













20 Comprehensive Growth Management Plan 2015-2035

Contributors

Board of County Councilors

Marc Boldt, Chair Jeanne E. Stewart Julie Olson David Madore Tom Mielke

TOTT WIERC

Planning Commission Steve Morasch, Chair Ronald H. Barca Richard Bender John Blom Karl Johnson Eileen Quiring Bill Wright

Clark County

Mark McCauley, County Manager
Oliver Orjiako, Community Planning Director
Gordon Euler, Program Manager II
Gary Albrecht
Jose Alvarez
Colete Anderson
Matt Hermen
Jacqui Kamp
Laurie Lebowsky
Sharon Lumbantobing
Kathy Schroader
Sonja Wiser

Amended by Ordinance 2019-02-02

Amended by Ordinance 2018-01-01

Amended by Ordinance 2017-07-04

Members of the Public

To the many residents, neighborhood associations, advisory committees, business associations and consultants who participated in this planning effort. Thank You.



Department of Community Planning

1300 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810
[v] 360.397.2280 ext. 4558
[e] CommunityPlanning@clark.wa.gov



Table of Contents

Introduction	2
Clark County, Washington	2
Growth Management	4
Community Framework Plan	6
Countywide Planning Policies	6
Comprehensive plan organization and use	
Community Framework Plan	
The Community Vision	
Policies	
Chapter 1 Land Use Element	
Introduction	
Relation to other elements of the plan	·
Relation to other county planning policy documents	
Relation to city comprehensive plans	_
Land Use Conditions	
General History	25
Current general distribution of land uses and population	26
Residential Land Uses	
Commercial and Industrial Land Uses	
Parks	
Land Use Integration	
Urban Growth Areas	
Focused Public Investment Areas	
Sub-area Plans	
Communitywide Plans Interpretation of the 20-Year Plan Map	_
·	
20-Year plan designations and location criteria	-
Residential Lands	
Commercial (C) Mixed Use (MU)	
Industrial (I)	
Heavy Industrial (IH)	
Public Facility (PF)	35
Airport (A)	
Parks/Open Space (P/OS)	
Bonneville Power Administration (BPA)	
Rural Lands	
Rural Center (RC)	36
Rural Commercial (CR)	36
Rural Industrial (RI)	36
Rural Industrial Land Bank (RILB)	_
Resource Lands	
Agriculture Lands (AG)	37
Agriculture/Wildlife (AG/WL)	
Forest Tier I	37

Forest Tier II	
Overlays	37
Highway 99 Overlay	38
Mill Creek Overlay	38
Urban Holding Overlay	38
Urban Reserve Overlay	38
Surface Mining Overlay	_
Existing Historic Resort Overlay	_
Railroad Industrial Overlay	
Equestrian Overlay	
Airport Environs Overlay	
Rural Center Mixed Use Overlay	
Freight Rail Dependent Use Overlay	
Concurrency	
Goals and Policies	39
Washington State Goals and Mandates	39
Community Framework Plan	-
Buildable Lands Review and Evaluation Program	
Land Use Element policies	
1.1 Countywide Planning Policies	·
County 20-Year Planning Policies	44
apter 2 Housing Element	51
Introduction	51
Relationship to other elements and plans	51
Housing Element requirements	52
Organization of the element	52
Background and existing conditions	
Population	
Age	
Race and Ethnicity	
Households	
Income	
Percent of Income Spent on Housing	
Special Housing Needs	
Physically Challenged Persons	
Senior Citizens	
Homeless Persons	58
Projected Household Growth	59
Housing Resources	
County funding for affordable housing	60
Housing Tenure	
Housing Costs	
Rental Costs	
Subsidized Housing	
Market and institutional influences on housing production	
The housing needs continuum in Clark County	-
Summary and Conclusions	64

	Goals and Policies	72
	2.1 Countywide Planning Policies	73
	County 20-Year Planning Policies	. 73
Chapt	ter 3 Rural and Natural Resource Element	81
	Introduction	
	Growth Management Act	81
	Clark County's Rural Communities	
	Rural Population Growth	
	Rural Land Distribution	_
	Rural Commercial / Industrial Uses	_
	Rural Center	_
	Designation Criteria	85
	Resource Lands	85
	Forest lands	85
	Agricultural Lands	86
	Mineral Lands	•
	Critical/Sensitive Lands	-
	Parks and Open Space	-
	Master Planned Resorts	-
	Capital Facilities and Utilities	-
	Transportation	-
	Equestrian Element Community Framework Plan	-
	Goals and Policies	-
	3.0 Countywide Planning Policies	-
	County 20-Year Plan Policies	-
	ter 4 Environmental Element	-
•	Introduction	
	Relationship of the Environmental Element to other elements and plans	
	Environmental Conditions and Conservation Programs	
	Critical Areas	
	Fish and Wildlife Habitat	
	Fish and Wildlife Habitat Conservation Programs Endangered Species Act	
	Water Quality	-
	Wetlands	_
	Wetlands Conservation Program	
	Wetlands Mitigation Banking	-
	Aquifer Recharge Areas	
	Aquifer Protection Programs	
	Flood Hazard Areas	109
	Flood Protection Programs	109
	Geologically Hazardous Areas	109
	Geohazard Protection Programs	
	Other Hazard Mitigation Programs	
	Shorelines	
	Columbia River Gorge National Scenic Area	111

	Regional Conservation and Greenway Systems	111
	Air Resources	112
	Goals and Policies	114
	4.1 Countywide Planning Policies	115
	County 20-year Planning Policies	
Char	oter 5 Transportation	_
1	Introduction	_
	Purpose and Background	_
	1. Transportation Facilities	_
	Regional Transportation System Performance	
	Regional Travel Forecasting Model	
	Forecasting Future Travel Demand and Transportation Needs	-
	Regional Travel Forecasting Model Analysis	-
	2. Level-of-Service (LOS)	
	Future Deficiencies	143
	Transportation System Management	146
	Congestion Management Process	147
	Preservation and Maintenance	148
	Summer Road Preservation Program	
	Freight Issues	
	State Initiatives	
	Truck Routes	_
	Future Conditions	-
	Parking Transportation Security	
	3. Concurrency	-
	Concurrency Requirements	=
	Concurrency Management System	_
	4. Policies and Strategies	
	Community Framework Plan	
	Goals and Policies	_
		-
	5.0 Countywide Planning Policies	
	County 20-Year Plan Policies	
	5. Financial Analysis	
	Existing Revenue Sources	
	Projected Expenditures	
	Comparison of Need and Revenues	
Char	Strategies to Balance the CFP	
	oter 6tal Facilities and Utilities Element	
capi	Introduction	
	Goals and Policies	
		-
	6.0 Countywide Planning Policies	
a 1	County 20-Year Plan Policies	
Chap	pter 7 Parks, Recreation and Open Space Element	
	Introduction	200

	Clark County Parks Advisory Board	200
	2015 Clark County Parks, Recreation and Open Space Plan	200
	Greater Clark Parks Mission and Vision	202
	Past Planning Efforts	
	Existing park and open space facilities in Clark County	202
	Urban and Regional Natural Areas	205
	Trails	_
	Wildlife Habitat	
	Regional Special Facilities	
	Camp Bonneville	
	Regional Park Standards Other Agency Facilities	-
	Urban Parks, Recreation and Open Space	_
	Vancouver Urban Area Other Cities and Towns	,
	Regional Parks, Recreation and Open Space	-
	Regional Parks	
	Regional Conservation and Greenway Systems	
	Regional Trails	
	Goals and Policies	
	7.0 Countywide Planning Policies	211
	County 20-Year Planning Policies	211
Chap	oter 8 Historic, Archaeological and Cultural Preservation Element	
·	Introduction	
	Background and Existing Conditions	220
	History	220
	Historic and cultural resources	220
	Existing Programs and Policies to Recognize and Protect Historic, Archaeological a	ınd Cultural
	Resources	
	The State Historic Preservation Officer (SHPO) and Department of Archeology and	
	Preservation (DAHP) The Clark County Historic Preservation program and the Clark County Historic Pres	
	Commission	
	Goals and Policies	
	8.0 Countywide Planning Policy	
	County 20-Year Planning Policies	
Chan	oter 9: Economic Development Element	
Спар	Introduction	
	Defining economic development	
	The county's role	
	Guiding principles	•
	Use robust strategies	
	Focus on core competencies	
	Maintain a small, strong and simple economic development program	-
	Goals and Policies	230
	9.1 Countywide Planning Policies	230

	County 20-Year Planning Policies	231
Chap	ter 10 School Element	. 236
	Introduction	. 236
	School Capacity and Enrollment Growth	. 237
	School Siting	. 237
	School Funding	. 237
	Schools as Community Centers	.238
	Schools and Transportation	.238
	Schools and Housing	.239
	Schools and the Economy	.239
	Schools and Parks	.239
	Intergovernmental Coordination	.240
	Community Involvement and Public Participation	.240
	Existing Facilities	
	Public K-12 Facilities	.240
	Higher Education Facilities	
	Goals and Policies	-
	10.1 Countywide Planning Policies	241
	County 20-Year Planning Policies	. 242
Chap	ter 11 Community Design Element	.246
·	Introduction	
	Background	.246
	Goals and Policies	-
	11.0 Countywide Planning Policies	.248
	County 20-Year Planning Policies	
Chap	ter 12 Annexation Element	
	Introduction	
	Goals and Policies	
Chan	ter 13 Shoreline Master Program	
Спар	Introduction	-
	General Shoreline Goals	-
	Shorelines of Shorelines of Statewide Significance	-
	Archaeological, Historic and Cultural Resources	_
	Conservation	
	Economic Development	
	Flood Prevention and Flood Damage Minimization	
	Public Access and Recreation	
	Restoration	. 262
	Shoreline Modification and Stabilization	.263
	Shoreline Use and Development	.264
	Transportation, Utilities and Institutional Facilities	.265
	Views and Aesthetics	.266
	Water Quality and Quantity	
Chap	ter 14 Procedural Guidelines	
	Introduction	.268

