset to the community. Methods that the Town may use include, but are not limited to, those listed in Countywide Planning Policy Environment-15:

- Public acquisition of property in fee simple or through development easement acquisition;
- Private acquisition with covenants, conditions and/or restrictions limiting the use of the property to open space;
- Alternatives to public purchase, including, but not limited to:
 - Flexible zoning, subdivision and regulatory approaches designed for protection or preservation;
 - Land trust;
 - Conservation easement;
 - Transfer of development rights, purchase of development rights, and other compensable regulatory approaches;
 - Rails-to-trails;
 - Donations;
 - Preferential assessments;
 - Planned developments;
 - Dedications;
 - Impact fees;
 - View easements; and
 - Use value assessments.

1.1 Dedicated open space featuring native vegetation that thrives in the local climate and soils with minimal watering and maintenance should be incorporated into new development and redevelopment wherever possible.

1.3 Vegetative buffers and open space transitions should be established between areas of different building intensity or land use type. Vegetative buffers should also be maintained or established between SR 165 and residential areas wherever possible. At a minimum, trees should be incorporated into the urban landscape where existing development or topography prevents vegetative buffers.

1.4 Improvements to dedicated open space should be appropriate for the natural constraints imposed by the open space area. Proposed improvements in critical areas designated as open space should be subject to review under the critical areas ordinance.

1.5 Park planning and use of facilities should be coordinated with other Town projects and not-for-profit, private or public groups to assure maximum use of recreational facilities. Carbonado should encourage a variety of uses in all existing public schools and facilities to efficiently help meet the recreational needs of the community. The Town should cooperate and coordinate with other jurisdictions in the planning and development of regional parks and recreational facilities.

1.6 Carbonado should develop and implement a plan for park and recreation facility development, maintenance and beautification.

1.7 Neighborhood parks should be established, maintained and enhanced where needs exist for safe play areas. These parks should be sited and designed to meet the needs of the people in the immediate neighborhood. They should be oriented toward pedestrians and bicyclists and should not provide automobile parking except for vehicles of disabled persons. Bicycle parking and automobile unload areas should be provided.

1.8 All new multifamily development should incorporate open space. Recreational facilities should be included that are suitable for the types of households that will be occupying the completed dwelling units.

1.9 The Foothills Trail should be extended through Carbonado to enhance recreational opportunities for pedestrians and bicyclists. Bicycle and pedestrian trails should connect the extended Foothills Trail with the Town's schools, parks, commercial and residential areas. View corridors should be preserved and enhanced by these trail connections and the corridors in which they are located.

1.10 Parks should include facilities that provide active and passive recreational opportunities for people of all ages.

1.11 To ensure adequate park and open space land is dedicated within Carbonado, the Town should assure that park or open space land has been dedicated or impact fees collected to contribute to park land acquisition and facility development before granting development or redevelopment approvals for residential projects.

1.12 Park, recreation and open space level of service standards of 8 acres per 1000 population for community parks and 2 acres per 1000 population for neighborhood parks should be achieved and maintained. Portions of acreage classified as community park may be considered as meeting neighborhood park demand if developed with neighborhood park type facilities and improvements.

1.13 Carbonado should review, amend and adopt, as appropriate, development regulations that will achieve the intent of the Countywide Planning Policies relating to *Natural Resources, Open Space, Protection of Environmentally-Sensitive Lands, and the Environment*.

TOWN OF CARBONADO

UTILITIES ELEMENT

UTILITIES ELEMENT

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Utilities Element

Introduction

Utilities Planning Requirements

Section RCW 36.70A.070 (4) of the *Washington State Growth Management Act (GMA)* requires that all comprehensive plans contain:

"A utilities element consisting of the general location, proposed location, and capacity of all existing and proposed utilities, including, but not limited to, electrical lines, telecommunications lines, and natural gas lines."

Additionally, the GMA contains the following planning goal relating to public facilities and services. This goal affects utilities planning and states that the comprehensive plan must:

"Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards."

Finally, the Section RCW 36.70A.110 (3) states:

". . . it is appropriate that urban government services be provided by cities. . ."

Pierce County's *County-Wide Planning Policies* relating to urban growth areas and urban services elaborate on these and other GMA requirements. In addition, the *Comprehensive Plan for Pierce County, Washington* specifies for each municipality an urban service area (USA) that represents the geographic area within which the city may anticipate providing urban services in the future.¹ A city's USA may or may not correspond to an urban growth area (UGA), which defines the area within which urban land uses will be permitted and outside of which they will not be permitted. Each city's USA was based on input from the municipalities and on the evidence that the city was capable of providing urban services to the area.

The county's plan states:

". . . individual USAs may change as growth management planning and implementation proceed. . .".²

Information Included in this Element

To ensure that all urban services necessary for the health and well-being of the community are available in the future, this element discusses both public utilities and private (investor-owned) utilities. The Town of Carbonado currently owns and operates, water, sanitary sewer, and

stormwater management utilities within its corporate boundaries. A few areas adjacent to Carbonado are also served by some of Carbonado's utilities. As Carbonado contemplates the potential expansion of its corporate boundaries to the boundaries of the UGA, it must plan how these utilities' services will be provided throughout Carbonado and its UGA under Carbonado's governance.

Private utilities in Carbonado and its UGA provide electricity and telecommunications services. In addition, solid waste services are provided by a private vendor, although there are no facilities located within Carbonado or its UGA. Information that was provided to Carbonado by the private utilities is included in this element.

Organization of the Utilities Element

This utilities element contains the following sections:

- Introduction
- Water
- Sanitary sewer
- Stormwater management
- Electric
- Telecommunications
- Solid waste
- Goals and policies

Relationship to the Capital Facilities Element

The capital facilities element of the comprehensive plan is concerned with the same public utilities as the utilities element. To improve readability of the comprehensive plan, all topics related to public utilities are consolidated in the Utilities Element except the capital improvement program. Cross-references between the Capital Facilities and Utilities Elements are provided as necessary to meet GMA requirements.

Water

Summary of Services and Facilities

Water services are provided in Carbonado and its UGA within the context of federal, state, regional, and county regulatory acts, plans, and programs. A host of agencies are responsible for implementing and overseeing programs ensuring water quality and supply, allocating rights, controlling distribution, and promoting conservation. The Carbonado Public Works Department, which provides water service within Carbonado and to sixteen adjacent homes outside the Town, conforms with regulations through the ongoing implementation of its *Water System Plan*. In addition to publicly-owned facilities, private wells exist in Carbonado and the along Forest Drive in the UGA.

Carbonado Facilities Inventory

Carbonado has no wells for water supply and relies entirely on water from the 1260 acre watershed lying to the east of Town on the mountainside and owned by White River School District. Water is provided via a collection point and reservoir on Forest Drive East.

Currently the system is adequate to handle the existing customers within the Town and UGA. The Town has plans to construct a newer, larger reservoir capable of holding 110,000 gallons in 2015. This will increase the storage capacity for the Town. However, whether this translates to additional hook-ups is currently under discussion with the Washington State Department of Health. Most of the water system is the original system put in before incorporation in 1948. It is adequate for the existing population. However, system upgrades are needed on a regular basis.

Service Levels and Current Demand and Adequacy

As with all other aspects of water supply, service levels and standards applicable in Carbonado and the UGA are determined by federal, state, regional, and county regulations. Carbonado needs to update its Water System Plan to address the future needs of the system.

Supply

Carbonado consumption levels conform with the assumptions used for county-wide long-term planning in Pierce County's *Coordinated Water System Plan (CWSP)*. The CWSP assumes consumption for Carbonado as 180 gallons per capita per day. Carbonado's average consumption is currently 180 gallons per capita per day or approximately 513 gallons per day per equivalent residential unit (ERU), which is the amount consumed by a household in a single-family dwelling unit. This is a higher consumption rate than most jurisdictions. For example, Tacoma's water service level is 273 gallons per ERU.¹²

For consistency with county-level facilities planning and to conserve water resources, the City should set a target for water use reduction of 0.5% per year for the six year planning period. If achieved, this will result in an average day demand of 510 gpd per ERU for Carbonado water

customers. A water conservation program, in conjunction with a new billing structure that is based on water consumption, has been implemented to achieve this consumption level. Commercial accounts are currently individually metered and charged based on consumption. In addition, as of January 1, 2014, the Town began charging residential accounts based on consumption since all services are now equipped with individual service meters.

Storage

The available storage for the Carbonado's water system is insufficient storage for the Planning Period. A new storage facility of 110,000 gallons will be constructed in 2014 which will be sufficient for the Planning Period.

Fire Flows

In Carbonado, the standard for fire flow in residential areas has been set at 1,000 gallons per minute. The system is deficient in most areas with respect to this standard.

Future Demand and Adequacy

Demand and Adequacy in Carbonado's Service Area

Details concerning future demand and facility adequacy in Carbonado's current service area are available in the *2001 Water System Plan*. The following table summarizes the adequacy of Carbonado's facilities to meet future demand.

Demand Factor	Future Adequacy
Supply	Carbonado has sufficient water rights and reservoir capacity to supply up to 251 ERUs once the capital improvements scheduled in 2014-15 are completed.
Storage	When the reservoir planned for 2014-15 is constructed adequate based on current consumption levels.
Transmission & distribution	Inadequate for fire flows in some areas; in addition, water loss may be occurring due to leakage. And, most of the water pipes are in need of replacement due to age.
Telemetry	Adequate. Maintenance and replacement as needed.
Service metering	Adequate.

Demand and Adequacy in the UGA

Current residential demand, based on 1 existing residence in the UGA and 522 gallons per ERU, is 0.0064 million gallons per day (mgd). Future demand, based on a build-out of approximately 2 residences, is approximately the same. Most of the UGA is in a critical area, the Town's watershed.

Water Facility Issues

Carbonado faces issues concerning transmission and distribution piping, consumption levels, and potential contamination of Carbonado's water supply. A summary of each of these issues will be provided in the *2001 Water System Plan*.

Water Facility Projects

The capital improvements program includes a new reservoir to be designed in 2014 and built in 2015. Updating the distribution system should also be an on-going capital project.

Sanitary Sewer

Carbonado and its UGA are part of the Carbon River Basin. As Pierce County has developed, ensuring wastewater treatment capacity sufficient to handle increasing wastewater volumes and to protect ground water quality has become a focus of sanitary sewer facilities planning. Septic systems, which dispose of wastewater through percolation into the aquifer, are a known source of ground water pollution. Hence, Carbonado and Pierce County share the long-term goal of eventually connecting all development in the Carbon River Drainage Basin to a sewer system. The sewer system replaces septic tanks and drain fields with wastewater collection and conveyance facilities and percolation of untreated effluent with wastewater treatment and biosolid disposal.

Summary of Services and Facilities

Carbonado and portions of the UGA are provided with wastewater collection services by the Town of Carbonado Public Works Department. There are also approximately 2 isolated septic systems within the Town.

The primary components of Carbonado's sanitary sewer system are 15,169 feet of 4, 5 and 8 inch sewer pipes. The Town has no lift stations. The lift stations pump wastewater against gravity to overcome elevation gains on the route to the treatment plant

In 2013 the Town of Carbonado authorized the preparation of a General Sewer Plan. Part of the development of the General Sewer Plan should include in-line video inspections of the pipes and manholes.

Facility conditions range from failure to excellent. The original system dates back to before incorporation of the Town, and is thus 70 plus years old. The newest developed neighborhoods, which are about 20 years old have adequate pipe.

The current Wastewater Treatment Plant is a lagoon system consisting of two aeration cells and one stabilization cell. Effluent from the lagoon is disinfected with chlorine prior to discharge to the outfall to the Carbon River. Preliminary analysis by Gray and Osborne, Inc., consulting engineers, are that the plant is expected to have sufficient capacity to treat the forecasted flows and loadings for the 20 year planning period. The WWTP effluent is generally in compliance with the Town's discharge permit.

Applicable Studies and Reports

A summary of the information in each of these documents is provided in the list of references at the end of this element.

Facilities Inventory

The table below summarizes Carbonado's major sewer facilities. Detailed maps showing all sewer lines are available in Carbonado Public Works.

Facility Name and Location	Capacity and Condition
Sewer mains: located primarily in road and alley rights-of-way; some are located on private property.	<p>Carbonado's service area has approximately 3 miles of sewer mains ranging in diameter from 4 to 8 inches. The approximate quantity of each diameter of main are:</p> <p>8-inch: 11,199 feet 6-inch: 3,709 feet 4-inch: 261 feet</p> <p>Sewer main conditions range from failure to very good depending on the age of the pipe, the quality of the installation, and the quality of ongoing maintenance. The best pipes are in the newer neighborhoods. The remainder of the system is very old.</p>
Manholes	<p>The system has a large variety of manholes and cleanouts, including concrete manholes, brick manholes and shallow concrete vaults. The system serving the Hopkins Williams and Conner Haley neighborhoods has standard concrete manholes. A majority of the remainder of the system is brick manholes and shallow vaults. There are 76 total manholes.</p>

Service Levels and Standards

The table below summarizes the service levels and standards applicable in Carbonado and the USA.

Service Parameter	Service Level
Capacity	220 gallons per day (gpd) per single family dwelling, which is referred to as a <i>residential equivalent</i> (one RE); service levels for multifamily dwellings, commercial and industrial businesses, public service organizations, etc. are expressed in numbers of REs; for example, multifamily units are expected to produce .83 RE or 183 gpd.
Average daily and peak flows	Average daily flow in 2000: 45,000 gpd (estimate) ²⁸ Peak flow in 2000: 58,500 gpd (estimate)
Wastewater quality	Sewage quality must conform to County Sanitary Sewer Utility Administrative Code and county Pretreatment Code requirements.
Design and construction of facilities	Construction of new facilities and rehabilitation of old facilities must conform to the standards of the wastewater treatment service provider.

Demand and Adequacy

This section discusses current and future demand for sanitary sewer services and adequacy of facilities to meet demand.

The system is currently being studied by a consulting engineer, Gray and Osborne, Inc. The Engineer has not completed his evaluation of the system at the time of publication of the Comprehensive Plan. However, Gray and Osborne, Inc. did say that “with the exception of the sewers in the Conner-Haley and Hopkins-Williams neighborhoods, the sewers are upwards of 70 years old, are likely beyond their useful lives and are outside of Town easements and rights of way. In addition the original sewers are not in compliance with the Department of Ecology criteria. The Town would like to replace the entire collection system (with the exception of in the Conner-Haley and Hopkins-Williams neighborhoods) in the next ten years. The WWTP has sufficient capacity for the foreseeable future.”

Future demand is based on assumptions of successful reduction of infiltration and inflow and of decreased residential water consumption. Therefore, a standard effluent rate of 220 gallons/RE has been used for computing future demand.