	Plan Interpretation	268
	Amendments to 20-Year Plan	268
	Urban Growth Boundary Changes	268
	Frequency of UGA Review and Expansions	269
	Plan Policy or Text Change	269
	20-Year Plan Map Amendment	270
	Other Planning Documents	270
	Capital Facilities Plans	270
	Arterial Atlas	270
	County Road Improvement Plans	-
	Parks, Recreation and Open Space Plan	
	Emergency Amendments	
	Special Implementation Procedures	-
	Urban Holding	.271
	Battle Ground, Camas, La Center, Ridgefield, Washougal, Yacolt and Woodland Urban	
	Growth Areas	
	Vancouver Urban Growth Area	-
	Zone To Zone Consistency	272
	Governmental Coordination	272
	Plan Amendment, Public Notification and Public Hearing Processes	273
	Dispute Resolution	273
	Cooperative Agreements and Interjurisdictional Guidelines	273
	Land Use Planning Implementation Measures and Annexation	_
Glossa	ary	
Abbre	eviations and Acronyms	282
Append	dix	279



Introduction

Introduction

"Cherish your visions and your dreams as they are the children of your soul, the blueprints of your ultimate achievements." - Napoleon Hill

Clark County, Washington

Often referred to as the cradle of the Pacific Northwest, Clark County is rich in culture, history and peoples.

Chinookan Indian villages dotted the banks of the Columbia River when explorers Capt. Meriwether Lewis and 2nd Lt. William Clark's Corps of Discovery Expedition arrived in 1805. Twenty years later, the British-owned Hudson's Bay Company moved its headquarters from Astoria, Ore., to establish Fort Vancouver, one of the first non-native settlements in Washington.

In 1843, Clark County began as a district established by the Oregon Provisional Government and encompassed most of what is now the state of Washington. In December 1844, Congress adopted the most expansive American claim in the Oregon boundary dispute with Great Britain regarding the Parallel 54°40′ north. A year later, the provisional government changed "district" to "county," and in 1849, changed "Vancouver" to "Clarke" in honor of the explorer William Clark. Many years later, the Washington Legislature corrected the county's name to Clark. In 1849, the Hudson's Bay Company transferred its headquarters to Fort Victoria in British Columbia and abandoned Fort Vancouver. The same year, American troops established what is now known as the Vancouver Barracks, the largest military installation west of the Mississippi River.

When Congress passed the Donation Land Claim Act on September 27, 1850, a rush of settlers came in pursuit of a better future. By 1852, so many settlers came along the Oregon Trail that they became known as the Great Migration.

Today, approximately 450,000 residents live in eight municipalities surrounded by a rural landscape. The seven cities and one town are:

- 1. **Battle Ground:** Incorporated in 1951, it lies in the heart of the agricultural belt and is home to the county's oldest dairy.
- 2. **Camas:** Incorporated in 1906, it is on the northern bank of the Columbia River and charts its origin to a still-operating 1883 paper mill. Camas is the county's second largest city.
- 3. **La Center:** Incorporated in 1909, it sits on the east fork of the Lewis River and was known as a business and navigation center for river commerce.
- 4. **Ridgefield:** Incorporated in 1909, it is on the bank of the Columbia River and was an important trading center.
- 5. **Vancouver:** Incorporated in 1857, it is on the north bank of the Columbia River and flourished as a waterfront town. It is the fourth largest city in the state and the second largest city in the Portland metropolitan area.
- 6. **Washougal:** Incorporated in 1908, it is at the gateway to the Columbia River Gorge. It was a terminus for Columbia River riverboat traffic and home to Pendleton a woolen mill established in 1908.
- 7. **Woodland:** Incorporated in 1906, it flourished as a waterfront town at the confluence of the Columbia and Lewis rivers. Woodland straddles Cowlitz and Clark counties.

8. Town of **Yacolt:** Incorporated in 1908, it is situated north of the East Fork of the Lewis River and was a major logging hub connected to across county railroad.

On April 1, 2015, the state Office of Financial Management ranked Clark County the fifth largest county in the state. It is home to Washington State University Vancouver, Clark College and tech business clusters.

Geography and climate

Located in southwest Washington State, Clark County is approximately 70 miles from the Pacific Ocean. It is physically compact, measuring approximately 25 miles across in either direction encompassing 656 square miles. The Columbia River forms the western and southern boundaries of the county with over 40 miles of river frontage. The Columbia is the only fresh-water harbor for ocean-going commerce on the entire west coast of North America. While the Columbia River forms the county's southern and western boundaries, the Lewis River forms the northern perimeter and the Cascade Mountain range the eastern border.

Clark County lies within a geographic basin created by the Cascade and Pacific Coast mountain ranges. The climate in the county is influenced by this geography which produces mild wet winters and moderately dry summers. Annual rainfall averages 41.3 inches a year with about 70 percent of the annual precipitation between the months of November and March. The average high temperature in July is 79.9°F and the average low temperature in January is 33.7°F. The marine influence of the Pacific Ocean contributes much to the temperate climate.

Comprehensive planning

Clark County, as with any rapidly urbanizing area, is constantly adapting to meet the need of its residents. A brief summary of planning history is below:

- 1935 Clark County established the first county planning department and planning commission.
- 1961 Clark County adopts first *Comprehensive Plan* (1961 Plan) on April 27, 1961 with the corresponding map on October 2, 1961. In 1959, the state legislature approved a new statute (Chapter 36.70 Revised Code of Washington), which applied specifically to county, regional and joint planning programs. [Commissioner's Journal book 25929 and 16235 respectively]
- Clark County adopts second Comprehensive Plan (1979 Plan) on May 10, 1979. The plan included a map that identified appropriate levels of development on all lands in Clark County. In rural areas, the plan designated and conserved forest, agricultural and mining land while setting varying levels of housing densities for rural residential areas. The 1979 Plan also identified areas appropriate for urban intensity housing, commercial and industrial development. Urban growth areas were adopted around each city along with adopted policies which limited the types of services permitted outside of urban areas. These policies were intended to help protect the rural character of rural lands and focus urban development within urban areas. The plan also included chapters related to transportation planning (including adopting an arterial road plan as a part of the countywide plan map), identifying heritage areas and creating policies on improving community appearance. [ORD. 1979-05-461]
- 1980 Countywide zoning was applied that helped implement the newly adopted comprehensive plan. [ORD. 1980-06-80]
- 1990 The state legislature adopted the Growth Management Act (GMA) as Chapter 36.70A RCW.

- 1993 Community Framework Plan adopted on May 26, 1993. [ORD. 1993-05-41]
- 1994 Clark County 20-year Comprehensive Growth Management Plan 1994-2014 (1994 Plan) resulted in a total of 41,229 acres or 64.42 square miles of urban growth areas. [ORD. 1994-12-47 and 1994-12-53] The 1994 Plan was remanded by the Western Washington Growth Management Hearings Board for inconsistency between population projections and capital facilities planning. The 1994 Plan also faced 67 appellants. To comply with the hearings board findings and subsequent appeals the county revisited the 35,000 acre Agri-Forest designation and Rural Centers. [ORD. 1998-07-19] The remaining 3,500 acre review of non-resource designation was resolved in 2003. [ORD. 2003-09-12]
- 2004 Clark County 20-year Comprehensive Growth Management Plan 2004-2024 (2004 Plan) resulted in 6,124 acres or 9.57 square miles of urban growth areas added. There were 14 appellants that challenged the 2004 Plan. The Community Framework Plan was amended and incorporated into the 2004 Plan. [ORD. 2004-09-02]
- Revision of 2004 Plan (2007 Plan) added 12,023 acres to urban growth areas. Appeals challenged the 2007 Plan, arguing the county had erroneously moved 4,351 acres from agricultural designation to a non-resource designation and included those lands within urban growth areas. As a result of the appeals process, 1,500 acres of rezoned land was ruled invalid and those lands were removed from urban growth areas and again designated as agricultural lands. [ORD. 2007-09-13], [ORD. 2009-12-15], [ORD. 2014-07-03]
- 2016 Clark County 20-year Comprehensive Growth Management Plan 2015-2035 (2016 Plan) focusing on land for jobs. [ORD. 2016-06-12]

Growth Management

In 1990, the Washington State Legislature passed the Growth Management Act of 1990 (GMA). The GMA requires that counties and cities with state oversight plan and control where and how much growth occurs. The comprehensive plans developed by communities under this mandate will guide land use decisions in the future. Comprehensive plans must respond to the requirements of the GMA and all subsequent amendments.

The GMA established thirteen planning goals to guide the creation and adoption of comprehensive plans and development regulations in the counties and cities that are required to or choose to plan under the Act. The fourteenth goal was added in 2003. These goals provided the basis for the policies in the Community Framework Plan.

The GMA has been amended numerous times since its original adoption. A list summarizing the amendments made by the legislature and other related statutes are included in the Appendix. All applicable Revised Code of Washington (RCW) changes are included in the 2016 Plan.

Figure 1 | Growth Management Act Goals

- Urban Growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
- Reduce Sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
- Transportation. Encourage
 efficient, multi-modal
 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.
- **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 disadvantaged persons 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.
- Permits. Applications for both state and local permits should be processed in a timely and fair manner to ensure predictability.
- 8. Natural Resource
 Industries. Maintain and
 enhance natural resourcebased industries, including
 productive timber,
 agricultural and fisheries
 industries. Encourage the
 conservation of productive
 forest lands and
 productive agricultural
 lands and discourage
 incompatible uses.
- Open Space and Recreation. 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.

- 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 minimums.
- 13. Historic Preservation. Identify and encourage the preservation of lands, sites and structures that have historical or archaeological significance.
- 14. Shorelines of the State. The goals and policies of the shoreline management act as set forth in RCW 90.58.020 are added as the 14th goal.

Community Framework Plan

The Community Framework Plan was adopted in 1993; amended in 2000, 2001 and 2004. The extensive citizen participation process to develop the Community Framework Plan resulted in the expression of a wide variety of options regarding appropriate population densities, property rights, provision of public facilities and services and whether all urban development should occur within cities. This visioning document provides guidance to local jurisdictions on regional land use and service issues. The 2016 Plan is consistent with the concepts put forward in the Community Framework Plan.

Countywide Planning Policies

The GMA, under RCW 36.70A.210, requires counties and cities to collaboratively develop Countywide Planning Policies (CWPP) to govern the development of comprehensive plans. The Washington Administrative Code (WAC) 365-196-305 defines "the primary purpose of CWPP is to ensure consistency between comprehensive plans of counties and cities sharing a common border or related regional issues. Another purpose of the CWPP is to facilitate the transformation of local governance in the urban growth areas, typically through annexation to or incorporation of a city, so that urban governmental services are primarily provided by cities and rural and regional services are provided by counties." In response to this requirement, CWPP were adopted in 1994; amended in 2004, 2007 and 2016; and are provided in each relevant element.

Comprehensive plan organization and use

The 2016 Plan is designed to reflect the uniqueness of Clark County and seeks to preserve those qualities. The 2016 Plan has been written to recognize and reinforce the positive characteristics which make Clark County a special place. The 2016 Plan builds upon the efforts undertaken during the process of developing the Community Framework Plan, 1994 Plan, 2004 Plan and 2007 Plan.

The organization of the 2016 Plan is described in the following outline. It is presumed that city policies are consistent with the county's plan. The major components of the 2016 Plan are as follows:

Introduction

Community Framework Plan

Chapter 1: The **Land Use Element** describes the way in which the Plan will allocate land for different purposes and will permit or encourage development at differing densities.

Chapter 2: The **Housing Element** describes housing needs and the direction the county and its cities will take to influence the type, location and affordability of housing throughout the county. The issues addressed include fair share housing, infill, accessory units and special needs housing.

Chapter 3: The **Rural and Natural Resource Element** describes the designation and proposed level of development for rural and natural resource lands in the county.

Chapter 4: The **Environmental Element** describes specific environmental goals and requirements as the basis for development regulations and general goals for land use planning and parks acquisition. Additionally, the element describes critical areas including wetlands, water recharge areas and wildlife habitat that are to be protected throughout the county.

Chapter 5: The **Transportation Element** describes the way in which key transportation components, including roadways, transit, freight, aviation and bicycle and pedestrian movement have been planned and integrated into other elements of the 20-Year Plan to further

environmental, economic and other goals and policies. It highlights policies on various modes of transportation, identifies concurrency issues and includes capital facilities planning for transportation.

Chapter 6: The **Capital Facilities and Utilities Element** describes the investment in public infrastructure needed to support the land use, housing, transportation and economic development elements. Emphasis is on water, sewer and storm drainage, with fire protection, law enforcement, schools, libraries, government buildings and other facility needs also being discussed.

Chapter 7: The **Parks and Open Space Element** describes the direction and strategies to provide for parks and open space in the county. This element is linked to the land use plan and the proposed densities to guide the acquisition and development of parks. Plans for urban (active) parks, regional parks, open spaces and trails are discussed.

Chapter 8: The **Historic Preservation Element** describes directions and strategies to recognize and finance protection of historical and archaeological sites in the county.

Chapter 9: The **Economic Development Element** describes the policy direction and implementation strategies to provide for increased employment opportunities and higher family wages in the county. This element is linked to the land use and transportation elements as an integral part of the Plan.

Chapter 10: The **School Element** describes the policy direction and goals to provide full consideration to the importance of school facilities and encourage_the development of sustainable learning environments.

Chapter 11: The **Community Design Element** describes policies and strategies to provide for design standards and the framework for consistent development in the county. Like historical and critical areas, community design is an element that can assist the community in achieving its potential. This element is included in order to encourage better designed development in the future.

Chapter 12: The **Annexation Element** describes the intent of designating areas within the urban growth boundary and provides for the annexation of the county's urban areas to cities.

Chapter 13: The **Shoreline Element** contains Clark County's Shoreline Master Program Goals and Policies. These goals and policies are implemented by Chapter 40.460 of the Clark County Code. These goals and policies along with Chapter 40.460 and the Official Shoreline Map are adopted as the Clark County Shoreline Master Program.

Chapter 14: The **Procedures for Planning Element** describes how the plan is to be used and processes for amending and updating the plan.

Public participation

The GMA requires the county and cities to conduct outreach to ensure early and continuous public participation in developing and amending comprehensive plans and development regulations in RCW 36.70A.140. The GMA also requires that local programs clearly identify schedules and procedures for public participation in the periodic update process in RCW 36.70A.130 (2) (a). The county developed the Clark County Comprehensive Plan 2016 Update Public Participation Plan and Preliminary Scoping Schedule to satisfy these requirements [RES. 2014-01-10].

Integration with other plans

The 2016 Plan serves as an umbrella plan to ensure that the following plans are compatible and advance the goals described in the Community Framework Plan:

- Highway 99 Subarea Plan, December 16, 2008
- Agriculture Preservation Strategies Report, March 2009
- Mill Creek Subarea Plan, June 23, 2009
- Clark County Bicycle and Pedestrian Plan, December 2010
- Clark County Economic Development Plan Final Edition, September 2011
- Shoreline Master Program, November 2011; amended December 2014
- Coordinated Water System Plan, January 2012
- Aging Readiness Plan, February 12, 2012
- Growing Healthier Planning for a Healthier Clark County Report, June 5, 2012
- Clark County Conservation Areas Acquisition Plan, March 2014
- Clark County Community Development Block Grant Program and Home Investment Partnerships Program Consolidated Housing and Community Development Plan 2015-2019, July 2015
- Clark County Comprehensive Parks, Recreation and Open Space Plan, September 2015



Community Framework Plan

Community Framework Plan

The Community Vision

The Community Framework Plan encourages growth in urban growth areas and rural centers, with each area center separate and distinct from the others. These centers of development are of different sizes; they may contain different combinations of housing, shopping and employment areas. Each provides places to live and work. The centers are oriented and developed around neighborhoods to allow residents the ability to easily move through and to feel comfortable within areas that create a distinct sense of place and community.

In order to achieve this, development in each of the urban growth areas would have a higher average density than currently exists. In parts of the urbanizing area, densities will range from approximately 4, 6 and 8 units per net residential acre (3 to 6 gross units per acre) depending on the specific urban area, with more housing being single family on smaller lots (5,000 sf) and multi-family. No more than 75 percent of the new housing stock would be of a single product type (e.g. single-family detached residential or attached multi-family). This would not apply to the Yacolt urban growth area due to sewer wastewater management issues. A minimum of 25 percent of the new housing would be duplexes, townhouses, or apartments. This variety of housing types and sizes would provide more opportunities for builders to provide affordable and attainable housing for first-time home buyers, retirees and lower-income families.

Each urban growth area would have a mix of land uses with housing, businesses and services appropriate to its character and location. For example, the Vancouver Mall area would continue to be a retail center, downtown Vancouver will continue to be a center of finance and government, Brush Prairie and Hockinson as rural centers with community commercial areas and the Mount Vista area will be a center of research and education. Residential development appropriate to the needs of the workers and residents in these areas would be encouraged nearby. A primary goal of the plan is to provide housing in close proximity to jobs resulting in shorter vehicle trips and allows densities along public transit corridors that support high capacity transit, either bus or light rail.

Outside of urban growth areas, the land is predominantly rural with farms, forests, open space and large lot residences. Shopping or businesses would be in rural centers. Urban levels of public services would generally not be provided in rural areas. Rural residents are provided level-of-service appropriate to their areas. These areas are, by definition, more rural in nature and residents are more self-sufficient, often relying on private wells and septic systems. Most of northern Clark County would remain as it is today, in resource based industries or rural use protecting, conserving and enhancing critical stream and riparian habitat essential to supporting and recovering salmonid populations throughout the county. To implement the Community Framework Plan, the county, towns and cities are amending certain land use and development policies in their 20-year comprehensive plans. The framework policies to guide future detailed policies are discussed in the next section.