Sanitary Sewer Facility Issues and Projects

The replacement of the sewer pipes in a majority of Town, and an annual maintenance program should be instituted. Also, the Town should begin the process of obtaining rights of way for all the sewer lines.

Stormwater Management

Surface water and stormwater in Carbonado and its USA originate with precipitation falling in and north, west, and east of Carbonado. Carbonado is located in the Carbon River Drainage Basin.

Summary of Services and Facilities

Stormwater flows over the surface into dry wells, swales, ponds, and basins where some of it percolates through the soil into ground water. The remainder is conveyed to retention facilities and then to the Carbon River via ditches, street surface, and subsurface storm drainage pipes. Stormwater also flows off the nearby rural hills into the Carbonado stormwater collection system.

Facilities Inventory

Stormwater facilities in Carbonado and its USA are owned by the Town of Carbonado. The *DOE Stormwater Management Manual for Western Washington* includes the procedures necessary to facilitate consistency in interlocal planning and implementation of stormwater facilities projects.

Note: In addition to publicly-owned stormwater facilities, there may be some privately-owned stormwater facilities. Privately-owned stormwater facilities are not discussed in this document.

Facility Name(Owner)	Location, Capacity, and Condition
Stormwater lines	Design event: 10-year, 24-hour storm
Trunk lines	Design event: 25-year, 24-hour storm
Conveyance system facilities and trunk lines	Design event: 25-year, 24-hour storm
Detention pond	Capacity data is not available.
Conveyance system facilities and trunk lines	Design events: Existing stormwater facilities in the newer neighborhoods of Carbonado have been designed in accord with the <i>Standard Plans for Road, Bridge, and Municipal Construction</i> and <i>Hydraulic Manual</i> by the Washington State Department of Transportation and the American Public Works Association. It is unclear what the design standards were in earlier developed neighborhoods.

Service Levels and Standards

Until recently, the primary controls for stormwater quality in Carbonado have been administrative. Administrative techniques are still in use. For example, development projects are controlled through site plan review, conditioned permits, and on-site inspection. Controls also include Public Works maintenance techniques such as street sweeping and cleaning of sedimentation out of catch basins. Operational solutions such as installation of oil/water separators are also employed. Carbonado should publish educational articles on the Town's website and in utility bills that encourage the reduction of non-point pollution sources from households and businesses.

Administrative controls should be formalized into regulatory mechanisms. Standards, specifications, and best management practices to prevent, control, and treat pollution in stormwater in new development and redevelopment in Carbonado must conform to those defined in the *DOE Stormwater Management Manual for Western Washington*.

Demand and Adequacy

Demand for stormwater management is directly related to the amount of impervious surface in an area. Impervious surface is directly related to development. Carbonado has a minimal amount of impervious surface, consisting mainly of street surfaces.

Stormwater Management Issues and Projects

Several stormwater management issues exist in Carbonado. They are:

1. The stormwater may infiltrate the sanitary sewer lines. This can cause a mixing of effluent and stormwater.
2. Carbonado does not maintain records of private stormwater facilities within its boundaries. Carbonado's municipal code and ordinances do not address maintenance and operation requirements for those facilities as required by Chapter 90.70 RCW.
4. Carbonado does not have a comprehensive stormwater management plan. There is no engineering analysis of the impacts on Carbonado's stormwater facilities of future development in the Carbon River basin.

No projects to enhance or maintain the stormwater system are currently in the budget. The Town should consider a replacement program for existing stormwater mains as streets are resurfaced or replaced and an annual maintenance program to assure the Town that the existing system is operating at peak efficiency.

Electric

Puget Sound Energy (PSE), an investor owned electric and natural gas utility, is the electrical provider to Carbonado and its USA. PSE does not decide system configuration or service area boundaries based on municipal boundaries, although it does maintain customer information with respect to municipality. Overviews of the services and facilities in each area are provided below.

Summary of Services and Facilities

Power is provided to Carbonado from the substation in Wilkeson. In the past there have been periodic power outages during the winter months. However, with the improvements in the PSE system the Town only experiences an average of 1.5 days of power outage per year.

Telecommunications

Telecommunications services in Carbonado consist of land-based telephone service, cellular telephone service, and cable television service furnished by private providers. The following subsections summarize the information provided to Carbonado by each of the private service providers.

Land-Based Telephone Service⁴⁷

Century Link, a private for profit corporation, provides local lines for voice and data transmission within the Town of Carbonado. Residents may choose between several long distance providers such as AT&T, MCI, and Sprint for service to areas outside of western Washington.

Century Link and its predecessors have provided telephone services to Washington communities for over 100 years. The Washington Utilities and Transportation Commission (WUTC) regulates the provision of telecommunication services. Century Link also is subject to various federal laws and regulations administered by the Federal Communications Commission (FCC).

Local jurisdictions in Washington fall within a particular Local Access and Transportation Area (LATA). A LATA is a telephone exchange area that services to define the area within which Century Link is permitted to transport telecommunications traffic. Century Link is permitted to carry telephone calls only within LATA boundaries. Calls outside of the LATA require long distance carriers such as MCI, Sprint or AT&T.

Hundreds of Central Offices (CO's) serve Century Link customers in Washington. A CO is a telecommunications common carrier facility where calls are switched. For local exchange or intra-LATA calls the central office switches calls within and between line exchange groupings.

The transmission facilities that serve Carbonado originate with the Buckley Central Office. From each main cable route are branch feeder routes. Branch feeder routes may be aerial or buried, copper or fiber. Extending from the branch feeder routes are the local loops that provide

dial tone to every telephone subscriber. Telecommunications lines are generally co-located with electric lines.

Telecommunications technology does not require that every single customer be served by a pair of wires that connects all the way from the telephone set to the central office. Using electronics, digital transmission, fiber optics, and other technologies, Century Link's facilities can provide multiple voice/data paths over a single wire.

Century Link construction planning is driven by the needs of its customers. As communities grow, facilities are upgraded to ensure adequate service levels. RCW 80.36.090 requires Century Link to provide adequate telecommunications services on demand. To comply with RCW 80.36.090, Century Link regularly evaluates the capacity of its facilities. Century Link's goal is to maintain its routes at 85 percent capacity. When usage exceeds 85 percent, additional facilities are planned, budgeted and installed. Moreover, facilities are upgraded as technology makes additional services available. Capacity is available to serve the area.

Cellular Service⁴⁸

There are seven cellular providers licensed to serve in the Puget Sound area. With the passage of the Federal Telecommunications Act of 1996, service area competition has increased. Prior to the Act's passage, only two cellular providers would be licensed by the FCC to service a particular area. With the Act's passage, the number of carriers competing in a particular market could now conceivably include all seven.

Where feasible, cellular companies site facilities on existing structures, poles, and buildings. This is where antennas can be mounted on rooftops and electronic equipment located within the building itself. Topography and other engineering constraints influence specific site selection because of the need to "hand off" the signal so that it can be picked up by another facility. The Town has not adopted telecommunications ordinance to address the siting of cellular and other telecommunications facilities inside of the Town limits.

There is one existing cellular transmission facility in Carbonado. Cell service is provided by Verizon Wireless.

Cable Television Service⁴⁹

Comcast provides cable service to the Town of Carbonado. Local governments primarily regulate cable companies through franchise agreements. Carbonado is a member of Rainier Communications Commission, which was created through an inter-local agreement with Pierce County and other cities and towns in the County, in order to establish inter-jurisdictional cooperation on regulation and oversight activities and to build expertise in negotiating with cable companies.

Cable service is delivered to customers through a complex series of electrical components and many miles of cable. Located at the origin of a cable system is the *receive site* where towers

with antennae and earth station receivers are located to pick up off-air and satellite signals. From the receive site, signals are sent to the *headend* to be processed for entry onto the *trunk line*, which is the main artery of the cable system. From the trunk, the signals are branched off onto *feeder lines*, which carry the signals through neighborhoods past individual residences. The signals are branched off again from the feeder onto *drop cable* that allows the signal to flow to the subscriber's television set or computer cable modem.

Comcast makes every attempt to provide service to all residents within its franchise area. Factors considered in extending service include the overall technical integrity, economical feasibility, and franchise agreements. Discussions with Comcast indicate that the company can serve future growth in Carbonado.

Solid Waste

State law requires counties, in coordination with their cities, to adopt comprehensive solid waste plans for the management, handling, and disposal of solid waste for twenty years and to update them every five years. Cities may choose to be joint participants in the plan, delegate planning to the county, or do their own plan. In Pierce County, waste management and recycling activities for all jurisdictions are coordinated under the umbrella of the Tacoma-Pierce County Solid Waste Plan.

There are three separate collection and disposal systems in the County: 1) The County's system includes the unincorporated areas of the county and 19 cities and towns using the County's disposal system; 2) Tacoma, as a joint participant in the plan, has its own collection utility and disposal system and the Town of Ruston operates its own collection utility, but has an inter-local agreement with Tacoma for disposal and an inter-local agreement with the County adopting the Solid Waste Plan; and, 3) Fort Lewis and McChord Air Force Base use the Fort Lewis disposal system but coordinate with the County on public outreach and educational programs about waste reduction and recycling.

Under the existing inter-local agreement for the Tacoma Solid Waste Plan, the County has responsibility for overall planning, disposal and waste reduction and recycling education. Cities are responsible for collection and the development of any recycling program specific to their jurisdiction.

Currently in Carbonado, all of the waste collected is handled through the Pierce County disposal system. The Town contracts with American Disposal d/b/a Murray Refuse for solid waste collection and recycling collection services. Carbonado residents receive weekly refuse and recycling pickup and bi-weekly yard waste collection. Carbonado residents are also given the opportunity to receive small "mini" or "micro" refuse cans at a lower cost than the full-size cans. This encourages recycling and provides equitable price structuring for senior and other households that generate a small amount of refuse.

Goals and Policies

The utility goals contained in this comprehensive plan are:

- Ensuring cost-effective services
- Ensuring health and safety
- Planning and coordination
- Environmental considerations
- Annexations

Detailed goal statements and associated policies follow in this section.

Goal 1: Ensuring Cost-Effective Services

Carbonado will provide cost-effective services to all utility customers within its service areas.

Policies:

- 1.1 Public utility maintenance and rehabilitation programs should maximize the useful life of facilities to avoid unnecessary facility replacements.
- 1.2 The need for increases in local and regional facility capacities should be moderated through the promotion of public and private conservation of utilities such as water and power. Conservation promotion techniques may include, but are not limited to, education of utility consumers and implementation of utility rate structures that reward voluntary conservation.
- 1.3 The design and timing of utilities siting, trenching, maintenance, repair, and replacement shall be coordinated with street improvements to minimize duplicate expenditures as much as possible.
- 1.4 Carbonado may consider the transfer of its public utilities to private utilities or other government jurisdictions if a significant cost benefit would result to the utility consumers and adequate service levels can be maintained.
- 1.5 Public utility rate structures should consider the impact of service fees on low-income households in the community. Utility bill assistance programs should be researched and implemented as appropriate to provide relief to low-income households that are spending a disproportionate share of their income on utilities.
- 1.6 The cost of utility extensions and improvements required to meet the needs of new development should be the responsibility of the developer.

Goal 2: Ensuring Health and Safety

Utilities in Carbonado should promote the good health and safety of all Carbonado citizens.

Policies:

- 2.1 Utilities shall be planned and maintained to ensure adequate services are available for existing and future development in Carbonado and its USA. Services shall be available at the time that development is occupied.
- 2.2 Carbonado shall monitor the quality of potable water and take actions as needed to ensure an uncontaminated water supply.
- 2.3 Carbonado should ensure that improvements to the fire flow capacity of the water system are completed in a timely manner relative to budgeted appropriations.
- 2.4 Carbonado should monitor research concerning possible health effects of electromagnetic fields and should adopt appropriate practices concerning human exposure to electromagnetic fields as such practices become known.
- 2.5 Carbonado shall comply with state-mandated requirements for stormwater management facilities, including those concerning private facilities and interjurisdictional coordination.
- 2.6 Carbonado's utility facilities should be installed and maintained in a manner that maximizes safety to the public. For example, facilities such as power substations shall be fenced in a manner that prevents unauthorized public entry.
- 2.7 Private utility providers should be required to construct safe facilities, to maintain their facilities in safe working order, and to respond to emergencies.
- 2.8 Carbonado's disaster recovery plan should include procedures for restoring essential utilities such as water and sewage disposal to a minimal level of service as rapidly as possible after the onset of a disaster. The plan should also include provisions for checking and temporarily repairing infrastructure that could cause great harm to people should damaged components remain unmonitored or unrepaired; such infrastructure includes, but is not limited to, electric facilities and natural gas lines.

Goal 3: Planning and Coordination

Carbonado shall coordinate its utility planning with that of adjacent jurisdictions and with that of private, county, and regional service providers as needed to ensure efficient management of utility infrastructure.

Policies:

- 3.1 Carbonado shall notify other utility providers about planned Carbonado's utility and street improvement projects that may interrupt or otherwise affect other utility services. Sufficient notification should be given to ensure that the utility providers have time to make an appropriate response.
- 3.2.1 Carbonado should coordinate with other utility providers to take advantage of joint trenching opportunities.

- 3.3 Carbonado should coordinate with other jurisdictions to ensure that utility corridors are identified and maintained as needed for the benefit of citizens in Carbonado and the surrounding area.
- 3.4 Carbonado shall provide comprehensive planning information as well as utilities planning information to other service providers to ensure that they have the information they need to adjust their plans to meet Carbonado's projected demand.
- 3.5 Carbonado shall negotiate Interlocal agreements as necessary to define responsibilities and protect Carbonado's interests concerning shared utility infrastructure.

Goal 4: Environmental Considerations

Carbonado shall conduct utility planning, construction, operation, and maintenance in an environmentally responsible manner.

Policies:

- 4.1 Utility facilities should be planned and installed to avoid disturbing critical areas, except where no other option exists. Where no other option exists, facilities shall be planned, installed, operated, and maintained to minimize disturbance of the natural environment. Unavoidable negative impacts shall be mitigated.
- 4.2 Utility facilities should be sited and buffered in accord with the policies concerning essential public facilities in the land use element of this comprehensive plan. Utility facilities should not be installed in an area where they are incompatible with surrounding development.

Goal 5: Annexations

Carbonado may endeavor to plan transfers of non-Carbonado public utility services in annexation areas to Carbonado within five years of annexation.

Policies:

- 5.1 After annexation of an area, Carbonado may negotiate with non-Carbonado public utility providers for the transfer of existing facilities to Carbonado and may plan improvement projects to integrate those facilities with the Carbonado utility systems. However, if existing facilities are not suitable for integration with Carbonado's systems or they would be too costly to operate and maintain over the years, Carbonado may install replacement facilities.
- 5.2 Within five years of annexation of an area, Carbonado should provide annexation areas with the same levels of utility services as are provided in the remainder of Carbonado.