Policies

In order to achieve the vision of Clark County as a collection of distinct communities surrounded by open space, agriculture and forest uses, Clark County and each of the cities will adopt certain types of policies. The general framework policies are outlined below by element of the Comprehensive

Growth Management Plan (20-Year Plan). The process-oriented countywide planning policies which were adopted by the county in August 1992 and amended in 2000, 2004, 2007 and 2016 are found in each applicable plan element. The framework policies guide implementation of the vision of Clark County's future preferred by many of its residents. The policies provide a framework within which the county can bridge the gap between the general land use concepts presented in the Community Framework Plan and the detailed (parcel level) 20-Year Plan required by the State Growth Management Act. Supplemental to the Community Framework Plan, the county and each jurisdiction, can develop more specific policies for the their required 20-year time frame, in order to ensure that the resulting plans will work to achieve the overall vision of the future for Clark County.

1.0 Land Use

The Land Use Element for 20-year comprehensive plans determine the general distribution and 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 uses. The Land Use Element includes population densities, building intensities and estimates of future population growth. The land use-related issues such as protection of groundwater resources, stormwater run-off, flooding and drainage problems are discussed in detail in the Environmental Element, Chapter 4 of this document. The following framework policies are to guide the efforts of the county and cities in designating land uses, densities and intensities to achieve the pattern described above in their respective Comprehensive Growth Management Plans.

- 1.1.0 Establish a hierarchy of urban growth areas activity centers and rural centers. Hierarchy of Urban Growth Areas and Rural Centers: All planning should be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other.
- 1.1.1 Urban Growth Area Centers (UGA) have a full range of urban level-of-services and can be divided into three main categories in the following density tiers:
 - Vancouver Urban Growth Area is now or will be a major urban area activity centers with a full range of residential, commercial and industrial uses, high-capacity transit (HCT) corridors, schools, major cultural and public facilities. Major urban areas centers, have or will have, urban densities of development of at least 8 units per net residential acre (6 gross units per acre) as an overall average. Areas along high capacity transit corridors and priority public transit corridors may have higher than average densities while other areas would have lower densities (e.g. established neighborhoods and neighborhoods on the fringes of the urban area). Regional institutions and services (government, museums, etc.) should be located in the urban core.
 - Urban Growth Areas of Battle Ground, Camas, Ridgefield and Washougal will have a full range of residential, commercial and industrial uses, schools, neighborhood, community and regional parks, within walking distance to HCT corridors or public transit. These areas will have employment opportunities and lower densities than a major urban area centers, averaging at least 6 units per net residential acre. (4.5 gross units per acre). Higher densities occur along transit

- corridors and in the community center, with lower densities in established neighborhoods and on the outskirts of the community. These urban growth areas centers should have a center focus that combines commercial, civic, cultural and recreational uses.
- La Center Urban Growth Area is located in a growing area with at least 4 housing units per net residential acre (3 gross units per acre) and includes pedestrian-oriented commercial uses, schools and small parks.
- There are no standards for the Yacolt urban growth area due to lack of public sewer. A mix of residential uses and densities are or will be permitted. Neighborhoods are to have a focus around parks, schools, or common areas.
- 1.1.2 Rural Centers are outside of urban growth area centers and urban reserve areas and provide public facilities (e.g., fire stations, post offices, schools) and commercial facilities to support rural lifestyles. Rural centers have residential densities consistent with the surrounding rural minimum lot sizes and do not have a full range of urban levels-of-services.

1.2 Urban Areas

- 1.2.0 Establish consistent regional criteria to determine the size of urban growth areas for the 20-year comprehensive plans that:
 - Assume the need for a residential market factor lands added to the amount called for in the population forecast to build in flexibility;
 - include a household size of 2.59 people per household;
 - conserve designated agriculture, forest or mineral resource lands;
 - ensure an adequate supply of buildable land;
 - have the anticipated financial capability to provide infrastructure/services needed for the 20-year growth management population projections; and,
 - balance industrial, commercial and residential lands.
- 1.2.1 Establish consistent regional criteria for urban growth area boundaries for the 20year comprehensive plans that consider the following:
 - geographic, topographic and man-made features; (such as drainages, steep slopes, riparian corridors, wetland areas, etc.);
 - public facility and service availability, limits and extensions;
 - jurisdictional and special district boundaries;
 - location of designated natural resource lands and critical areas; and,
 - minimize split designations of parcels.

1.3 Urban Reserves

- 1.3.0 Establish criteria for new fully contained communities to ensure that the appropriate public facilities and services are available. Large scale residential only developments are not considered as fully contained communities.
- 1.3.1 The county and jurisdictions within the county are to define urban reserve areas (land reserved for future development after 20 years), where appropriate, to allow an orderly conversion of land adjacent to designated urban growth areas to urban densities, as demonstrated by the need to expand the developable land supply or by regional industrial or public facility needs.

- 1.3.2 The county, cities and towns are to work cooperatively, to develop policies governing transition of urban reserve areas between the urban growth area set by the 20-Year Comprehensive Growth Management Plans and the urban areas conceptualized by the longer-term Community Framework Plan. Such policies are to:
 - encourage urban growth in cities and towns first, then in their urban growth areas and finally in the urban reserve area;
 - ensure that any development permitted is consistent with the level of urbanization of the adjacent areas;
 - identify major capital facilities and utilities, provide locational and timing criteria for development of these facilities and utilities; and,
 - include a mechanism to ensure that major capital facilities and utilities are constructed when needed.
- 1.3.3 Develop criteria for uses within urban reserve areas to allow a reasonable use without preempting future transition to urban growth. Techniques that enable the urban reserve to be maintained include but are not limited to:
 - conservation easements;
 - tax assessments;
 - pre-planning of lots and the clustering of units; and,
 - other innovative techniques.

2.0 Housing

The Housing Element is to recognize the vitality and character of established residential neighborhoods and identify sufficient land for housing to accommodate a range of housing types and prices. The goal is to make adequate provision for existing and projected housing needs of all economic segments of the community. These policies are intended to coordinate the housing policies of Clark County and its jurisdictions to ensure that all existing and future residents are housed in safe and sanitary housing appropriate to their needs and within their means.

- 2.1.0 Communities, urban and rural, should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries and to ensure an adequate supply of affordable and attainable housing. Housing options available in the county include single family neighborhoods and mixed use neighborhoods (e.g., housing above commercial storefronts, traditional grid single family neighborhoods, townhouses, multi-family developments, accessory units, boarding homes, cooperative housing and congregate housing).
- 2.1.1 Establish density targets with jurisdictions in the county for different types of communities, consistent with the definitions of Urban Growth Areas and Rural Centers.
- 2.1.2 Provide housing opportunities close to places of employment.
- 2.1.3 Establish maximum as well as minimum lot sizes and densities in urban areas.
- 2.1.4 All cities, towns and the county share the responsibility for achieving a rational and equitable distribution of affordable housing.

- 2.1.5 Coordinate with C-TRAN to identify and adopt appropriate densities for priority transit corridors. Ensure that the development standards for these areas are transit and pedestrian friendly. Transportation and housing strategies are to be coordinated to assure reasonable access to a variety of transportation systems and to encourage housing opportunities in locations that support development of cost effective and convenient public transportation for all segments of the population.
- 2.1.6 Encourage infill development that enhances the existing community character and provide a mix of housing types in all urban and rural centers. All cities and towns are to encourage infill housing as the first priority for meeting the housing needs of the community.
- 2.1.7 Encourage creative approaches to housing design to:
 - accommodate higher densities attractively;
 - increase housing affordability;
 - ensure that infill development fits with the character of the existing neighborhood; and,
 - develop demonstration projects to assist the private sector to achieve infill goals.
- 2.1.8 Housing strategies are to be coordinated with availability of public facilities and services, including human services.
- 2.1.9 All cities, towns and the county are to provide for a variety of housing types and designs to meet the needs of people with special needs (for example those with physical, emotional, or mental disabilities), recognizing that not all housing will become accessible to special needs populations.
- 2.1.10 Establish a mechanism for identifying and mitigating adverse impacts on housing production and housing cost which result from adoption of new development regulations or fees.
- 2.1.11 Encourage and permit development of inter-generational housing, assisted living options and accessory units in order to allow people with special needs and senior citizens to live independently as possible and to reduce the need for (and cost of) social services.
- 2.1.12 All cities, towns and the county are to provide increased flexibility in the use of new and existing housing development to increase the potential for re-use, preservation of existing affordable housing, shared living quarters, use of accessory structures as housing, etc.
- 2.1.13 Housing strategies are to be coordinated with the financial community and are to be consistent with public and private financing mechanisms.

3.0 Rural and Natural Resource Element

The policies below are to ensure the conservation of agricultural, forest and mineral resource lands and protect these lands from interference by adjacent uses which affect the continued use, in the accustomed manner, of these lands for production of food, agricultural products, or timber, or the extraction of minerals.