References

1. Pierce County Planning and Land Services, *Comprehensive Plan for Pierce County Washington*, November 29, 1994, p. II-10.
2. *Comprehensive Plan for Pierce County Washington*, p. II-10
3. *Water System Plan for Carbonado*, 2000, Parametrix. Inc.

TOWN OF CARBONADO

TRANSPORTATION ELEMENT

TRANSPORTATION ELEMENT

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Transportation Element

Introduction

Transportation Planning Challenge

The *Washington State Growth Management Act* (GMA) challenges communities to rethink transportation planning strategies used during the last several decades, to analyze strategic shortcomings, and to develop new local strategies that help to solve problems of traffic congestion, pollution, and the diminishing quality of life associated with automobile dependence.

This challenge is echoed in regional and county planning documents, namely PSRC's *Vision 2040* and *Transportation 2040*, and the *Pierce County Countywide Planning Policies*. Throughout the Pacific Northwest, streets designed primarily for automobiles and lacking in convenient, interconnected facilities for other transportation modes have resulted in an automobile dependency that starts at almost every residence's door and ends at almost every travel destination. The scope of walking and bicycling has been reduced to exercise and recreation--not transportation--in most peoples' lives.

The Carbonado area has been influenced by these transportation trends. The Town's location, which is remote from the nearest bus service provided by Pierce Transit, provides a challenge to citizens who lack mobility. The population of the Town and surrounding area is insufficient to support efficient and convenient local public transit. Because employment opportunities are extremely limited in Carbonado, most Carbonado households are supported by persons who must commute. As with commuting, most Carbonado residents use automobiles for other travel. Discontinuous pedestrian and bicycle facilities and the absence of public transit service combine to keep residents in their automobiles to reach local travel destinations.

Fortunately, from a transportation planning perspective, much of Carbonado has been developed with a traditional street grid that features short blocks, interconnected streets with few cul-de-sacs, narrow streets and other characteristics that calm traffic and support pedestrian activity. And, Carbonado has the potential to extend this grid and support improvements that will enhance pedestrian and bicyclist opportunities.

This transportation element focuses on defining transportation system policies that will guide Carbonado's transportation improvements in compliance with GMA requirements and regional and county policies while realistically accommodating the practical limitations determined by Carbonado's small size, remote location and land use. These policies are designed to encourage Carbonado's residents to walk and bicycle not only for exercise and recreation, but to use nonmotorized and public transit transportation modes, when available, to reach common travel destinations.

Transportation Planning Requirements

Requirements of Growth Management Act

The Washington State Growth Management Act identifies transportation facilities planning and, specifically, encouraging efficient multi-modal transportation systems based on regional priorities and coordinated with local comprehensive plans, as a planning goal to guide the development and adoption of comprehensive plans and development regulations [RCW 36.70A.020(3)]. In addition, it identifies a transportation element as a mandatory element of a county or city comprehensive plan [RCW 36.70A.070(6)]. The transportation element must include: (a) land use assumptions used in estimating travel; (b) facilities and service needs; (c) finance; (d) intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions; and (e) demand management strategies [RCW 36.70A.070(6)(a)- (c)]. The Growth Management Act expressly requires a Countywide Planning Policy on transportation facilities and strategies [RCW 36.70A.210(3)(d)].

VISION 2040 Multicounty Planning Policies (MPPs)

VISION 2040 offers an integrated approach to addressing land use and transportation, along with the environment and economic development. It calls for a clean, sustainable transportation future that supports the regional growth strategy. Sustainable transportation involves the efficient and environmentally sensitive movement of people, information, goods and services – with attention to safety and health. Sustainable transportation minimizes the impacts of transportation activities on our air, water, and climate. It includes the design of walkable cities and bikeable neighborhoods, as well as using alternatives to driving alone. It relies on cleaner, renewable resources for energy.

The transportation-related multicounty planning policies in VISION 2040 are presented in three groups. The first group of policies calls for maintaining, preserving, and operating the existing transportation system in a safer and more efficient way. They advance transportation that is less polluting. The second group of policies call for developing the system to support the regional growth center, particularly travel within and between centers. Investments are to be prioritized to serve centers and to support pedestrian-oriented, mixed use development. The policies address complete streets to serve all users, green streets that are better for the environment, and context sensitive design, that guides the development of transportation facilities to better fit within the context of the communities in which they are located. There are policies addressing nonmotorized transportation as well as freight. The final group of policies addresses greater transportation options, including alternatives to driving alone, mobility choices for people with special needs, and avoiding new roads or capacity expansion in rural areas.

Pierce County Countywide Planning Policy

The GMA's transportation planning requirements and VISION 2040 transportation planning policy directives are expounded upon in greater detail in Pierce County's County-Wide Planning

Policy on “*Transportation Facilities and Strategies*”. This policy directs Carbonado, to the extent practicable, to:

- Promote a sustainable transportation system that assures the ability of future generations to provide transportation infrastructure and services in an effective, efficient, clean, and cost effective manner. (Transportation Policy Tr-1)
- Improve safety in the transportation system by working toward the state’s “zero death and disabling injury” target. (Transportation Policy Tr-2)
- Deem the following transportation services Countywide in nature (for the purpose of this Policy):
 - state and federal highways;
 - major arterials;
 - transit facilities and services;
 - waterborne transportation (ferries, shipping);
 - airports (passenger or freight);
 - rail facilities (passenger or freight);
 - nonmotorized facilities. (Transportation Policy Tr-3)
 - Include the following facilities and system components in the multi-modal network:
 - roads, including major highways, arterials and collectors;
 - public transit, including bus, rail, vanpool, paratransit, and park and ride lots and other emerging concepts;
 - nonmotorized facilities;
 - ferries;
 - airports;
 - parking facilities;
 - facilities related to transportation demand management. (Transportation Policy Tr-4)
 - Consider the impacts of its planning activities on neighboring jurisdictional (inclusive of WSDOT) roadway facilities when developing and administering its level of service standards. (Transportation Policy Tr-5)
 - Designate or adopt multimodal levels of service (LOS) per RCW 36.70A.108 such as:
 - for roadways and intersection; and
 - transit levels of service (e.g., hours of service, headways, pedestrian environment, accessibility, safety, rider comfort, reliability, transfer necessity, cost, and travel time).

- Enter into interlocal agreements, where necessary, to establish uniform, coordinated service levels between jurisdictions for countywide facilities.
 - Establish an adopted LOS that may be:
 - set below existing levels (thereby allowing reserve capacity for growth and minimizing the need for new capital investment);
 - set above existing levels (thereby increasing comfort and convenience of travel, enhancing economic development and minimizing some environmental impacts);
 - set at existing levels (thereby allowing new development to mitigate full marginal impacts);
 - set at different levels of service in different zones;
 - set at different levels of service based on facility classifications;
 - set for multi-modal facilities;
 - taken directly from standards developed by the Washington State Department of Transportation for Highways of Statewide Significance and directly from standards developed by the Puget Sound Regional Council for regionally significant state highways. (Transportation Policy Tr-6)
 - Determine the adequacy of transportation facilities, including transit infrastructure, taking into account existing development, approved but unbuilt development, current and future roadway conditions, and multiple modes of transportation through utilization of
 - capacity-to-demand levels of service (LOS);
 - availability of capacity based on current and future demand including phased capacity;
 - appropriate standards of design across jurisdictional lines. (Transportation Policy Tr-7):
 - Address substandard LOS for existing facilities by:
 - designating funding mechanisms;
 - prioritizing facility needs in capital improvement and transportation improvement programs to correct existing deficiencies;
 - using transportation demand management;
 - using transportation systems management to promote cost effective methods of moving people and goods;
 - promoting nonmotorized travel. (Transportation Policy Tr-8)
 - In cooperation with the transit and transportation agencies, establish:
 - policies and/or regulations for park and ride facilities;
 - parking requirements for public facilities so as to encourage public transit use. (Transportation Policy Tr-9)

- Address concurrency through the following methods:
 - providing transportation facilities needed to accommodate new development within six years of development approval;
 - limiting new development to a level that can be accommodated by existing facilities and facilities planned for completion over the next six years;
 - encouraging new and existing development to implement measures to decrease congestion and enhance mobility through transportation demand and congestion management. (Transportation Policy Tr-10)
- Address compatibility between land use and transportation facilities by:
 - Requiring new transportation facilities and services in areas in which new growth is appropriate or desirable to be phased within a twenty-year time frame consistent with six year capital improvement programs;
 - Discouraging the extension of new transportation facilities into areas not planned for growth (e.g., outside urban growth areas) and avoiding planning of major roads and capacity expansion in rural and resource areas;
 - Using development regulations to ensure that development does not create demands exceeding the capacity of the transportation system, including transit alternatives.
 - Using land use regulations to increase the modal split between automobiles and other forms of travel:
 - Designating high densities in transit and transportation corridors and designated Transit Oriented Development (TOD) sites;
 - Dedications and impact fees to provide public transit facilities;
 - Requiring pedestrian-oriented design;
 - Encouraging or requiring mixed use development and TOD;
 - Facilitating ease of access for physically challenged individuals.
 - Developing plans or planning provisions, where appropriate, to protect the continued operation of general aviation airports by using adopted land compatibility standards such as those published by the Federal Aviation Administration (FAA) and the Washington State Department of Transportation (WSDOT) to discourage incompatible land uses and development on adjacent land. (Transportation Policy Tr-11)
- Plan and implement programs, as appropriate, for designing, constructing and operating transportation facilities for all users, including motorists, pedestrians, bicyclists, and transit users. (Transportation Policy Tr-12)
- Address environmental impacts of the transportation policies through:
 - programming capital improvements and transportation facilities designed to alleviate and mitigate impacts on land use, air quality and energy consumption

such as high-occupancy vehicle lanes, public transit infrastructure, or bicycle/pedestrian facilities designed for home-to-work travel;

- locating and constructing transportation improvements so as to discourage adverse impacts on water quality and other environmental resources. (Transportation Policy Tr-13)
- Use low-impact development practices or environmentally appropriate approaches for the design, construction and operation of transportation facilities to reduce and mitigate environmental impacts, including, but not limited to, storm water runoff from streets and roadways. (Transportation Policy Tr-14)
- In cooperation with transit agencies, promote the facilities and services to encourage alternatives to automobile travel and/or to reduce the number of vehicle miles traveled (modal split, trip generation and trip length) including:
 - structural alternatives (public transit [such as grade separated guideways, for bus and rail applications]; construction of new high-occupant vehicle lanes; limitations on highway/roadway construction; carpool/vanpool facilities; non-recreational bicycle/pedestrian facilities);
 - non-structural/regulatory alternatives (growth management [concurrency; urban growth areas]; road/congestion pricing; auto-restricted zones; parking management; site design; ridesharing incentives, and transportation systems and demand management). (Transportation Policy Tr-15)
- Work with transit agencies to identify and preserve existing rights-of-way in order to preserve options for future transit alignments. (Transportation Policy Tr-16)
- Work in cooperation with WSDOT and Port authorities to plan and implement projects and programs to meet freight mobility and access needs, including the establishment of programs designed to maintain, preserve and expand freight rail capacity including planning for needed capital improvements. (Transportation Policy Tr-17)
- Consider a number of financing measures, including but not limited to:
 - general revenues;
 - fuel taxes;
 - toll roads and other user fees;
 - bonding;
 - congestion pricing;
 - public/private partnerships, and public/public partnerships;
 - assessment and improvement districts, facility benefit assessments, impact fees, dedication of right-of-way and voluntary funding agreements;
 - grants;
 - others, as may be appropriate. (Transportation Policy Tr-18)

- Protect the transportation investments and preservation of assets through the proper operations and maintenance. (Transportation Policy Tr-19)
- Protect the transportation system against disaster, develop prevention and recovery strategies, and plan for coordinated responses by using transportation-related preparedness, prevention, mitigation, response, and recovery strategies and procedures adopted in the emergency management plans and hazard mitigation plans of the County and cities, as well as the Washington State Comprehensive Emergency Management Plan. (Transportation Policy Tr-20)

Land Use Assumptions

The land use assumptions used while developing this transportation element are summarized below and described in detail in the documents listed:

Area	Document
Within Carbonado	Future land use will remain relatively unchanged, although there will be an incremental increase in commercial, mixed use development, and housing types other than detached single-family dwellings. The land use and housing elements of this comprehensive plan provide details.
Outside of Carbonado	The <i>Comprehensive Plan for Pierce County, Washington</i> specifies that generally, most land uses in areas adjacent to Carbonado will remain unchanged from those existing at the time this plan was adopted.

Organization of the Transportation Element

This transportation element contains the following sections:

- Introduction
- Inventory of facilities and services
- Current and projected demand
- Levels of service
- Adequacy of transportation facilities
- Funding capability and resources
- Goals and policies

The transportation improvement program is described in the capital facilities element.

Inventory of Facilities and Services

Because Carbonado is a geographically small, land-locked rural community with limited internal commercial activity, Carbonado does not contain many of the typical components of a multimodal transportation network. Carbonado has no water, air, or rail facilities. The Town's transportation facilities are limited to streets and those transportation modes and services that use streets.

Streets

Functional Classification

A roadway network is a series of streets which increasingly focus and concentrate traffic as one moves away from residential neighborhoods, much in the way small rivulets join streams and ultimately converge into rivers. A community roadway network is typically comprised of local streets, collector streets, and arterial streets.

Designation of roadway facility functional classification is an integral part of managing street use and land development. Designation should be consistent with land use policies and adopted street standards. In Washington, as in most states, classification of streets is necessary for receipt of state and federal highway funds. State law requires that cities and counties adopt a street classification system that is consistent with state and federal guidelines. The legal basis and requirement for the classification of streets is in RCW 35.78.10 and RCW 47.26.180.

A primary determinant of the functional classification is the present and anticipated traffic volumes to be carried by a street. Within a given classification the number of lanes can be varied to accommodate the anticipated volume. Roadway functional classifications are summarized below.

Principal Arterial Streets

Principal arterial streets serve as the primary routes within and through a community. They may serve as the principal routes to and from centers of activity outside of a community. Efficient traffic movement is of prime concern. Roadway width and intersection design should accommodate concentrated traffic volumes at moderate speeds. In Carbonado, SR-165 is designated a major arterial between the north and south Town limits. It serves as the primary route for individuals traveling between the Carbon River entrance to Mt. Rainier National Park and the more populated areas of the region.

- Minor Arterial Streets

Minor arterial streets interconnect with and augment arterial streets as the principal circulation routes within the community. Ease of traffic mobility and the length of trips

may be somewhat less along minor arterials than principal arterials. Pershing Avenue from First Street to SR-165 is classified as a minor arterial.

- Collector Streets

Collector streets gather traffic from local streets and direct it to arterial routes. Collectors provide both land access and traffic circulation within residential neighborhoods and commercial and industrial areas. Roadways should be of sufficient width to allow for on-street parking and yet facilitate efficient traffic flow at moderate speeds. The following streets are classified as collectors in Carbonado:

- Wilkeson-Carbonado Road from north Town limits to Pershing Avenue
- Hillside Drive
- Tubbs Road from west Town limits to Wilkeson-Carbonado Road
- Fifth Street from Pershing Avenue to 8th Street
- 8th Avenue from 5th Street to 8th Street
- 8th Street from 8th Avenue to Pershing Avenue
- Fairfax-Mellmont Road from SR-165 to north Town limits

It should be noted that with the E-911 renaming project the Town will be re-naming many of the streets. This project is currently planned for 2015.

- Local Streets

Local streets are typically low volume roadways that provide access to individual lots adjacent to them. A number of factors including multiple driveways accessing the roadway, on-street parking, and the potential presence of children playing and riding bicycles suggest that the design and width of local streets should encourage slower traffic speeds (i.e., 25 mph or less). An interconnected network of local streets disperses traffic and allows multiple access routes for emergency service vehicles. All Carbonado streets not classified as an arterial or collector are considered to be local streets.

Bus Service

Regionally, bus service is provided by Pierce Transit within a service area that is focused on the more densely populated areas of Pierce County along the I-5 corridor and nearby communities. The nearest bus service to Carbonado is located within Sumner, Puyallup and the unincorporated South Hill area approximately 20 miles distant.

Shuttle Service

Paratransit service is provided by Pierce Transit for persons with disabilities in accordance with the requirements of the Americans With Disabilities Act (ADA) and within the Pierce Transit Service Area. The ADA requires transit agencies to provide paratransit (door-to-door) service that is "complementary" to fixed route (bus) service. "Complementary" is defined as service that operates the same hours as fixed route service and within three quarters of a mile of existing bus routes. Carbonado is located outside Pierce Transit's service area and is currently not provided paratransit service. However, individuals who travel to locations within the service area may obtain paratransit service under Pierce Transit's program for travel to locations within Pierce Transit's service area.

Rail Service

Sound Transit provides commuter rail service between Lakewood and Seattle, with stations located in Tacoma, Puyallup, Sumner and other communities. Amtrak also provides rail service in the region to communities located along the I-5 corridor.

Air Service

Regional air service in the Central Puget Sound area is provided via the Seattle-Tacoma International Airport in SeaTac.

Current and Projected Demand

Current Residential Trip Generation

Carbonado predicts transportation demand in residential areas by multiplying the number of trips per day that each household will generate by the number of households. The number of trips generated per day per household in a multifamily unit is generally assumed to be six; for a household in a single family unit, the number is ten. When planning transportation improvements associated with new residential development, the assumption is that all trips will be made via private automobile.

The following table indicates generation for residential land uses based on six daily trips for each multifamily unit and ten daily trips for each single family unit:

Residential Area	Single Family	Multifamily	Total
Carbonado's current corporate boundaries	2,180 trips based on 218 units*	0	2,180 trips
Carbonado's UGA	10 trips based on 1 unit*	0	10 trips
Total residentially-generated trips in both areas	2,190 trips based on 219 units	0	2,190 trips

*2010 US Census

Projected Residential Trip Generation

The Pierce County 2030 population allocation for Carbonado is 800 persons. Based on an assumed average household size of 2.86 persons, 298 2040 will be required to meet this target. This represents a housing unit allocation, or increase in housing units, of 82 units (38%) by 2030. Based on this unit increase, residential trip generation is projected to increase 35 to 38 percent depending on the mix of housing types in 2030. The following table indicates total projected trip generation for residential land uses based on the 2030 allocation for the current corporate boundary and UGA combined.

Residential Area and Housing Mix	Single Family Attached and Detached Units	Multifamily and Accessory Dwelling Units	Total
Carbonado's current corporate boundaries plus UGA (<i>all SFD</i>)	2,980 trips based on 298 units x 10 trips per unit	0 trips	2,980
Carbonado's current corporate boundaries plus UGA (<i>mix of SFDs, MFDs and ADUs</i>)	2,780 trips based on 278 units x 10 trips per unit	120 trips based on 20 units x 6 trips per unit	2,900

Existing and Projected Arterial Traffic Levels

We project, based on observation, existing and projected land use and the lack of vehicular access to Mt. Rainier National Park from SR 165 that major arterial traffic on SR-165 will increase minimally during the Planning Period.

Current and Projected Nonmotorized Facility Demand

It is likely that the current recreational demand level for pedestrian and bicycle facilities will continue indefinitely. One of the challenges facing Carbonado is to increase the demand for nonmotorized facilities *as transportation*. Future demand depends on the success of Carbonado and other jurisdictions and agencies in cooperatively providing continuous pedestrian and bicycle facilities that link conveniently with travel destinations and with public transit. Carbonado's transportation goals and policies and transportation improvement projects support the development of convenient, contiguous pedestrian and bicycle facilities along newly developed streets and existing streets, primarily within available rights-of-

way. In addition, transportation goals and policies support the development of an extension of the regional Foothills Trail within the vacated Burlington Northern right-of-way that traverses Carbonado or within the SR-165 right-of-way located on the eastern boundary of the Town. As these plans are made all appropriate agencies, including WSDOT will be involved.

Levels of Service and Arterial Adequacy

Carbonado accepts arterial levels of service (LOS) as defined in the Pierce County 2011-2012 Capital Facilities Plan.¹ The County's current volume/service (V/S) service standard is 1.0, which roughly equates to a LOS D for rural areas. By accepting the county's standards for arterials, Carbonado achieves level of service coordination across the geographic area most likely to impact traffic levels in Carbonado and in which Carbonado transportation needs are most likely to have an impact. This approach will also facilitate the coordination of mutually beneficial transportation improvement projects between jurisdictions. The Puget Sound Regional Council has set an LOS C for rural highways in Pierce County, which includes SR-165.

Transportation Demand Management

Transportation demand management (TDM) strategies can help create or preserve existing capacity of roadways by reducing demand, thereby deferring or negating the need for capacity improvements. TDM strategies focus on increasing the availability of alternative transportation modes, discouraging single-occupancy-vehicle (SOV) use, and reducing time of travel. Given Carbonado's remote location, small size, relatively low population density and low employment levels, there are practical limitations on how effective certain TDM strategies may be in managing the capacity of roadways to meet projected growth. In addition, chronic funding limitations have led to Pierce Transit reducing its service area and the number of routes and frequency of service within the reduced service area. This has reduced the availability of bus service in east Pierce County, making it an even less viable option for residents of Carbonado. Nonetheless, as conditions change within the community and surrounding region over the planning horizon, an increasing number of the following examples of TDM strategies may warrant consideration:

- Increasing the availability of transit and paratransit to east Pierce County;
- Encouraging the use of high occupancy vehicles and related programs, e.g., buses, carpools and vanpools;
- Providing a more continuous system of sidewalks, walkways and bikeways servicing the community; and
- Encouraging employers to promote commuter trip reduction practices in the work place through employee incentives for using high occupancy vehicles, preferential parking for high occupancy vehicles, improved access for transit vehicles, compressed work weeks, flexible work hours, and telecommuting;
 - Providing facilities and services which make multimodal travel more convenient, e.g., covered transit stops and shuttle services to regional transit centers; and

- Using traffic calming strategies to reduce vehicular speeds and enhance the safety of pedestrians and bicyclists, thereby maximizing pedestrian and bicycle mobility. Examples of traffic calming strategies include the use of raised crosswalks, traffic circles, medians (especially near intersections), narrow driving lanes, interrupted sight lines, narrow distance between curbing to create "neck-downs" or "chokers" (curb extensions), textured pavement, and neighborhood speed watch programs.

Multimodal Transportation Adequacy

Pedestrian and Bicyclist Facilities

Citizen interest in improving pedestrian and bicyclist facilities complements the GMA goal of encouraging multi-modal travel. Currently, sidewalks within the Town are limited to those located on both sides of Pershing Avenue. Bicyclist facilities are also limited in that Carbonado does not have any dedicated bike lanes, bike routes, or off-street bike paths. However, the vacated Burlington Northern right-of-way and existing SR-165 right-of-way located along the northerly and easterly sides of the Town provide opportunities to develop a shared bike and pedestrian pathway that could eventually connect to the regional Foothills Trail.

Transit Service

As noted above, Pierce Transit recently reduced its service area, pulling back from areas of Pierce County that had relatively infrequent service, low ridership and limited taxpayer support for the additional funding needed to maintain existing service. The closest bus service to Carbonado is now located in Sumner, Puyallup and South Hill approximately 20 miles from the Town. This distance makes the use of transit for commuter trips and in support of other activities challenging, if not impractical, for most residents and employees. Carbonado's goals and policies provide for coordination with Pierce Transit for future route planning when conditions change to support enhanced service to the Carbonado area.

Funding Capability and Resources

Historically, Carbonado has relied on a pay-as-you-go approach to funding local street maintenance. However, the Town's financial capability is currently limited to the point that such maintenance is deferred indefinitely. Local funding is generally not available for projects that increase capacity or enhance safety. The Town's sole arterial street, Pershing Avenue, may qualify for federal, state or regional funding given its classification. However, it may be unlikely that any proposed maintenance or upgrades to this street would rank highly in a competitive funding environment. For improvements to local streets where there is sufficient neighborhood support to share in the cost, local improvement districts can be formed to defray the cost, provided the Town has sufficient bonding capacity to cover the up-front costs. For new development, developers will pay for new infrastructure, including streets, sidewalks, bike trails and associated transportation facility improvements, with the Town assuming long-term maintenance responsibilities for these new facilities.

In 2013 the Town created the Town of Carbonado Transportation Benefit District (TBD) as a junior district. The Town now contracts with the TBD to provide roadway maintenance and improvements. The main source of funding for the TBD is a \$20 vehicle license fee.

GMA requirements regarding the financing and funding of transportation-related improvements are addressed in the capital facilities element and goals and policies of this comprehensive plan.

Goals and Policies

The transportation goals contained in this element are:

- Consistency with Regional Growth Strategy
- Provision of transportation facilities;
- Parking and load/unload areas;
- Air quality; and
- Citizen participation.

Goal 1: Consistency with Regional Growth Strategy

Carbonado shall adopt, maintain and implement goals, policies, regulations and programs as necessary to ensure consistency with VISION 2040 Multicounty Planning Policies and Pierce County Countywide Planning Policies.

Policies:

- 1.1 Carbonado should promote a sustainable transportation system that assures the ability of future generations to provide transportation infrastructure and services in an effective, efficient, clean, and cost effective manner – consistent with Transportation Policy Tr-1.
- 1.2 Carbonado should improve safety in the transportation system by working toward the state’s “zero death and disabling injury” target – consistent with Transportation Policy Tr-2.
- 1.3 Carbonado should strive toward including the following facilities and system components in its multi-modal network and supporting the inclusion of such facilities in adjoining networks -- consistent with Transportation Policy Tr-4.
 - roads, including major highways, arterials and collectors;
 - public transit, including bus, vanpool, paratransit, and park and ride lots and other emerging concepts;
 - nonmotorized facilities;
 - parking facilities;

- facilities related to transportation demand management. (Transportation Policy Tr-4)
- 1.4 Carbonado should consider the impacts of its planning activities on neighboring jurisdictional roadway facilities, including SR-165 (Washington State Department of Transportation), when developing and administering its level of service standards – consistent with Transportation Policy Tr-5.
- 1.5 Carbonado should adopt LOS standards for streets and other transportation facilities that are set below existing levels, thereby allowing reserve capacity for growth and minimizing the need for new capital investment, as allowed per Transportation Policy Tr-6. This includes the arterial LOS as defined in the Pierce County 2011-2012 Capital Facilities Plan and the rural highway LOS set by the Washington State Department of Transportation for SR-165.
- 1.6 Carbonado should determine the adequacy of transportation facilities taking into account existing development, approved but unbuilt development, current and future roadway conditions, and multiple modes of transportation through utilization of capacity-to-demand LOS, the availability of capacity based on current and future demand, and appropriate standards of design across jurisdictional lines – consistent with Transportation Policy Tr-7.
- 1.7 Carbonado should address substandard LOS for existing facilities, consistent with Transportation Policy Tr-8, by:
- designating funding mechanisms;
 - prioritizing facility needs in capital improvement and transportation improvement programs to correct existing deficiencies;
 - using transportation demand management;
 - using transportation systems management to promote cost effective methods of moving people and goods;
 - promoting nonmotorized travel.
- 1.8 In the event that regional transit or other transportation services become available to the community, Carbonado should work in cooperation with the appropriate transit or transportation agency to establish policies and/or regulations for park and ride facilities, and parking requirements for public facilities, so as to encourage public transit use – consistent with Transportation Policy Tr-9.
- 1.9 Carbonado should address concurrency – consistent with Transportation Policy Tr-10, through the following methods:
- providing transportation facilities needed to accommodate new development within six years of development approval;
 - limiting new development to a level that can be accommodated by existing facilities and facilities planned for completion over the next six years;
 - encouraging new and existing development to implement measures to decrease congestion and enhance mobility through transportation demand and congestion management.

- 1.10 Carbonado should address compatibility between land use and transportation facilities – consistent with Transportation Policy Tr-11, by:
- Requiring new transportation facilities and services in areas in which new growth is appropriate or desirable to be phased within a twenty-year time frame consistent with six year capital improvement programs;
 - Using development regulations to ensure that development does not create demands exceeding the capacity of the transportation system;
 - Using land use regulations to increase the modal split between automobiles and other forms of travel by requiring pedestrian-oriented design, encouraging mixed use development, and facilitating ease of access for physically challenged individuals;
- 1.11 Carbonado should plan and implement programs, as appropriate, for designing, constructing and operating transportation facilities for all users, including motorists, pedestrians, bicyclists, and transit users – consistent with Transportation Policy Tr-12.
- 1.12 Carbonado should address environmental impacts of the transportation policies, in a manner consistent with Transportation Policy TR-13, through:
- programming capital improvements and transportation facilities, such as bicycle/pedestrian facilities, that designed to alleviate and mitigate impacts on land use, air quality and energy consumption;
 - locating and constructing transportation improvements so as to discourage adverse impacts on water quality and other environmental resources.
- 1.13 Carbonado should use low-impact development practices or environmentally appropriate approaches for the design, construction and operation of transportation facilities to reduce and mitigate environmental impacts, including, but not limited to, storm water runoff from streets and roadways – consistent with Transportation Policy Tr-14.
- 1.14 In cooperation with transit agencies, Carbonado should promote facilities and services to encourage alternatives to automobile travel and/or to reduce the number of vehicle miles traveled – consistent with Transportation Policy Tr-15.
- 1.15 Carbonado should consider a number of financing measures, consistent with Transportation Policy Tr-18, including but not limited to:
- general revenues;
 - fuel taxes;
 - bonding;
 - grants;
 - public/private partnerships, and public/public partnerships; and
 - assessment and improvement districts, facility benefit assessments, impact fees, dedication of right-of-way and voluntary funding agreements.