3.1 Framework Plan Policies

- 3.1.0 The county and its jurisdictions at a minimum are to consider agricultural land based on Washington Administrative Code (WAC) 365-190-050.
- 3.1.1 The county and its jurisdictions at a minimum are to consider forest land based on WAC 365-190-060.
- 3.1.2 The county and its jurisdictions at a minimum are to consider mineral resource lands based on WAC 365-190-070.
- 3.1.3 Identify agricultural land on parcels currently used or designated for agricultural use and provide these parcels special protection.
- 3.1.4 Identify forest land on parcels currently used or designated for forest use and provide these parcels special protection.
- 3.1.5 Encourage the conservation of large parcels which have prime agricultural soils for agricultural use and provide these parcels special protection.
- 3.1.6 Establish standards for compatible land uses on land designated for agriculture, forest and mineral resource uses.
- 3.1.7 Develop a range of programs (such as purchase of development rights, easements, preferential tax programs, etc.) to provide property owners incentives to maintain their land in natural resource uses.
- 3.1.8 Mineral, forestry and agricultural operations are to implement best management practices to minimize impacts on adjacent property.
- 3.1.9 Public facility and/or utility availability are not to be used as justification to convert agriculture or forest land.

The policies below govern the use of rural lands which are not reserved for agriculture, forest, or mineral resources, nor are they designated for urban development. Land uses, densities and intensities of rural development are to be compatible with both adjacent urban areas and designated natural resource lands.

- 3.2.0 Rural areas should meet at least one of the following criteria:
 - opportunities exist for small scale farming and forestry which do not qualify for resource land designation;
 - the area serves as buffer between designated resource land or sensitive areas;
 - environmental constraints make the area unsuitable for intensive development;
 - the area cannot be served by a full range of urban level-of-service; or,
 - the area is characterized by outstanding scenic, historic or aesthetic values which can be protected by a rural designation.
- 3.2.1 Recreational uses in rural areas should preserve open space and be environmentally sensitive.

- 3.2.2 Commercial development of appropriate scale for rural areas is encouraged within rural centers.
- 3.2.3 Establish large lot minimums for residential development appropriate to maintain the character of the rural area.
- 3.2.5 New master planned resorts are to meet the following criteria:
 - provide self-contained sanitary sewer systems approved by the Clark County Department of Health;
 - be served by public water systems with urban levels of fire flow;
 - preserve and enhance unique scenic or cultural values;
 - focus primarily on short-term visitor accommodations rather than for-sale vacation homes;
 - provide a full range of recreational amenities;
 - locate outside urban areas, but avoid adversely impacting designated resource lands;
 - preserve and enhance sensitive lands (critical habitat, wetlands, critical areas, etc.);
 - housing for employees only may be provided on or near the resort; and,
 - comply with all applicable development standards for master planned resorts, including mitigation of on and off-site impacts on public services, utilities and facilities.
- 3.2.6 Encourage the clustering of new development within a destination resort or a designated rural center (village or hamlet). All new development should be of a scale consistent with the existing rural character.
- 3.2.7 Revise existing development standards and housing programs to permit and encourage development of affordable housing for people who work in resource-based industries in rural centers.

4.0 Environmental Critical Areas

All of the jurisdictions in Clark County have adopted interim measures to protect identified critical areas within their boundaries. These measures must be reviewed and, if necessary, revised to implement the Comprehensive Growth Management Plan. The following policies are to ensure a coordinated approach to preservation of identified sensitive lands. The goal is to preserve significant critical areas as a part of a system of such areas, not as isolated reserves, wherever possible.

- 4.1.0 New developments are to protect and enhance sensitive areas and respect natural constraints.
- 4.1.1 Protect and improve the county's environmental quality while minimizing public and private costs.
- 4.1.2 In the long-term, all jurisdictions should work towards compatible classification systems for wetlands.

- 4.1.3 Vulnerable aquifer recharge areas are to be regulated to protect the quality and quantity of groundwater in the county.
- 4.1.4 Establish development standards for uses, other than natural resource uses, on sensitive lands (e.g., 100-year flood plains, unstable soils, high-value wetlands, etc.).
- 4.1.5 Wetlands and watersheds are to be managed to protect surface and groundwater quality and meet salmon recovery objectives.
- 4.1.6 The county and jurisdictions are to work cooperatively with the Washington State Department of Fish and Wildlife to develop programs and areas that promote the preservation of habitats.

5.0 Transportation

The Transportation Element is to implement and be consistent with the Land Use Element. The Community Framework Plan envisions a shift in emphasis of transportation systems from private vehicles to public transit (including high-capacity transit,) and non-polluting alternatives such as walking and bicycling. The following policies are to coordinate the land use planning, transportation system design and funding to achieve this vision.

- 5.1.0 The regional land use planning structure is to be integrated within a larger public transportation network (e.g., transit corridors, commercial nodes, etc.).
- 5.1.1 Encourage transportation systems that provide a variety of options (high capacity transit, high-occupancy vehicles, buses, autos, bicycles or walking) within and between and rural centers.
- 5.1.2 Streets, pedestrian paths and bike paths are to be a part of a system of fully connected and scenic routes to all destinations. Establish design standards for development to promote these options and work cooperatively with C-TRAN to ensure that programs for improvements in transit service and facilities as well as roadway and pedestrian facilities are coordinated with these standards.
- 5.1.3 To reduce vehicle trips, encourage mixed land use and locate as many other activities as possible to be located within easy walking and bicycling distances from public transit stops.
- 5.1.4 Encourage use of alternative types of transportation, particularly those that reduce mobile emissions (bicycle, walking, carpools and public transit).
- 5.1.5 Establish residential, commercial and industrial development standards including road and parking standards, to support the use of alternative transportation modes.
- 5.1.6 Establish connections between Urban and Rural Centers through a variety of transportation options.
- 5.1.7 Establish regional level-of-service (LOS) standards for arterials and public transportation that ensure preservation of the region's (rural and urban) mobility while balancing the financial, social and environmental impacts.

- 5.1.8 Encourage a balanced transportation system and can be maintained at acceptable level-of-service.
- 5.1.9 Establish major inter-modal transportation corridors that preserve mobility for interstate commerce and freight movement (Promote inter-modal connections to port, rail, truck, bus and air transportation facilities. Preserve and improve linkages between the Port of Vancouver and other regional transportation systems).
- 5.1.10 Coordinate with C-TRAN, WSDOT and SWRTC to allow park-and-ride facilities along regional transportation corridors.
- 5.1.11 Encourage the development of smaller, community scale-park and ride facilities in rural centers as the gateways to public transportation in non-urban areas.

6.0 Capital Facilities and utilities

The Capital Facilities and Utilities Element will identify the need for capital facilities (such as libraries, schools, police facilities and jails, fire facilities, etc.) to accommodate expected growth and establish policies to ensure that these facilities are available when the development is occupied and to provide for the extension of public utilities to new development in a timely manner. The following policies are to coordinate and be consistent with the work of the cities and towns and special districts.

6.1 Framework Plan Policies

- 6.1.0 Major public and private expenditures on facilities and services (including libraries, schools, fire stations, police, parks and recreation) are to be encouraged first in urban and rural centers.
- 6.1.1 Establish level-of-service standards for capital facilities in urban and rural areas.
- 6.1.2 Coordinate with service providers to identify the land and facility requirements of each and ensure that sufficient land is provided in urban and rural areas to accommodate these uses.
- 6.1.3 Establish standards for location of public facilities and services in urban growth areas, urban reserve areas and rural areas.

- 6.2.0 Public sanitary sewer service will be permitted only within urban areas, except to serve areas where imminent health hazards exist.
- 6.2.1 Public sanitary sewer service should be extended throughout urban areas. It is recommended that cities and towns and other sanitary sewer service purveyors adopt policies that specify the circumstances under which residents located within urban growth areas but outside of incorporated areas would be required to connect to a sanitary sewer system once it becomes available.
- 6.2.2 Adequate public water service should be extended throughout urban areas. (An "adequate" public water system is one that meets Washington State requirements and provides minimum fire flow as required by the Fire Marshal. Various levels of public water service are considered adequate, depending upon the specific land uses and densities of development being served.)

- 6.2.3 When it is appropriate to provide public water service in rural areas, the level-of-service may be lower than that which is provided in urban areas. However, public water service in rural areas must meet the minimum requirements for an adequate public water system, given the specific land uses and densities being served.
- 6.2.4 Construction of new private wells in urban areas should be discouraged. New private wells will be considered only on an interim basis, until adequate public water service becomes available to an area.
- 6.2.5 Construction of new subsurface sewage disposal systems within urban areas should be discouraged. It is recommended that cities and towns and the county adopt policies that specify the circumstances under which the construction of new subsurface sewage disposal systems would be permitted, if they are permitted under any circumstance within urban areas. If new subsurface disposal systems are permitted, it is suggested that these systems be considered only as an interim measure, until public sanitary sewer system becomes available.
- 6.2.6 Support Clark County Public Health's efforts to establish a mandatory subsurface sewage disposal system inspection and maintenance program for pre-existing and new systems located in areas that need special protection from an environmental health perspective, as determined by Clark County Public Health.
- 6.2.7 Ensure compliance with Washington State requirements which call for a proposed development to provide proof that there exists a source of public or private domestic water which produces sufficient quantity and quality of water to meet minimum requirements before a development permit may be issued.
- 6.2.8 New wells may be constructed in rural areas, but only to serve developments on rural lots that are without practical access to existing public water systems. Existing public water purveyors should be given an opportunity to serve a new development. The first opportunity to serve a development should be given to the utility provider designated to serve the area in which the development is proposed. If the designated utility cannot serve the development, an adjacent utility should be given the opportunity to serve the development. If an existing utility cannot serve the development, construction of a new private or public well may be permitted. This procedure is set forth in the Clark County Coordinated Water System Plan Update, which was adopted by Clark County and the Washington State Department of Health in 1991.
- 6.2.9 The availability of public sanitary sewer and water services with capacities beyond those which are minimally required to meet the needs of an area will not presume or justify approval of a development that is inconsistent with the Community Framework Plan.
- 6.2.10 The Clark County Coordinated Water System Plan is designed to be responsive to the county's Comprehensive Plan and other local comprehensive plans and land use regulations intended to implement the 20-Year Comprehensive Plan. Public water system plans must be consistent with the Coordinated Water System Plan and the Comprehensive Plan, as provided under WAC 248-56.