- 1.16 Carbonado should protect transportation investments and the preservation of assets through proper operations and maintenance – consistent with Transportation Policy Tr-19.
- 1.17 Carbonado should protect the transportation system against disaster, develop prevention and recovery strategies, and plan for coordinated responses by using transportation-related preparedness, prevention, mitigation, response, and recovery strategies and procedures adopted in applicable emergency management plans and hazard mitigation plans and the Washington State Comprehensive Emergency Management Plan – consistent with Transportation Policy Tr-20.

Goal 2: Provision of Transportation Facilities

Carbonado shall plan for facilities for motorists, transit users, pedestrians, and bicyclists as required to meet levels of service and design goals established by this comprehensive plan.

Policies:

- 2.1 Carbonado should develop a network of safe routes for pedestrians and bicyclists to schools, parks, government buildings, and commercial mixed use areas. Facilities may be developed in the same right-of-way as streets, but non-street alternatives such as a Foothills Trail extension may be developed in coordination with, and with connections to, facilities located within street rights-of-way. Pedestrian, bicyclist, and motor vehicle facilities should provide physical separations for the different travel modes wherever possible. Carbonado should employ traffic calming strategies where appropriate to maximize the mobility of pedestrians and bicyclists.
- 2.2 Utility infrastructure, lighting, and landscaping requirements should be addressed early in street design and redesign processes. Locations and configurations of utilities, street lights, and landscaping should be included in all street designs.
- 2.3 All transportation system improvements shall comply with the requirements of the Americans with Disabilities Act (ADA).
- 2.4 Where an existing right-of-way is not wide enough to accommodate transportation facilities in conformance with transportation goals and policies, Carbonado should seek to acquire enough additional right-of-way to enable conformance. No encroachment into the right-of-way should be granted and no right-of-way should be vacated if such action has the potential to interfere with current or future implementation of transportation goals and policies.
- 2.5 Streets should be landscaped in accord with community character goal and policies and other applicable goals and policies of the land use element. Landscape design should ensure that visibility is not blocked at intersections or where there is limited sight distance. Plant species that do not damage pavement should be used. In addition, vegetation should be pruned on a regular schedule to ensure good visibility.
- 2.6 Street lights should be included as necessary to ensure safety of motorists, pedestrians, and bicyclists. Street lights should be designed and installed to ensure that motorists' and law enforcement officers' visibility is not impeded by glare.

- 2.7 Carbonado should address safety issues at locations where the number of accidents involving personal injury or significant property damage exceed the Washington State Department of Transportation's threshold for governmental action. Traffic calming devices may be installed where appropriate. Where engineering changes are to be made, a traffic engineer should be consulted to assist with the design.
- 2.8 Street designs should minimize the paved area needed to achieve levels of service established in this comprehensive plan. Designs of parking lots and other paved facilities should use pervious pavement or other surface materials and design solutions that allow infiltration and minimize stormwater runoff to the extent practicable.

Goal 3: Parking and Load/Unload Areas

Parking and load/unload facilities shall accommodate all transportation modes.

Policies:

- 3.1 Maximum motor vehicle parking standards should be established for various types of development. Shared parking facilities should be encouraged. Parking areas should include plantings of vegetation appropriate for the setting. Adequate lighting and safe, handicapped accessible walkways should be provided in all parking areas. Parking lots and vehicle load/unload areas should not interrupt or block pedestrian and bicycle facilities that access or circulate through an area. Parking near intersections should be prohibited to ensure good visibility at the intersection. Motor vehicle parking lanes should be separate from bicycle lanes. Where a destination requires significant parking facilities, off-street parking should be required.
- 3.2 A minimum number of bicycle parking spaces should be established for different types of development. Bicycle parking facilities should include sufficient covered areas for bicyclists to load and unload packages, mount and unmount wheels, don rain gear, etc. The parking area should be conveniently located, well lit, and provide a method for securing bikes.
- 3.3 Development characterized by a high number of deliveries and pickups should provide a dedicated off-street area for delivery and pickup. Delivery and pickup areas for such destinations should not serve as parking areas. Travelers entering the destination should not be forced to cross the delivery and pickup area in order to reach the entrance of the destination.

Goal 4: Air Quality

Carbonado should support projects and programs that help to meet and maintain federal and state clean air requirements, as well as regional air quality policies and programs.

Policies:

- 4.1 The Carbonado transportation system should conform to the federal and state Clean Air Acts by maintaining conformity with the Metropolitan Transportation Plan of the Puget

Sound Regional Council and by following the requirements of Chapter 173-420 of the Washington Administrative Code.

- 4.2 Carbonado should work with the Puget Sound Regional Council, the State Department of Transportation, Pierce Transit, and other jurisdictions in the development of transportation control measures and other transportation and air quality programs where warranted.
- 4.3 Carbonado should promote and support public education efforts aimed at reducing activities that result in air pollution, especially transportation-related pollution.
- 4.4 To promote the reduction of criteria pollutants for mobile sources (WAC 173-420-080) Carbonado should reduce the community's reliance on the automobile as the primary method of transportation by encouraging alternative modes of transportation through the policies outlined in Goal 1 of this element and other complementary strategies as appropriate.

Goal 5: Citizen Participation

Carbonado shall facilitate the involvement of interested citizens in planning transportation system improvements.

Policies:

- 5.1 Where major improvements are planned, interested citizens should be asked early in the design process to provide their inputs concerning the improvements. Some or all of the following techniques may be used: citizen advisory committees, citizen workshops, public hearings, and public bulletins. Where minor improvements will affect a specific neighborhood, neighborhood residents should be provided with an opportunity to provide their inputs and comment on designs.

TOWN OF CARBONADO
CAPITAL FACILITIES ELEMENT

CAPITAL FACILITIES ELEMENT

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Capital Facilities Element

Introduction

Capital Facilities Planning Requirements

Section RCW 36.70A.070 (3) of the *Washington State Growth Management Act (GMA)* requires that all comprehensive plans contain:

"A capital facilities element consisting of:

- 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 existing 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.

Additionally, the GMA contains a planning goal that states that comprehensive plans and their associated development regulations must:

"Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards."

This GMA requirement is frequently referred to as "concurrency." The *County-Wide Planning Policies for Pierce County, Washington* include a policy section on public facilities and services, which states that they will be considered available at the time of development if:

"as to all public facilities and services other than transportation, if the facility or service is in place at the time demand is created, or if the county or municipality has made appropriate provision to meet the demand for the public facility or service through one or more of the following techniques:

- a. inclusion of the public facility or service in the applicable county or municipal capital facilities element and specification of the full source of the funding for such project;
- b. impact fees;

- c. required land dedication;
- d. assessment districts;
- e. users' fees and charges;
- f. utility fees;
- g. other."

Purpose

The purpose of the capital facilities element is to set policy direction for determining capital improvement needs and for evaluating proposed capital facilities projects. The element also establishes funding priorities and a strategy for utilizing various funding alternatives. It represents the Town's policy plan for the financing of public facilities for the next 20 years, and includes a six year financing plan for capital facilities.

The capital facilities element promotes efficiency by requiring the Town to prioritize capital improvements for a longer period of time than a single budget year. It also requires coordination between other government bodies to ensure that all levels of government are working together to help the Town achieve its community vision. Long range financial planning presents the opportunity to schedule projects so that various steps in development logically follow one another, with regard to relative need, economic feasibility, and community benefit. In addition, the identification of funding sources results in the prioritization of needs and requires that the benefits and costs of projects are evaluated explicitly.

The capital facilities element is concerned with needed improvements that are of relatively large scale, are generally nonrecurring high cost, and may require multi-year financing. Day to day operating items such as paper, desks, and shovels are not included. The list of facilities and improvements has been limited to major components in order to analyze community needs at a level of detail that is both manageable and reasonably accurate.

For purposes of this capital facilities element, capital improvements are those major facilities or items which cost \$5,000 or more and which require the expenditure of public funds over and above annual operating expenses. These facilities and items will generally have a life or use expectancy of more than ten years and will result in an addition to the Town's fixed assets and/or extend the life or usefulness of existing capital improvements. The cost of capital improvements may include design, engineering, permitting, environmental work, land acquisition, construction, landscaping, initial furnishings, and equipment.

Facilities and improvements which cost less than \$5,000, routine maintenance (e.g. painting and reroofing), and the Town's rolling stock (e.g. police cars, public works trucks) will be addressed in the Town's annual budget and not within this capital facilities element. The element will also not include the capital expenditures or improvements of private or nonprofit organizations that provide services or facilities to the public.

Organization of the Capital Facilities Element

The capital facilities element is organized into the following sections:

- Introduction
- Public schools, land, and buildings
- Goals and policies
- Level of service standards
- Current and possible funding sources
- Six-year capital improvements program

Relationship to Other Elements and Facility Plans

Most information about facilities is contained in other elements and documents. To avoid redundancy, this capital facilities element provides references to information contained in other elements and documents instead of repeating information.

Utilities and Transportation Elements

The utilities and transportation elements (chapters) of the comprehensive plan are concerned with many of the same public facilities as the capital facilities element. To improve readability of the comprehensive plan, all topics related to Carbonado-owned public utilities and streets are consolidated in the utilities and transportation elements except the capital improvement program. Specifically, those elements contain facility inventories, existing demand and capacities, levels of service, and future needs for electric, water, sanitary sewer, stormwater, and transportation facilities. Where an improvement will result in capacity changes in a utility, capacity information for the improvement is included in the utilities element. The utilities element contains additional references to other utility or facility plans as necessary for more detailed information. Detailed project descriptions are available for future projects in the Carbonado Town Clerk.

Park and Recreation Plan

The Park and Recreation Element of this comprehensive plan is concerned with the public parks, trails and recreation facilities and contains facility inventories, existing demand and capacity, levels of service, future needs, and project information for Carbonado's park and recreation facilities. The park and recreation element will be revised during the implementation of this comprehensive plan and to ensure consistency.

Public Schools, Land, and Buildings

Capital facilities in Carbonado that are not associated with utilities, transportation, or parks and recreation consist of public schools and Carbonado-owned land and buildings. This section

provides basic information about those facilities. All of the facilities discussed in this element are owned and operated by Carbonado except school facilities. Information about school facilities is included to ensure that all capital facilities owned by public entities are addressed. Information about school facilities is based on school district plans.

Public Schools

Carbonado Historic School District provides public education to the majority of Carbonado's households and has facilities within Carbonado. The District extends beyond the Town limits and also includes many students from other communities outside the district who choose to attend Carbonado schools. About one half of the student population comes from outside the District.

The Carbonado Historic School District has a school population of 180 students. Both Primary and Secondary students through the grades of Kindergarten through 8th grade attend school on the School Campus at 424 Fourth Street, Carbonado, Washington.

Carbonado-Owned Land and Buildings

Carbonado owns several tracts of land for the purpose of delivering urban services.

The table below summarizes information about Carbonado's land and buildings, except those associated with parks and recreation.

Location, Size, and Use	Improvements
818 -8 th Avenue Approximately one-half acres Town Hall Building	Existing: This one story, 5000 sq. ft. building has been shared with the US Post Office since 2002. Originally the Fire Station was also housed in the Town Hall. In 2002 a new Fire Station was constructed. The Fire Station is manned by volunteer firefighters. Planned: There are no plans to remodel or add facilities to the Public Safety Building at this time.
819 8 th Avenue Approx. one-half acre Fire Station	Existing: The building is approximately 10,000sf. It was built in 2002. Parking for volunteers and visitors is provided adjacent to the building. Planned: There are no plans to remodel or add facilities to the Fire Station at this time.
8 th Ave Park Approximately one acre	Existing: The Park is triangular shaped and has a picnic shelter, horse shoe pits and a "Big Toy". Planned: No immediate plans to upgrade
Forest Drive Tubbs Road	Existing: This 10,000 square foot lot has a water collection and filtration building. Planned: A 500,000 gallon Reservoir, Existing: Wastewater Treatment Plant capable of treating 65, 000 gpd. Is a lagoon plant that consists of two aeration

Location, Size, and Use	Improvements
	cells and one stabilization cell.
Tubbs Road Cemetery	<p>Existing: Cemetery is approximately one-half full.</p> <p>Planned: Cemetery is sufficient capacity for the Planning Period</p>

Goals and Policies

This section contains the goals and policies that will guide the design, construction, operation, maintenance, renovation, removal, cost management, and financing of capital facilities in Carbonado for 20 years following adoption of the comprehensive plan update. Goals and policies are organized into the following categories:

- Service standards
- Environmental impacts
- Facility and service providers
- Costs and financing
- USA and annexations
- Interjurisdictional coordination
- Consistency with other comprehensive plan elements
- Concurrency

Goal 1: Service Standards

Carbonado shall ensure that adequate urban facilities and services are provided to all citizens and residences, businesses, and other establishments within Carbonado's boundaries. Where Carbonado's service area for a particular facility or service extends beyond Carbonado's boundaries, extensions shall be planned and built to a master plan that will ensure adequacy for the entire service area.

Policy 1.1: Facility Plans

Facility-specific plans shall be prepared as needed to define Carbonado's approach to achieving adopted levels of service within Carbonado's current boundaries. These plans shall be consistent with Carbonado's comprehensive plan and should include projects and programs that upgrade substandard facilities within 20 years of the adoption of the comprehensive plan.

Policy 1.2: Service Levels for New Development and Redevelopment

All new development and redevelopment shall be required to conform to service standards, the comprehensive plan, and facility plans.

Policy 1.3: Evaluating Improvement Projects

When prioritizing improvement projects, Carbonado should consider if the project is needed to correct existing deficiencies, replace needed facilities, or extend the life or usefulness of facilities; increase public health and safety; reduce long-term maintenance and operating costs; coordinate with other providers' projects; meet state facility requirements; and improve the environment. Financial feasibility and the impact on Carbonado's budget should also be considered.

Goal 2: Environmental Impacts

Capital facilities and services shall be designed and managed to minimize and mitigate adverse environmental impacts resulting from construction, use, operation, maintenance, renovation, and removal of the facilities.

Policy 2.1: Minimizing Pollutants and Protecting Critical Areas

Facilities, services, programs, and procedures should be structured to prevent or minimize pollutants entering the air, water, and soil and to protect the environmental integrity of critical areas.

Policy 2.2: Immediate and Cumulative Impacts

During facility planning and implementation, the cumulative adverse environmental impacts of all projects should be considered as well as immediate adverse impacts.

Policy 2.3: Resource Conservation and Demand Management

Facilities, services, programs, and procedures should be designed and managed to conserve resources and reduce demand for facilities with significant adverse environmental impacts. Similarly, procedures, programs, and rate structures should encourage citizens to conserve resources and to minimize the negative environmental impacts of their use of facilities and services.

Goal 3: Facility and Service Providers

Carbonado may contract with other facility and service providers to ensure adequate urban facilities and services. All providers serving Carbonado should conform to Carbonado's service standards.

Policy 3.1: Evaluating Facility and Service Providers

When selecting facility and service providers, potential providers should be evaluated with respect to cost, Carbonado's service standards, and environmental responsibility. Additional evaluation criteria may be established as appropriate. Carbonado should select the provider offering optimum conformance with evaluation criteria.

Policy 3.2: Nonconforming Facility and Service Providers

Existing facility and service providers that do not conform to Carbonado's service standards should be informed in writing of nonconformance issues.

Goal 4: Costs and Financing

Carbonado shall ensure that cost-effective facilities and services can be available indefinitely.

Policy 4.1: Cost Containment and Reduction

Facility plans should estimate the impact of new or upgraded facilities on annual operating and maintenance costs. Operation, maintenance, project, and replacement costs should be considered when making facility planning decisions. In addition, the Town should periodically assess operation, maintenance, and replacement programs and procedures with respect to efficiency. Plans, programs, and procedures should be updated as necessary to ensure maximum efficiency.

Policy 4.2: Maximizing the Useful Life of Facilities

Facilities operation and maintenance programs should be structured to maximize the useful life of facilities. In addition, facilities should be designed and constructed to meet projected cumulative demand.

Policy 4.3: Responsibilities for Supporting Future Development

Each future development shall be responsible for facility improvement costs necessitated by that development.

Policy 4.4: Fees and Service Charges

Fees and service charges should be evaluated periodically to ensure that they reflect the cost to Carbonado of providing utility hookups, facilities, and services.

Policy 4.5: Additional Local Funding Sources

Carbonado should consider as needed new sources of local funding such as impact fees and a street utility for capital facilities.

Policy 4.6: Other Funding Sources

Carbonado should aggressively seek conventional and innovative funding sources necessary to achieve its capital facilities goals, policies, and service standards. Carbonado should make efforts to secure grants and similar sources of funding and should explore other funding mechanisms when such sources will provide needed funding for capital improvements.

Policy 4.7: Providing for Deferred Environmental Costs

If proposed facility plans, projects, operating procedures, and maintenance procedures will cause cumulative adverse impacts to the natural environment, future costs of mitigating cumulative

adverse impacts should be estimated. When decisions are made to implement such plans, projects, or procedures, funding programs should be established concurrently to ensure funds sufficient for future restoration and mitigation programs. Funding programs should be designed to ensure availability of funds when restoration or mitigation programs are expected to be needed.

Goal 5: UGA and Annexations

Carbonado shall take steps to ensure smooth and efficient post-annexation transitions for provision of urban facilities and services in areas that may eventually be annexed.

Policy 5.1: Pre-Annexation Planning

Carbonado should assume an active role in facility planning for existing and new development and for redevelopment within its USA. Carbonado should encourage and, where possible, require adherence to its goals, policies, and service standards for all development within its UGA.

Policy 5.2: Post-Annexation Transitions

During annexation processing or within two years of annexation, Carbonado should revise facility plans as necessary to describe in detail the approach to achieving Carbonado's levels of service throughout the annexed area within 20 years of the annexation. Revisions shall be consistent with this comprehensive plan.

Goal 6: Inter-jurisdictional Coordination

Carbonado shall participate in joint planning with other jurisdictions to ensure achievement of capital facilities goals, policies, and service standards and to ensure consistency among jurisdictions.

Policy 6.1: Equitable Allocation of Costs

Carbonado should seek inter-jurisdictional agreements allocating costs equitably for improvements, operations, and maintenance of facilities that are shared by other jurisdictions.

Policy 6.2: Sharing Resources

Carbonado should explore opportunities to share facilities and services with nearby jurisdictions to achieve mutually beneficial increases in services or overall reduction in costs to the citizens of Carbonado and those of other jurisdictions.

Policy 6.3: School Districts

Carbonado shall inform affected school districts (Carbonado Historical School District and White River School District) early in the permit application review process for any residential developments that will significantly increase demand for school facilities. Permit applications

may be denied if the school district is unable to provide educational services at the time that development is available for occupancy. Impact fees may be imposed to compensate for the school facilities impact of new developments.

Goal 7: Consistency with Other Comprehensive Plan Elements

All elements of the comprehensive plan shall be consistent with the capital facilities element.

Policy 7.1: Siting of Capital Facilities

Capital facilities shall be sited and buffered in accord with the land use element goal and policies for siting public facilities.

Policy 7.2: Consistent Plans, Projects, and Financial Plan

Plans and projects described in other elements shall be consistent with the financial plan of the capital facilities element and with the capacity of the Town to fund facility operations and maintenance. If probable funding falls short of meeting needs, affected elements and the capital facilities element shall be reassessed and revised as necessary to ensure an achievable comprehensive plan. Levels of service may be adjusted if other reconciliation measures do not achieve consistency.

Goal 8: Concurrency

Carbonado shall ensure that public facilities and services necessary to support new development are adequate and available to serve the development within the time period specified by this plan.

Policy 8.1: Implementation

Carbonado shall apply its concurrency management regulations to new development to support the implementation of this comprehensive plan.

Policy 8.2: Re-evaluating Total Cumulative Future Demand

Re-evaluation of total cumulative future demand for capital facilities shall be a requirement prior to issuance of any permits for future development. No development shall be permitted if such development allows services to fall below standards established in this comprehensive plan, unless the developer provides the compensating facilities and improvements at the time of development or provides funds to Carbonado to make the necessary facilities improvements when they become necessary to maintain levels of service.

Level of Service Standards

In order to determine existing capacity and future capital improvement needs, level of service standards are required. Level of service (LOS) standards are an indicator of the extent or degree of service provided by, or proposed to be provided by a facility or improvement. These levels of

service, the land use vision, or the capital facilities program may need to be modified in the future in response to changing community expectations or vision, revenue shortfalls, or unforeseen or emergency expenditures.

It is important to note that the level of service standards listed below should be considered minimums. Future capital improvements are not limited to meeting these standards, and in some cases the Town may choose to exceed these standards.

Figure 1 identifies level of service standards that are used to determine what capital improvements are essential to the community.

Figure 1. Summary of LOS Standards

<u>Facility/Improvement</u>	<u>Level of Service Standard</u>
Fire/EMS	4-minute response time
Law Enforcement	1.33 uniformed commissioned officers/1000 population
Parks/Open Space	5.2 acres/1000 population
Power (electric)	Undergrounding for new facilities; National Electric Code and Washington State Electric Code
Schools	LOS as adopted by Carbonado Historical School District
Sanitary Sewer	220 gpd/eru
Stormwater	Department of Ecology Stormwater Management Manual for Western Washington
Streets (arterial)	LOS C
Streets (collector)	LOS C
Water (supply service)	513 gpd/eru
Water (fire flow)	1000 gpm @ 20 psi for residential; 2000 gpm @ 20 psi for non-residential

Note: For additional detailed information on existing and proposed levels of service and LOS standards, please see the Transportation and Utility Elements, and specific facility plans referenced in this comprehensive plan.

Current and Possible Funding Sources

This section of the capital facilities element describes the current budgeted sources of Town revenue for the General Fund. The possible funding sources listed within this element are subject to change and should be periodically reviewed for applicability and appropriateness for the Town. Additional sources in other funds will also be used in the Six-Year Capital Improvement Program.

Figure 2 – 2014 Sources of Revenue Town and TBD

TAXES

General Property Taxes	\$48,495
E.M.S. Taxes	11,977
Retail Sales & Use Tax	28,550
Franchise Fee	2,500
Private Harvest Tax	2
Television Cable Utility Tax	7,000
Phone Utility Tax	12,500
Electric Utility Tax	11,000
Utility Tax City Streets	11,200
REET 1&2d Quarters	800
TOTAL TAXES	134,024

LICENSES & PERMITS

Business Licenses & Permits	\$250
Building Permit	500
Mechanical Permit	25
Plumbing Permit	20
Energy Code Permit	20
State Building Code fee	5
Cemetery Plots and Services	600
Stormwater Fee	3,800
Other/Miscellaneous Fees	800
TOTAL LICENSES & PERMITS	6,020

INTERGOVERNMENTAL REVENUE

Growth Management	\$10,000
Criminal Justice	10,530
DOH Grant –Water Source	18,000
Grant for New Water Reservoir	525,000
General Sewer Plan Grant	50,000
General Sewer Plan Loan	50,000
Prehospitalization Grant	200
City Assistance	11,800
Dept of Health Otep	200
Liquor Excise Tax	1,500
Liquor Board Profits	5,400
MVET	12,400
AWC Grant	350
AWC Rmsa Grant	1,000

TOTAL INTERGOVERNMENT REVENUES	696,380
OTHER SERVICES AND CHARGES	
Garbage Income	\$66,000
Water Utility Income	240,350
Sewer Utility Income	130,600
Plan Check Fees	500
Local Vehicle License	2000
TOTAL OTHER SERVICES & CHARGES	439,450
TRANSFERS	
From Utilities	1,000
MISCELLANEOUS REVENUE	
Post Office Rent	7,952
Utility Reserves	10,000
Other Miscellaneous Revenue	2,015
TOTAL MISCELLANEOUS REVENUE	19,967
TOTAL ESTIMATED REVENUE	\$1,296,841

Possible Funding Sources

The following are major sources of funding that could be explored to meet existing and projected capital improvement needs. These funding sources are divided into the following categories. Funding sources within each of these categories are described in greater detail in the following pages.

- Debt Financing
- Local Multi-Purpose Levies
- Local Single Purpose Levies
- Local Non-Levy Financing Mechanisms
- State Grants and Loans
- Federal Grants and Loans
- Utility Rates

Debt Financing

Short-Term Borrowing: The extremely high cost of many capital improvements require local governments to occasionally utilize short-term financing through local banks.

Revenue Bonds: Bonds financed directly by those benefiting from the capital improvement. Revenue obtained from these bonds is used to finance publicly owned facilities. The debt is

retired using charges collected from the users of these facilities. In this respect, the capital project is self-supporting. Interest rates tend to be higher than for general obligation bonds, and issuance of the bonds may be approved without a voter referendum.

Industrial Revenue Bonds: Bonds issued by a local government, but actually assumed by companies or industries which use the revenue for construction of plants or facilities. The attractiveness of these bonds to industry is that they have comparatively low interest rates due to their tax-exempt status. The advantage to the jurisdiction is the private sector is responsible for retirement of the debt.

General Obligation Bonds: Bonds backed by the value of the property within the jurisdiction. Voter-approved bonds increase property tax rates and dedicate the increased revenue to repay bondholders. Councilmanic bonds do not increase taxes and are repaid with general revenues. Revenue may be used for new capital facilities, or maintenance and operations at existing facilities. These bonds should be used for projects that benefit the Town as a whole.

Local Multipurpose Levies

Ad Valorem Property Taxes: (Tax rate in mills (1/10 cent per dollar of taxable value). The maximum rate is \$3.60 per \$1,000 assessed valuation. The Town is prohibited from raising its levy more than 1% of the highest amount levied in the last 3 years, before adjustments for new construction and annexation. A temporary or permanent excess levy may be assessed with voter approval. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Business and Occupation Tax: Tax of no more than 0.2% of gross value of business activity. Assessment or increase of the tax requires voter approval. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Local Option Sales Tax: Retail sales and use tax of up to 1%. The local governments that level the second 0.5% may participate in a sales tax equalization fund. Assessment of this option tax requires voter approval. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Real Estate Excise Tax (REET): The original 0.5% was authorized as an option to the sales tax for general purposes. An additional 0.25% was authorized for capital facilities, and the Growth Management Act authorized another 0.25% for capital facilities. Revenues must be used solely to finance new capital facilities, or maintenance and operations of existing facilities, as specified in the capital facilities element.

Utility Tax: Up to a 6% tax on the gross receipts of electric, gas, telephone, cable TV, water, sewer, and stormwater utilities. Up to an 8.5% tax on gross receipts of cable TV and solid waste services. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Local Single Purpose Levies

Emergency Medical Services Tax: Property tax level of \$0.25/1,000 assessed valuation for emergency medical services. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

Motor Vehicle Fuel Tax: Tax paid by gasoline distributors. Local jurisdiction receives 11.53% of total tax receipts. State shared revenue is distributed by the Department of Licensing. Revenues must be spent for highway construction, maintenance, or operation; policing of local roads; or related activities.

Local Option Fuel Tax: A Countywide voter approved tax equivalent to 10% of statewide Motor Vehicle Fuel Tax. Revenue distributed to Town on a weighted per capita basis. Revenues must be spent for highway construction, maintenance, or operation; policing of local roads; or related activities.

Commercial Parking Tax: Tax on commercial parking businesses based on gross proceeds, the number of parking stalls, or on the customer rates. Tax imposed by local referendum. Revenues must be spent for highway construction, maintenance, or operation; policing of local roads; highway related activities; public transportation planning and design; and other transportation related activities.

Local Non-Levy Financing Mechanisms

Conservation Futures Program: The funding for this program is generated by all property taxpayers of Pierce County. Six and one-quarter cents per thousand dollars of assessed value of each taxpayer's property provides these funds. The Pierce County Council reviews all project proposals and decides which projects will be awarded Conservation Futures Funds for acquisition.

Fines, Forfeitures, and Charges for Services: This includes various administrative fees and user charges for services and facilities operated by the jurisdiction. Examples are franchise fees, sales of public documents, permits, sale of public property, and all private contributions to the Town. Revenue from these sources may be restricted in use.

Impact Fees: These fees are paid by new development based upon its impact to the delivery of services. Impact fees must be used for capital facilities needed by growth, not for current deficiencies in levels of service, and cannot be used for operating expenses. These fees must be equitably allocated to the specific entities that will directly benefit from the capital improvement, and the assessment levied must fairly reflect the true costs of these improvements. Impact fees may be imposed for public streets, parks, open space, recreational facilities, school facilities, and fire protection facilities.

Lease Agreements: Agreements allowing the procurement of a capital facility through lease payments to the owner of the facility. Several lease packaging methods can be used. Under the

lease-purchase method the capital facility is built by the private sector and leased back to the local government. At the end of the lease, the facility may be turned over to the Town without any future payment. At that point, the lease payments will have paid the construction cost plus interest.