7.0 Parks, Recreation and Open Space

Although this element is not required by the Growth Management Act, Clark County and several cities and towns intend to include a Parks, Recreation and Open Space Element in their plans because provision of these facilities is essential to the livability of the urban area. The policies listed below are to coordinate the planning for parks facilities, recreation programs and open spaces to ensure that they are appropriately sited given expected growth patterns.

7.1 Framework Plan Policies

- 7.1.0 Provide land for parks and open space in each urban growth area and rural centers consistent with adopted level-of-service standards. Wherever possible, the natural terrain, drainage and vegetation of the community should be preserved with high quality examples contained within parks or greenbelts.
- 7.1.1 Use environmentally sensitive areas (critical areas) for open space and where possible, use these areas to establish a well-defined edge separating urban areas from rural areas.
- 7.1.2 Regions should be bounded by and provide a continuous system of open space/wildlife corridors to be determined by natural conditions. Where appropriate connect open spaces to provide corridors, consistent with the Metropolitan Greenspace Program.
- 7.1.3 Coordinate with jurisdictions to establish consistent definitions of park types and level-of-service standards for parks within urban areas.
- 7.1.4 Coordinate the planning and development of parks and recreation facilities with jurisdictions within the urban areas.
- 7.1.5 Establish a countywide system of trails and bicycle paths both within and between jurisdictions for recreational and commuter trips. Coordinate this trail system with those of adjacent counties and Oregon jurisdictions.

8.0 Historic Preservation

Clark County has a long and varied history, with many structures and sites remain which were a part of that history. These structures and sites define the unique character of the county and its communities. The historical record of our community should detail its abundant natural resources and wildlife. The following policies are to ensure a coordinated approach to their preservation.

- 8.1.0 The county, cities and towns are to identify federal, state and local historic and archaeological lands, sites or structures of significance within their jurisdictions.
- 8.1.1 Encourage owners of historic sites or structures to preserve and maintain them in good condition, consistent with their historic character.
- 8.1.2 Develop financial and other incentive programs for owners of historic properties to maintain their properties and make them available periodically for public education.

- 8.1.3 Establish countywide programs to identify archaeological and historic resources, protect them and educate the public about the history of the region.
- 8.1.4 Establish criteria for the identification of archaeological and historical resources and establish a process for resolving conflicts between preservation of these resources and development activities.

9.0 Economic Development

Although an Economic Development Element is not required in the Comprehensive Growth Management Plan, Clark County will include this element in order to ensure that there is a balance of economic and population growth in the county and that the type of economic development which occurs contributes to maintaining and improving the overall quality of life in the county.

9.1 Framework Plan Policies

- 9.1.0 Encourage a balance of job and housing opportunities in each urban center. Provide sufficient land for business as well as homes. Businesses within the community should provide a range of job types for the community's residents.
- 9.1.1 Encourage industrial uses in major urban centers, small towns and community centers.
- 9.1.2 Revise commercial and industrial development standards to allow for mixed use developments and ensure compatibility with nearby residential and public land uses.
- 9.1.3 Encourage businesses which pay a family wage to locate in Clark County.
- 9.1.4 Encourage appropriate commercial development in neighborhoods and rural centers that support the surrounding community.
- 9.1.5 Develop transit-friendly design standards for commercial and industrial areas. Encourage businesses to take responsibility for travel demand management for their employees.
- 9.1.6 Establish incentives for the long-term holding of prime industrial land. Encourage local jurisdictions and special districts to hold prime industrial land for future development.

10.0 Community Design

Implementation of the Community Framework Plan will require attention to the details of design if it is to succeed in encouraging a sense of community and getting people to use alternative means of transportation. The following policies are intended to focus the design policies of each jurisdiction on certain key issues which must be coordinated in order to be effective.

- 10.1.0 Develop high quality design and site planning standards for publicly funded projects (e.g., civic buildings, parks, etc.).
- 10.1.1 Encourage the establishment of open space between or around urban centers. These areas could be public greenways, resource lands, wildlife habitats, etc.

- 10.1.2 Encourage urban and rural centers to provide an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
- 10.1.3 Establish development standards to encourage mixed use developments in urban and rural centers, while providing buffering for each use from the adverse effects of the other.
- 10.1.4 Establish development standards for higher densities and intensities of development along priority and high capacity transit corridors that encourage pedestrian, bicycle and public transit usage.
- 10.1.5 Encourage street, pedestrian path and bike path standards that contribute to a system of fully-connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use and be defined by buildings, trees and lighting and discouraging high speed traffic.
- 10.1.6 Establish standards that use materials and methods of construction specific to the region, exhibiting continuity of history and culture and compatibility with the climate, to encourage the development of local character and community identity.
- 10.1.7 Establish new development standards and retrofit existing developments to minimize environmental conflicts and support salmon recovery.

11.0 Annexation and Incorporation

The goal of the Growth Management Act is that urban development generally occurs within cities or areas that will eventually be cities -- either through annexation or incorporation. Currently in Clark County, large unincorporated areas are developed at urban densities, primarily in the Vancouver Urban Growth Area. The transition of these areas to cities is a process that will require the cooperation of staff and elected officials from the county, cities and towns and special districts.



Chapter I

Land Use Element

Chapter 1 Land Use Element

Introduction

The Land Use Element of the Clark County Comprehensive Growth Management Plan 2015-2035 (20-Year Plan) provides policy guidance for the uses of land throughout Clark County, which range from residential, commercial and industrial structures to farm and forestry activities to parks, open spaces and undeveloped environmentally sensitive areas. It contains policies to provide guidance as to how and where these uses should be located and what type of overall land use pattern should evolve as Clark County develops over the next 20 years.

In addition to the written descriptions of existing conditions and the policies, the land use element is closely associated with the 20-Year comprehensive plan map. The map delineates the unincorporated area in various categories, or plan designations, which appear on the map as different colors. Specific policies are applied to specific map designations, providing policy direction for the development of those areas.

This element includes a review of existing conditions and analyses of how Clark County will meet future needs related to land uses. One critical concern that it addresses is whether the map and policies designate adequate amounts of land to meet the residential, commercial, industrial, environmental and other needs of Clark County through the next 20 years. A second equally important concern is the integration of land uses. The various types of uses should be located and developed in an integrated, cohesive manner which minimizes transportation and other public and private service needs and costs and fosters greater accessibility, livability and community in Clark County.

The Growth Management Act of 1990 (GMA) clearly emphasizes the reduction of urban sprawl. The Land Use Element promotes more compact development patterns which allow for more efficient delivery of services and promotes a better balance of jobs and housing to minimize the distance people need to travel between home, workplace and shopping.

The Land Use Element contains provisions for a clear distinction between urban and rural areas through the designation of urban growth boundaries, as required by the GMA. Within urban areas, urban style and density development should occur. Within the rural area, rural style and density development are planned.

Within the urban areas, a range of urban densities and development opportunities are envisioned. Although single family housing will continue to be the most common form of residential development, certain areas within major activity centers and along transportation corridors are planned for increased multi-family and mixed use development, as well as more intensive commercial uses. Protection of environmentally critical lands and an expansive recreational and open space network development are planned in both the urban and rural areas.

Relation to other elements of the plan

The land use element addresses land development throughout the entire unincorporated area. However, because of its unique conditions and policy issues, analysis and policies for the unincorporated rural area of Clark County are contained in a separate Rural and Natural Resource Lands Element, Chapter 3 and Environmental Element, Chapter 4 of this document.

The Land Use Element is the central element of the comprehensive plan. The other elements must be fully consistent with the land use development patterns and policies presented in the Land Use Element and comprehensive plan map. For example, the Transportation and Capital Facilities Elements must contain adequate provisions to serve the type and extent of the land use patterns envisioned in the Land Use Element. Conversely, the Land Use Element and map must not specify a land use development pattern which cannot be adequately served by transportation and other services specified in the other elements.

Relation to other county planning policy documents

The Clark County 20-Year Comprehensive Plan, including the land use element, is part of a hierarchy including GMA, the Clark County countywide planning policies, the Community Framework Plan and the Clark County zoning ordinance and related implementation measures. The GMA contains general and specific requirements for participating jurisdictions. Clark County's Community Framework Plan provides an overall community vision and general policies for future development in accordance with the GMA. Clark County's 20-Year Comprehensive Plan and Land Use Element within, provides detailed policies for managing growth consistent with the mandates of GMA and the direction of the Community Framework Plan.