Privatization: Privatization is generally defined as the provision of a public service by the private sector. Many arrangements are possible under this method ranging from a totally private venture to systems of public/private arrangements, including industrial revenue bonds.

Reserve Funds: These are also known as “sinking funds”. Revenue that is accumulated in advance and earmarked for capital improvements. Sources of funds can be surplus revenues, funds in depreciation reserves, or funds resulting from the sale of capital assets.

Special Assessment District: District created to service entities completely or partially outside of the jurisdiction. Special assessments are levied against those who directly benefit from the new service or facility. Includes Local Improvement Districts (LIDs), Road Improvement Districts, Utility Improvement Districts and the collection of development fees. Funds must be used solely to finance the purpose for which special assessment district was created.

Special Purpose District: District created to provide a specified service, such as the Transportation Benefit District created in 2013 for Carbonado. Often the district will encompass more than one jurisdiction. Includes districts for fire facilities, hospitals, libraries, metropolitan parks, airports, ferries, parks and recreation facilities, cultural art/stadiums/ convention centers, sewers, water flood control, irrigation, and cemeteries. Voter approval required for airport, parks and recreation facilities, and cultural art/ stadiums/convention center districts. The district has authority to impose levies or charges. Funds must be used solely to finance the purpose of which the district was created.

Street Utility Charge: Fee up to 50% of actual costs of street construction, maintenance, and operations charged to businesses and households. The tax requires local referendum. The fee charged to businesses is based on the number of employees and cannot exceed \$2.00 per employee per month. Owners or occupants of residential property are charged a fee per household that cannot exceed \$2.00 per month. Both businesses and households must be charged. Revenue may be used for activities such as street lighting, traffic control devices, sidewalks, curbs, gutters, parking facilities, and drainage facilities.

User Fees, Program Fees, and Tipping Fees: Fees or charges for using park and recreational facilities, solid waste disposal facilities, sewer and water services, surface water drainage facilities. Fee may be based on measure of usage, flat rate, or design features. Revenue may be used for new capital facilities, or maintenance and operations of existing facilities.

State Grants and Loans

Centennial Clean Water Fund: Grants and loans for the design, acquisition, construction, and improvement of water pollution control facilities, and related activities to meet state and federal water pollution control requirements. Revenues distributed by the Department of Ecology with a

25 - 50% match. Use of funds limited to planning, design, and construction of water pollution control facilities, stormwater management, ground water protection, and related projects.

Community Development Block Grants: Grant funds available for public facilities, economic development, housing, and infrastructure projects that benefit low and moderate income household. Grants distributed by the Department of Commerce. Primarily to applicants who indicate prior commitment to a project. Revenue restricted in type of project and may not be used for maintenance and operations.

Community Economic Revitalization Board: Low interest loans and occasional grants to finance infrastructure projects for a specific private sector development. Project must create or retain jobs. Funds distributed by the Department of Commerce primarily to applicants who indicate prior commitment to a project. Revenue restricted in type of project and may not be used for maintenance and operations.

Drinking Water State Revolving Fund (DWSRF): The Drinking Water State Revolving Fund loan is an agreement entered into between the Town and the State of Washington, and the Public Works Board, acting through the Department of Community Trade & Economic Development. Funds for the loan are provided by the United States Environmental Protection Agency, CFDA No. 66.468, Title: Safe Drinking Water State Revolving Fund. The loan funds local improvement projects that further the goals and objectives of the Washington State Drinking Water State Revolving Loan Fund Program.

Interagency Committee for Outdoor Recreation: Administers several grant programs for outdoor recreation and habitat conservation purposes. Each grant program requires that monies be spent for specific types of projects. The program requires sponsors to complete a systematic planning process prior to seeking IAC funding. IAC has grant limits on most of its programs, and also encourages and often requires sponsors to share in the project's cost. Grants are awarded by the Committee based on a public, competitive process that weighs the merits of proposed projects against established program criteria.

Public Works Trust Fund: Low interest loans to finance capital facility construction, public works emergency planning, and capital improvement planning. To apply for the loans, the Town must have a capital facilities element in place and must be levying the original .25% REET authorized for capital facilities. Funds are distributed by the Department of Commerce. Loans for construction projects require matching funds generated only from local revenues or state shared entitlement revenues. Public works emergency planning loans are at 5% interest rate, and capital improvement planning loans are no interest loans with a 25% match. Revenues may be used to finance new capital facilities, or maintenance and operations of existing facilities.

State Parks and Recreation Commission Grants: Grants for parks capital facilities acquisition and construction. Distributed by the Parks and Recreation Commission to applicants with a 50% match.

Transportation Improvement Account: Revenue available for projects to alleviate and prevent traffic congestion caused by economic development or growth. Entitlement funds are distributed

by the State Transportation Improvement Board subject to a 20% match. Revenue may be used for capital facility projects that are multimodal and involve more than one agency.

Urban Arterial Trust Account: Revenue available for projects to alleviate and prevent traffic congestion. Entitlement funds are distributed by the State Transportation Improvement Board subject to a 20% match. Revenue may be used for capital facility projects to alleviate roads that are structurally deficient, congested with traffic, or have accident problems.

Water Pollution Control State Revolving Fund: Low interest loans and loan guarantees for water pollution control projects. Loans distributed by the Department of Ecology. Applicant must show water quality need, have a facility plan for treatment, and show a dedicated source of funding for repayment.

Federal Grants and Loans

Congestion Mitigation/Air Quality: Established under the ISTEA Section 1009. The purpose of the program is to fund transportation projects and programs that will contribute to attainment of National Ambient Air Quality Standards. Federal participation for most CM/AQ projects is 80 percent, which increased to 86.50 percent due to public lands adjustments. Federal participation can be 90 percent for some activities that are on the Interstate system. Pedestrian and bicycle activities are limited to 80 percent federal participation.

Department of Health Water Systems Support: Grants for upgrading existing water systems, ensuring effective management, and achieving maximum conservation of safe drinking water. Grants distributed by the State Department of Health through intergovernmental review and with a 60% local match.

Federal Aid Bridge Replacement Program: Funds available with a 20% local match for replacement of structurally deficient or obsolete bridges, including ferry landing bridges. Funds are distributed by the Washington State Department of Transportation on a statewide priority basis.

Federal Aid Emergency Relief: Revenue available for restoration of federal aid system roads and bridges that have been damaged by extraordinary natural disasters or catastrophic failures. Local agency declares an emergency and notifies the Division of Emergency Management of the Washington State Department of Transportation, upon approval entitlement funds available with a 16.87% local match.

Federal Aid Safety Program: Revenue available for improvements at specific locations which constitute a danger to vehicles or pedestrians as shown by frequency of accidents. Funds are distributed by the Washington State Department of Transportation on a statewide priority formula and with a 10% local match.

Transportation Efficiency Act of the 21st Century (TEA-21): Revenue available for construction and reconstruction improvements to arterial and collector roads that are planned for by the Puget Sound Regional Council and the Federal Highway Administration. Funds may also be used for

non-highway public mass transit projects. Funds are distributed by the Washington State Department of Transportation with a 16.87% match.

Surface Transportation Program: Funds may be used by the states and localities for any roads that are of a higher federal functional classification than local access or rural minor collectors. The formula for distribution of funds is based on each state's FY share of total national funding with appropriate adjustments for Interstate Maintenance and Bridge apportionments. Basic 80 percent/20 percent funds matching requirements adjusted due to federal lands to 86.5 percent federal and 13.5 percent local. Pedestrian and bicycle facilities remain unadjusted at 80 percent federal and 20 percent local.

Surface Transportation Program Enhancement Projects: Provision of Facilities for Bicycles and Pedestrians; Acquisition of Scenic Easements and Scenic or Historic Sites; Scenic or Historic Highway Programs; Landscaping and other Scenic Beautification; Historic Preservation; Rehabilitation and Operation of Historic Transportation Buildings, Structures or Facilities; Preservation of Abandoned Railway Corridors; Control and Removal of Outdoor Advertising; Archaeological Planning and Research; Mitigation of Water Pollution due to Highway Runoff.

Utility Rates

Utility Rates: Revenues for replacement and repair of existing capital improvements and for new capital improvements can be collected through utility rates. Portions of rates collected to pay for the future replacement of existing facilities that wear out over time are frequently referred to as "Depreciation Funds." The Town is having a Water Rate Study conducted in 2013-14.

Six-Year Capital Improvement Program

This section of the capital facilities element determines whether sufficient revenue will be available under the current budgeting assumptions to fund needed capital improvements. It provides an analysis of revenue sources available for capital improvements and balances these revenues against anticipated expenditures for capital improvements. Using this process, the Town can estimate annual revenue surpluses and shortfalls. Proposed funding sources for currently unfunded capital projects have also been provided.

The improvements schedules provided in the following pages set forth each capital project that the Town intends to construct over the next six years and presents estimates of the resources needed to finance the projects. The schedules will reflect the goals and policies of the capital facilities element and the other elements of the comprehensive plan. The first year of the schedules will be included within the annual capital budget, while the remaining five-year programs will provide long-term planning. Only the expenditures and appropriations in the annual budget are binding financial commitments. The projections for the remaining five years are not binding, and the capital projects recommended for future development may be altered or not developed due to changing circumstances. The Six-Year Capital Improvement Program is a rolling plan that will be revised and extended annually to reflect revenue projections, implementation of utility plans and changing circumstances. Improvement schedules are included for the following facilities:

- Water:
- Sanitary sewer
- Stormwater management
- Transportation
- Parks and recreation

Water

Water Rate Study Implementation: The Town received a grant to do a water rate study in 2013. The Study is to be completed and implemented in 2014.

Carbonado also received a special grant of \$525,000 from the Washington State Legislature to construct a new water reservoir. Current plans are to construct an 110,000 gallon reservoir. Per the 2001 Water System Plan, the Town's water supply has a capacity to serve 251 connections. Increased capacity will come from a combination of increased storage capacity and correcting excess use by the Town's Sewer Plant. The reservoir is currently under contract for design. It should be built in 2014 or 2015.

The water distribution system is suffering from deferred maintenance. A Phased replacement program of all water pipes and hydrants is planned that will cost about \$10 million dollars. This will be funded by grants and bonds.

The Town will implement a Water Source Protection Plan in 2014 for \$18,000.

The Town has sufficient revenue to complete the new reservoir and provide water capacity for the existing residential and non-residential uses. The Water rate study currently underway should answer whether the Town has sufficient revenue to expand capacity.

During the Planning Period the Town should secure and build another 100,000 gallon reservoir which should cost about \$2 million and will be paid for by grants and utility bonds.

Sanitary Sewer

The current sewer system is between 45 and 75 years old. The majority of the distribution lines are four to six inches in diameter. The Town is considering a ten year plan to replace 2800 to 5000 feet of the existing sewer lines or about 75% of the system for an estimated cost of \$10 million. The Town does not have the revenue in the existing reserves to undertake a major sewer pipe replacement program without securing additional grants.

In the mid-term future the Town should replace the sewage lagoon system with a secondary treatment plant at an estimated cost of \$3 million. This will be paid for by additional grants and some revenue reserves.

Stormwater Management

The Town does not have any formalized stormwater management system. Most of the collection system consists of Town street gutters. The Town should consider a future program of developing a stormwater management system. This can be done while other utilities and streets are being replaced. The Town has approximately \$4300 in stormwater revenues annually to fund this program.

Transportation

In 2013 the Town Council created the Carbonado Transportation Benefit District. Since that time all of the street maintenance and improvements have been in the purview of this District. The TBD is currently maintaining the existing streets. The multi-year plan is to improve the streets as they are opened for utilities. This program will be funded by a combination of TBD funds, bonds and grants.

The Foothill Trail will require hardened trails within the Town. This will be funded by a combination of grants and loans.

Parks and Recreation

The Town has no plans to increase the number of park and recreation facilities. Within the Planning Period the Town should develop a multi-year plan to maintain and improve the Park and Recreation facilities in Carbonado.

Six Year Capital Facilities Plan

Project	Cost	Funding
Water Reservoir	\$525,000	State Grant
Water Line replacement	\$10,000,000	Grants and utility bonds
Sewer Line replacement	\$10,000,000	Grants and utility bonds
Paving Town streets, improvements	\$5-10,000,000	Grants and TBD revenues
Watershed enhancement and Acquisition	\$3,000,000	Grants and utility bonds
Stormwater system	\$5,000,000	Grants and utility bonds

TOWN OF CARBONADO
ECONOMIC DEVELOPMENT ELEMENT

ECONOMIC DEVELOPMENT ELEMENT

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ECONOMIC DEVELOPMENT ELEMENT

Purpose

This Economic Development Element provides the policy basis for supporting economic development that would improve the tax base and create local jobs that are compatible with the character of the town.

Carbonado Community Profile

The Town of Carbonado was originally a company town for the coal mines. The Town's activities and population were focused on mining coal for use by the early railroads in Western Washington. The Town had a wash house that served as a primary mine entrance, the Company Store and houses owned by the mining company. When the mines closed, residents continued working on natural resources, with many of them employed in the timber industry. However, one resident continued mining until well into the 1990's.

As the town gentrified some newer residents moved into town looking for a more rural lifestyle and less expensive housing than was available in other areas. The scenery and serenity of this rural lifestyle is bringing more commuters from throughout Pierce and King Counties.

Until recently the Town leaders did not encourage any new economic activity. With the exception of the Historic Carbonado Tavern, no retail store or restaurant exists in Carbonado.

The Town is located in a picturesque area of Pierce County. It is surrounded on the south, west and north by forest covered foothills. To the east is a plateau extending to Mt. Rainier. Timber and other resource industries are the predominant industries in the immediate area.

Recently the town residents have begun to embrace the idea of more economic activity. They are seriously exploring ideas to create retail opportunities to serve the residents and the tourists who drive through Carbonado to Mt. Rainier National Park or the Off-Road Vehicle area nearby. The Town Council is also exploring changes that would allow some sort of specialized multiple housing, such as Assisted Living and similar facilities.

GMA Economic Development Goal RCW 36.70A.020

The GMA was amended in 2002 to require local comprehensive plans to contain economic development elements. The new language required:

“An economic development element establishing local goals, policies, objectives, and provisions for economic growth and vitality and a high quality of life. The element shall include:

- (a) A summary of the local economy such as population, employment, payroll,

sectors, businesses, sales, and other information as appropriate;

(b) a summary of the strengths and weaknesses of the local economy defined as the commercial and industrial sectors and supporting factors such as land use, transportation, utilities, education, work force, housing, and natural/cultural resources; and

(c) an identification of policies, programs, and projects to foster economic growth and development and to address future needs.”

Further, the GMA states:

“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.”

Puget Sound Regional Council Vision 2040 Multicounty Planning Policies

VISION 2040 recognizes that a robust economy is integral to our environmental, social, and financial well-being. It acknowledges that a healthy and diverse economy is vital for paying for public services, supporting arts and cultural institutions, and building our communities. The Multicounty Planning Policies for economic development in VISION 2040 are organized around the topics of *business, people, and places*. An emphasis is placed on enriching the region’s businesses and employment market through job retention, growth, and diversification. Importance is also placed on small and locally owned businesses, because they create jobs, can offer family-wage jobs, and make vital contributions to the sustainability of the region’s economy and prosperity. VISION 2040 recognizes the region’s economic well-being is also dependent upon the safe and reliable movement of people, goods and services, and information and includes provisions for prioritizing economic development and transportation funding to centers.

Pierce County Planning Policies

Countywide Planning Policy

Each City and Town in Pierce County is also guided by the Pierce County Countywide Planning Policies.

Policy EC-1.

The County, and each municipality in the County, will work to achieve a prospering and sustainable regional economy by supporting business and job creation, investing in all people,

sustaining environmental quality, and creating great central places, diverse communities, and high quality of life. This will involve assuring consistency between economic development policies and adopted comprehensive plans by:

1.1 considering the future development of commercial and industrial facilities [RCW 36.70A.210(3)(g)] and creating in the land use element of each comprehensive plan a designation of areas for "commerce" and "industry" [RCW 36.70A.070(1)];

1.2 providing within the areas designated for urban development, sufficient land to accommodate projected development;

1.3 designating and zoning large tracts of developable land equitably distributed throughout the various jurisdictions based on the related population, employment base and land areas of the jurisdiction for planned commercial and industrial centers, and local housing and employment targets;

1.4 designating and zoning large tracts of developable land equitably distributed throughout the various jurisdictions based on the related population, employment base and land areas of the jurisdiction for planned commercial and industrial centers, and local housing and employment targets;

1.4.1. "Equitably" means with consideration for the population and its characteristics, including the skills of the current population; the current employment base and its characteristics (i.e., type of businesses and industries, permanency of the existing employment base, past trends and current projections); the amount of land in the jurisdiction; the amount of vacant land in the jurisdiction appropriately zoned for economic development; the current unemployment rate; current commuting patterns; and other factors as appropriate.

1.5 providing adequate public facilities and services to employment centers and an adequate supply of housing with good access to employment centers.

1.6 separating, buffering, or leaving natural buffers between residential development and areas of economic development where necessary due to the type, characteristics and impacts of the economic development activity;

1.7 developing and adopting standards at the municipal level to guide commercial and industrial development in a setting that is appropriately landscaped;

1.8 evaluating federal, state, and local regulatory, taxing, facility financing and expenditure practices and then making changes to assure that these practices favor economic development at appropriate locations.

1.9 evaluating federal, state, and local regulatory, taxing, facility financing and expenditure practices and then making changes to assure that these practices favor economic development at appropriate locations.

1.10 leveraging the region's and county's position as an international gateway by supporting businesses, ports, and agencies involved in trade-related activities.

1.11 encouraging the private, public, and nonprofit sectors to incorporate environmental and social responsibility into their practices.

1.12 maximizing the use of existing designated manufacturing and industrial centers by focusing appropriate types and amounts of employment growth in these areas and by protecting them from incompatible adjacent uses.

Policy EC-2.

The County, and each municipality in the County, shall promote diverse economic opportunities for all citizens of the County, especially the unemployed, disadvantaged persons, minorities and small businesses. The following measures may be used in accomplishing this policy, where appropriate:

2.1 determining a reasonable "jobs/housing" balance and then coordinating land use and development policies to help achieve the designated balance of adequate affordable housing accessible to employment centers;

2.2 identifying urban land suitable for the accommodation of a wide range of nonresidential development activities;

2.3 utilizing state and/or federal programs and financial assistance to the maximum extent appropriate;

2.4 encouraging redevelopment of underutilized commercial areas;

2.5 encouraging flexibility in local zoning and land use controls in order to permit a variety of economic uses, but doing so without sacrificing sound design and development standards;

2.6 encouraging programs, in conjunction with other public, quasi-public and private entities, in order to attract appropriate businesses and industries, particularly those that diversify the economic base and/or provide family-wage jobs;

2.7 encouraging the location of economic development activities in areas served by public transit and adequate transportation facilities;

2.8 maintaining and enhancing natural resource-based industries, including productive timber, agriculture, fishing and mining;

2.9 targeting the appropriate creation and retention of specific firms and industries within established and emerging industry clusters that export goods and services, import capital, and have growth potential;

2.10 promoting educational, job training, and cultural opportunities, particularly for those facing unique obstacles and/or those with special needs;

2.11 providing opportunities and locations for incubator industries;

2.12 fostering a supportive environment for business startups, small businesses, and locally owned businesses to help them continue to prosper.

Policy EC-3

The County, and each municipality in the County, shall encourage economic development in areas in which there are insufficient employment opportunities for the local population base by:

3.1 considering development incentives;

3.2 marketing development opportunities.

Policy EC-4

The County, and each municipality in the County, shall take the following steps to ensure that economic growth remains within the capacities of the state's natural resources, public services and public facilities:

- 4.1 identifying existing and future demand for services;
- 4.2 encouraging the location of economic development within Urban Growth Areas;
- 4.3 limiting incompatible economic development activities in or adjacent to designated natural resource lands and critical areas and/or requiring adequate buffers between economic development projects and designated natural resource lands and critical areas, and ensuring that economic development activities occur in areas with adequate public facilities.

Policy EC-5

The County, and each municipality in the County, shall plan for sufficient economic growth and development to ensure an appropriate balance of land uses which will produce sound financial position given the fiscal/economic costs and benefits derived from different land uses by:

- 5.1 ensuring that the land use element of each Comprehensive Plan allows for an appropriate mix and balance of uses;
- 5.2 reducing inefficient, sprawling development patterns;
- 5.3 reducing transportation demand;
- 5.4 coordinating the provision of public facilities and services and/or insuring that new development supports the cost of public facility and service expansions made necessary by such development;
- 5.5 promoting development in areas with existing available public facility capacity;
- 5.6 encouraging joint public/private development as appropriate;
- 5.7 concentrating a significant amount of economic growth in designated centers;
- 5.8 ensuring the efficient flow of people, goods, services, and information in and through the region with infrastructure investments, particularly in and connecting designated centers [See the Centers policies in the Urban Growth Area sections].

Policy EC-6

The County, and each municipality in the County, shall work to strengthen existing businesses and industries and to add to the diversity of economic opportunity and employment by:

- 6.1 promoting infill development to assist in maintaining a viable market for existing businesses;
- 6.2 utilizing redevelopment or other public financing mechanisms, where appropriate, to maintain existing businesses;
- 6.3 making available information, technical assistance and loans for business expansion and job

creation;

6.4 protecting existing viable businesses from incompatible neighbors;

6.5 streamlining permit processing;

6.6 striving to maintain adequate public facilities and service levels;

6.7 evaluating regulatory and other constraints to business operations and devising an appropriate plan to minimize the effect of such constraints;

6.8 supporting the contributions of the region's and county's culturally and ethnically diverse communities in helping the region and the county continue to expand its international economy;

6.9 in rural areas promoting compatible occupations (such as, but not limited to, tourism, cottage and home-based businesses, and local services) that do not conflict with rural character and resource-based land uses, but provides needed employment in cities in the rural areas; and

6.10 in rural and natural resource areas supporting economic activity at a size and scale that is compatible with the long-term integrity and productivity of these lands.

Policy EC-7

The County, and each municipality in the County, shall provide both the private sector and the public sector with information necessary to support and promote economic development by:

7.1 coordinating the collection and dissemination of information with various local governments;

7.2 cooperating with private and quasi-private entities and sharing information to attract new industries.

Carbonado's Goals and Policies

Goal ED 1

Support economic growth through business retention, expansion, and formation consistent with the Comprehensive Plan vision and the other elements.

Policy ED 1.1 Prepare an Economic Development Plan that examines the Town's ability to attract and retain economic activity. (Completed May 2015.)

Policy ED 1.2 Prepare and maintain an assessment of Carbonado's business strengths, weaknesses, opportunities, and threats (SWOT). (Completed May 2015).

Policy ED 1.3 Coordinate Town investment in capital facilities projects with related business, employment, and economic development opportunities.

Goal ED2

Promote the creation of family-wage jobs that will serve the residents of Carbonado.

Policy ED 2.1 Work with employers and social service providers to coordinate employment and training opportunities for disadvantaged persons, including support for

transportation, dependent daycare, language, and access to housing.

Policy ED 2.2 Maintain an ongoing dialogue with the local school districts, regional community colleges and vocational training schools to promote programs and curricula that prepare residents for jobs and ensure that the work force will support businesses considering locating in Carbonado.

Goal ED3

Promote the installation of telecommunications technology throughout the Town in order to provide universal access to citizens, businesses, and institutions that is secure, reliable, and affordable.

Policy ED 3.1 Participate in seeking grant funding for improvement of infrastructure to support economic development.

Policy ED 3.2 Identify long-term infrastructure needs that support economic sustainability.

Goal ED4

Create public-private partnerships that will nurture entrepreneurship, innovation, and business growth.

Policy ED 4.1 Encourage economic sectors that:

- Pay higher-than-average wages;
- Bring new capital into the local economy;
- Can be sustained in the town;
- Maintain sound environmental practices; and
- Diversify the economic base.

Policy ED 4.2 Ensure that Town licensing and permitting practices and procedures are coherent, fair and expeditious. Where specialized industry requirements call for the inspection by government agencies, coordinate with those agencies to eliminate duplication of efforts.

Policy ED 4.3 Promote the development of a downtown to enhance the sense of community, encourage pedestrian/bicycle mobility, and reduce the number and length of motorized shopping trips by working with property and business owners to market Carbonado, provide parking solutions, create anchor projects with public gathering places, and support the development of mixed use retail, office and residential projects.

Goal ED5

Encourage diverse job options and entrepreneurial opportunities for people interested in full-time and part-time employment or desiring to own their own business.

- Policy ED 5.1 Home-based businesses that are compatible with the character of adjoining properties and neighborhoods will be accommodated.
- Policy ED 5.2 Cooperate with education providers and employer interests to ensure that availability of facilities and programs necessary to meet the needs of K-12, college, vocational and continuing education levels.

Goal ED6

Promote business practices that protect the Town’s natural beauty and environmental health.

- Policy ED 6.1 Encourage the use of “green” materials and techniques in all types of construction.
- Policy ED 6.2 Encourage public sector solid waste reduction and recycling.
- Policy ED 6.3 Encourage existing and new commercial enterprises to become part of a linked cooperative whereby the by-products and waste of one enterprise become the raw materials of another.

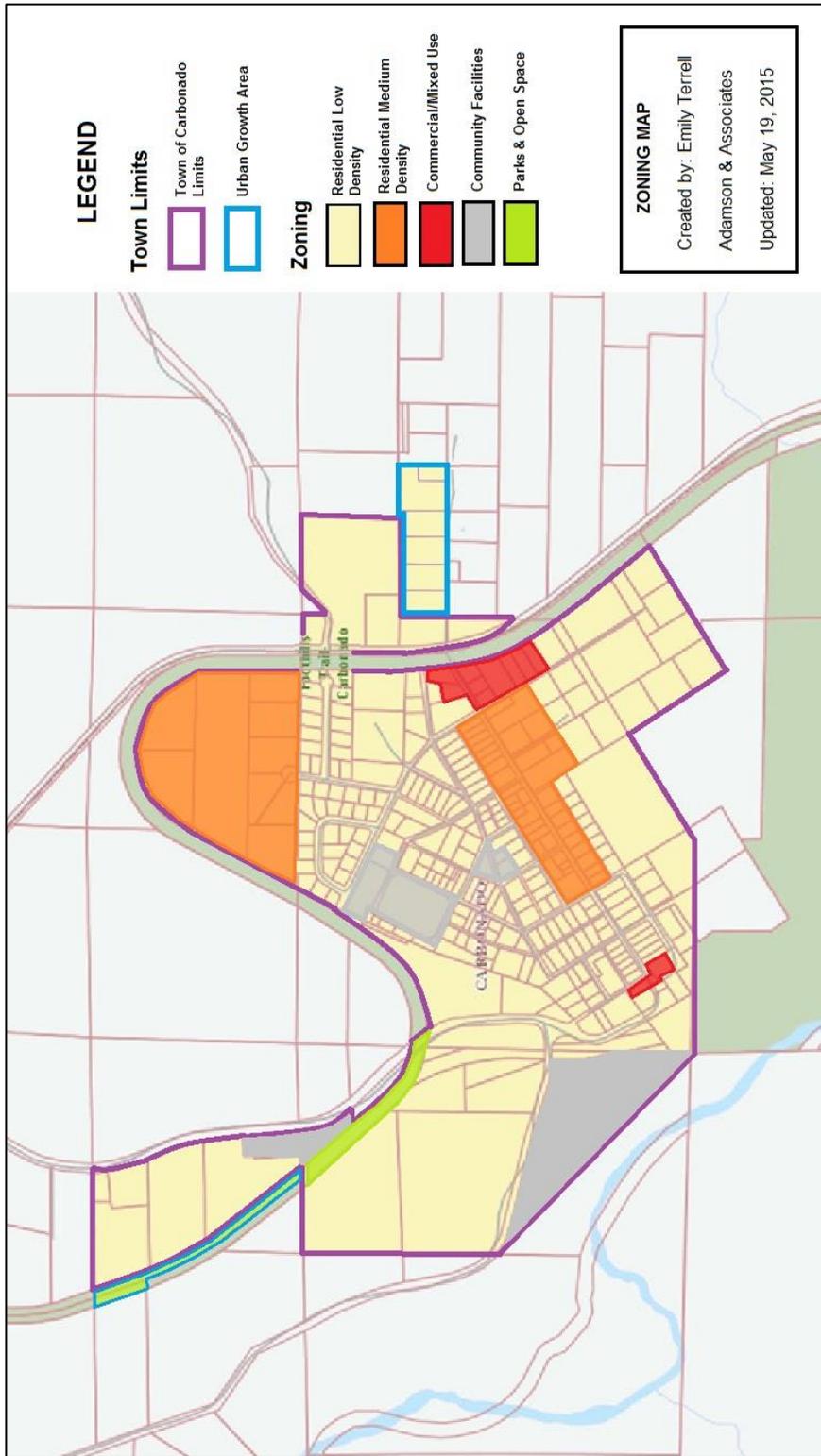
Goal ED7

Provide a variety of affordable housing choices so that people who work in Carbonado can live here.

- Policy ED 7.1 Continue to monitor the progress in implementing the Housing Element and evaluate new ways of providing affordable housing.

Appendix A

Future Land Use Map



Future Land Use Map