The 20-Year plan and its Land Use Element do not provide all the details, however. Precise standards, such as building setbacks, permitted uses within a particular zoning district or appropriate types of stormwater management systems are included in the implementing ordinances, including the zoning regulations. The 20-Year plan is the controlling document and where the implementing ordinances conflict with the 20-Year plan or fail to implement its policies, the 20-Year plan and its policies shall prevail.

Relation to city comprehensive plans

The land use element and other 20-year plan elements will be the governing documents for all unincorporated lands under the jurisdiction of Clark County. City comprehensive plans and their associated ordinances will be the governing documents applicable within incorporated city limits. Unincorporated lands within adopted urban growth areas will be subject to county plans and ordinances, although cities will be consulted and city policies may be considered. Interjurisdictional provisions are included in the Procedures Element, Chapter 14 of this document.

Land Use Conditions

General History

Clark County was originally settled by Native Americans, who established villages along the Columbia River and in other sites before recorded history. European settlement dates back to the establishment of Fort Vancouver in the early 19th century. Subsequent development of Clark County was primarily agriculturally based, but small residential concentrations within compact grid networks emerged in the Vancouver, Camas and Washougal areas and later in Battle Ground, La Center and Ridgefield.

Later expansions in development patterns were brought about largely by transportation improvements. With the arrival of the streetcar, radial development along track lines followed, such as along Fourth Plain Boulevard from downtown Vancouver to Orchards. Increased automobile use beginning in the 1920's extended the reach of development further from the original downtown

nodes into areas previously used for agriculture. This process continued with the influx of population during World War II, the post-war construction of Highway 99 and later Interstate 5 and 205.

Increasingly dispersed development patterns have occurred over the past 20 years in Clark County. The pace and timing of growth has occurred in cycles, driven largely by regional and national trends. From 2000 through 2010, county population grew from 345,238 to 425,363. During this period, Clark County grew by 80,125 residents or by 23 percent. On April 1, 2015, the state Office of Financial Management ranked Clark County as the fifth largest county in the state with a population of 448,500.

Current general distribution of land uses and population

The total land area encompassed by Clark County and its associated cities is approximately 420,238 acres, including areas covered by water. The overall existing distribution of various land uses within Clark County is illustrated in Table 1.1. This Table illustrates how the areas are designated by the comprehensive plan or zoning maps.

					Business	Mixed	Public	Parks Open	Single Family	Multi- Family
Jurisdiction	Forest	Agriculture	Commercial	Industrial	Parks	Use	Facilities	Space	Residents	Residents
Clark County	158,099	34,535	360	573			1,338	8,330	103,759	
Vancouver UGA			5,359	9,426		603	3,601	5,119	31,946	5,758
Camas UGA			889	1603	888		519	832	4,850	648
Washougal UGA			347	815		225	150	433	2,588	256
Battle Ground UGA			797	324	190	1,333		153	2,786	1,238
La Center UGA			175	105	·	129	91	122	1,136	85
Ridgefield UGA			390	1,075	442	48	246	254	2,991	565
Yacolt UGA			39	58			37	42	273	
Woodland							40		111	
Total*	158.099	34,535	8,355	14,279	1,521	2,337	6,022	15.283	150,440	8,550

Table 1.1 | 2015 Generalized Land Uses – Plan Map (Values in Acres)

Source: Clark County GIS. * The total above does not include 18,159 acres of bodies of water; 81 acres of Airport and 260 acres of Bonneville Power Administration (BPA) in Vancouver.

Table 1.2 presents 2015 base population and projected increases in Clark County and its cities. It should be noted that city limits listed have not remained static over time and will not do so in the future. Growth within urban growth areas reflects an expansion of city limits as well as births, deaths and net migration.

The projected 2035 populations for each city reflect an assumption that city limits will grow through annexation to fill the adopted urban growth areas (UGA). Similarly, the apparent decline in the unincorporated rural and urban areas is due to a loss of land area through annexation and not outmigration or other loss of population.

Much of the policy thrust of the Clark County 20-Year plan is in response to the need to plan for the anticipated population growth for the 20-year period ending in 2035 based on a 1.26%_growth rate or a projected population of 577,431 (90% to the urban area and 10% to the rural area). Under the GMA, Clark County and its cities are required to plan for a total population projection as provided by the state Office of Financial Management (OFM). The OFM has estimated a population projection for 2035 ranging from a low of 459,617 to a high of 681,135. Although the county can exercise discretion over how the projected total is distributed among the urban growth areas and the unincorporated rural area, the comprehensive growth plans of Clark County and its cities must be consistent with the official total allocation.

The 2035 population projections listed in Table 1.2 are actual goals, not merely future estimates or guidelines, which must be reflected in the respective 20-year plans of the jurisdictions.

Table 1.2 | 2035 Population Estimates by Jurisdiction

UGA	2015 Population	2015 – 2035 Change	2035 Population
Clark County	62,205	12,859	75,064
Battle Ground UGA	20,871	17,572	38,443
Camas UGA	22,843	11,255	34,098
La Center UGA	3,209	4,433	7,642
Ridgefield UGA	6,575	18,919	25,494
Vancouver UGA	315,460	56,601	372,061
Washougal UGA	15,932	6,415	22,347
Woodland	89	229	318
Yacolt UGA	1,661	303	1,964
Total	448,845	128,586	577,431

Sources: Clark County GIS. Projected 2035 population based on OFM allocation and 1.26% growth rate. 2015 population is based on incorporation of UGA area.

Approximately 90 percent of population growth over the 20-year planning horizon is expected to occur in designated urban growth areas, with 10 percent of the remainder to occur in unincorporated rural and natural resource lands. This type of development pattern is consistent with the goals of the GMA and supports the implementation of the long range vision of the county reflected in the Community Framework Plan. To accommodate the population growth over the 20-year planning horizon the following UGA's new total acreage in Table 1.3 is expected to expand to Battle Ground 81.67, La Center 72.47 and Ridgefield 111.26, acres.

Table 1.3 | Total Acreage Added by UGA

UGA Name	Commercial	Mixed Use	Public Facilities	Urban Low Density Residential	Grand Total
Battle Ground	0	81.67	0	0	81.67
La Center	55.04	0	17.43	0	72.47
Ridgefield	0	0	0	111.26	111.26
Grand Total	55.04	81.67	17.43	111.26	265.40

Source: Clark County GIS

Residential Land Uses

Residential lands provide the base for the provision of housing of Clark County residents. For the purposes of assessing overall land use, perhaps the most significant policy issues related to residential uses are the sufficiency, affordability and location of the overall housing stock. These factors are heavily driven by market and demographic factors which are largely beyond local control, such as interest rates or immigration to the Portland-Vancouver region. However, Clark County is working with all the cities to provide an appropriate land base and policy guidance through the comprehensive planning process to influence these factors in a positive direction.

The 2016 Comprehensive Plan Map for the county and its cities contains an adequate amount of land designated for urban residential use, which is sufficient to accommodate the projected population increase of 115,727 persons allocated to Clark County urban areas. The methodology used to determine the amount of land needed to accommodate the projected population increases is based

on the policy directives of the Board of County Councilors. A more complete analysis of residential development issues is contained in the Housing Element, Chapter 2 of this document.

Commercial and Industrial Land Uses

Urban commercial and industrial designations are designated within the Urban Growth Areas on the Land Use Map. These include Commercial (C), Industrial (I) and Heavy Industrial (IH), as described below. Commercial lands are envisioned to accommodate future employment growth, along with industrial and business lands. Economic Development Element, Chapter 9 provides further policy direction regarding types of employment uses and attraction of businesses to the county. For designations, goals and policies guiding commercial development in the rural area see Rural and Natural Resource Element, Chapter 3.

Parks

Clark County has been involved in land acquisition for parks since the 1930's and adopted its first Comprehensive Parks and Recreation Plan in 1965. From 1997 to 2013, the county park system was jointly planned and managed with the City of Vancouver via an interlocal agreement or memorandum of understanding (MOU). In 2014, the agreement was not renewed. The Clark County Parks Division was created in 2014 under the Department of Public Works and the associated Clark Parks Advisory Board (PAB) was also established in 2014. In 2015 the Clark County Parks, Recreation and Open Space (PROS) Plan was adopted by the Board of County Councilors. The plan provides direction for the future priorities of the parks system over the next two decades, qualifies the county for eligibility for state and federal grant resources, fulfills the requirements for a parks element within the comprehensive plan as part of the State of Washington Growth Management Act (GMA) and reflects the guidance from the Greater Clark Parks Advisory Board related to recreational needs and priorities of the community. The Parks, Recreation and Open Space Element, Chapter 7, provides further background and information on these facilities in Clark County.

Land Use Integration

For a community to function in a livable and efficient manner, land uses must not only be provided in sufficient overall quantities, but must also be developed in an integrated, cohesive fashion. The 20-Year Plan encourages improved land use integration on a range of levels, from more efficient overall regional form to better site-specific land use integration and access. Developing in an integrated fashion to include but not limited to working closely with school districts to ensure that new school facilities are within close proximity to neighborhoods they are intended to serve.

Urban Growth Areas

Perhaps the most fundamental policy component of the 20-Year Plan is the establishment of urban growth boundaries, as required by the GMA. Within urban growth boundaries, development of urban uses and densities should occur and urban level-of-services should be available, or capable of being provided in the future. Within the rural area beyond the urban growth boundaries, only rural uses and densities should occur and only rural level-of-services should be provided.

The establishment of urban growth boundaries is intended to reduce service inefficiencies associated with sprawling and dispersed development patterns and to produce a generally more compact overall urban development pattern which can be served more efficiently. Urban growth boundaries also facilitate more efficient timing of growth, as available land supplies within the urban areas are generally utilized before the boundary is extended into the adjacent rural area to allow for more intensive development in that area. In the absence of established boundaries, leap frog

development pattern may occur when urbanization takes place in isolated outlying pockets before it occurs in areas closer to the cities.

Urban growth boundaries also serve the purpose of fostering distinctions between the urban and rural areas which often become blurred or lost in the face of unmanaged growth. Those who choose to live in rural or urban areas often do so because of the relatively unique set of characteristics that each offers. By reinforcing and protecting the distinction between urban and rural areas, growth boundaries can help to conserve for the future many of these characteristics which have been steadily eroded in Clark County in recent years, particularly in the rural communities closer to the urban areas.

Focused Public Investment Areas

Although development will occur throughout the urban areas, the 20-Year Plan encourages more focused capital improvements for a variety of services in specific areas in order to provide "fully served" land where all public facilities meet or exceed standards. Clark County has identified potential investment areas and developed conceptual plans and cost estimates for making these areas ready to build. Encouraging development in the focused public investment areas will allow mixed use, industrial and professional business activities to locate where they can be served most easily and efficiently by public services, particularly transportation. These centers and nodes have better automobile and transit accessibility than most other urban areas. Encouraging commercial active-ties in close proximity to higher density housing will provide important opportunities to more closely match jobs, housing and shopping, minimizing traffic impacts by reducing the number and length of automobile trips needed.

Providing a range of development densities in the urban area is intended to foster a variety of options for people or companies wishing to live or do business in the county. Opportunities will be provided in residential areas characterized by larger homes and ample yard space, as well as those who wish to live in a more urbanized setting of smaller homes within walking distance or close proximity of a full range of shops or other activities. More detailed information can be found in the Economic Development Action Plan.

Sub-area Plans

Sub-area planning provides the community with a greater opportunity to be involved in a planning process that is more identifiable and predictable. Neighborhoods, corridors and special districts may be defined and plans will be tailored to address the issues of that area. Upon adoption by the Board of County Councilors they amend and become part of the comprehensive plan.

Many planning efforts have been undertaken within the Vancouver Urban Growth Area in collaboration with area residents, business owners and other stakeholders. Sub-area plans work to create a vision for a community as it grows and develops.

Highway 99

The Highway 99 sub-area is located in an urbanized area of unincorporated Clark County between Vancouver and Ridgefield. The planning area includes approximately 2,400 acres and extends from the Chelatchie Prairie Railroad Bridge near NE 63rd Street (south), Interstate 5 (west), NE 134th Street (north) and the Bonneville Power Administration Transmission Line Right-of-Way (east).

The area has a mix of housing, businesses and undeveloped property, but it is regionally known for US Highway 99. This key corridor, next to Interstate 5, serves as a business district for the Hazel Dell, Salmon Creek and Felida unincorporated areas.

The Highway 99 Sub-area plan and accompanying form-based code provides a vision for the redevelopment and revitalization of the Highway 99 corridor as shown in Figure 16a.

Mill Creek

The Mill Creek sub-area is bounded by NE 179th Street on the north, NE 50th Avenue on the east, the WSU campus on the south and NE 29th Avenue on the west. The plan includes zoning and traffic circulation for the area and recommendations on public open space, trails, lot size compatibility and design standards for future roads as shown in Figure 16a

Communitywide Plans

Something as simple as a sidewalk can improve your health and the health of your neighbors by encouraging walking for recreation or travel. Research shows that there are key features of communities that influence health, such as parks, safe streets, public gathering places and easy access to healthy food.

Other plans have been developed by and with the community to assure we are developing and sustaining healthy and age-friendly communities. Such plans include the Growing Healthier Report, the Aging Readiness Plan and the Clark County Bicycle and Pedestrian Plan. The Community Design Element, Chapter 11 includes policies related to the Growing Healthier Report and Aging Readiness, while the Transportation Element, Chapter 5 includes policies related to the Clark County Bicycle and Pedestrian Plan.

The 20-Year Plan encourages better land use integration through increased accessibility and interrelation of nearby uses. Development patterns or uses which allow for and encourage pedestrian access are encouraged, while development which is of a strip commercial nature or otherwise exclusively oriented to automobile traffic is not.

Growing Healthier Report

Clark County Public Health examined the ways that our neighborhoods and our built environment impact our health. Working with the community, they identified specific policies and strategies for improving the long-term health of our community through the development of the *Growing Healthier Report*.

Aging Readiness Plan

The Aging Readiness Task Force developed a plan that identifies strategies focusing on healthy communities, housing, transportation and mobility, supportive services and community engagement. The Aging Readiness Plan assesses the county's readiness to serve as a home for a growing number of older residents. The plan includes 91 strategies to improve the community's capacity to support its growing older population and ultimately benefit all ages. The Commission on Aging was established in 2012 to lead and manage the implementation of the plan.

Clark County Bicycle and Pedestrian Plan

Clark County has developed a *Bicycle and Pedestrian Plan* to make it safer and more convenient for people to get to major destinations on foot or by bicycle. The plan identifies ways to improve the transportation network by integrating existing sidewalks, bike lanes and trails.

Interpretation of the 20-Year Plan Map

The 20-Year Plan Map identifies a number of different designations which are described below. The plan designations have been chosen are consistent with the location criteria described. Future amendments to the 20-Year Plan map must be made in a manner, which is consistent with these general descriptions (Tables 1.4, 1.5 and 1.6).

Comprehensive Plan Map: Establishes land use designations for all land in Clark County. It shows the long-term vision of how and where the county will change over the next 20 years to accommodate expected population growth.

Zoning Map: Shows how land can be used and what can be built on any given property today. Zones are more specific than comprehensive plan designations and come with a set of rules described in the county's Unified Development Code Title 40.

Table 1.4 | Rural Lands Plan Designation to Zone Consistency Chart

Comprehensive Plan	Zoning
Rural 5 (R-5)	Rural (R-5)
Rural 10 (R-10)	Rural (R-10)
Rural 20 (R-20)	Rural (R-20)
	Airport (A)
Rural Center (RC)	Rural Center (RC-1)
	Rural Center (RC-2.5)
	Rural (R-5)
Rural Commercial (CR)	Rural Commercial (CR-1)
	Rural Commercial (CR-2)
Rural Industrial (RI)	Heavy Industrial (IH)
	Airport (A)
Public Facility (PF)	Public Facility (PF)
	Airport (A)
Rural Industrial Land Bank (RILB)	Light Industrial (IL)
` '	

Table 1.5 | Resource Lands Plan Designation to Zone Consistency Chart

Comprehensive Plan	Zoning
Agriculture (AG)	Agriculture (AG-20)
Agri-Wildlife (AG/WL) Parks/Open Space (P/OS)	Agri-Wildlife (AG/WL)
Forest Tier II	Forest (FR-40)
Forest Tier I	Forest (FR-80)
Airport (A)	Airport (A)

Table 1.6 | Urban Plan Designations to Zone Consistency Chart

Comprehensive Plan	Zoning
Urban Low Density Residential (UL)	Single Family Residential (R1-5)
	Single Family Residential (R1-6)
	Single Family Residential (R1-7.5)
	Single Family Residential (R1-10)
	Single Family Residential (R1-20)
Urban Medium Density Residential (UM)	Residential (R-12)
	Residential (R-18)
	Residential (R-22)
	Office Residential (OR-15)
	Office Residential (OR-18)
	Office Residential (OR-22)
Urban High Density Residential (UH)	Residential (R-30)
	Residential (R-43)
	Office Residential (OR-30)
	Office Residential (OR-43)
Mixed Use (MU)	Mixed Use (MX)
Commercial (C)	Neighborhood Commercial (NC)
	Community Commercial (CC)
	General Commercial (GC)
Industrial (I)	Business Park (BP)
	Light Industrial (IL)
	Railroad Industrial (IR)
	Airport (A)
Heavy Industrial (IH)	Heavy Industrial (IH)
	Airport (A)
Public Facility (PF)	Public Facility (PF)
	University (U)
	Airport (A)
Airport (A)	Airport (A)
	Heavy Industrial (IH)
Parks/Open Space (P/OS)	Parks/Open Space (P/OS)
	Parks/Wildlife Refuge (P/WL)
Bonneville Power Administration (BPA)	All zones
,	

The Plan to Zone matrix is provided to identify those implementing base zoning districts which are consistent with each plan designation. Those districts which are not included within a given plan designation are inconsistent with the plan map and are not permitted within that designation. This information is necessary to determine when, where and under what circumstances these designations should be applied in the future.

20-Year plan designations and location criteria

The policies in this chapter and those in the referenced planning studies strive to improve the quality of life, provide opportunities for innovative approaches to land use and protect our community character. The policies work in tandem with the Comprehensive Plan map, which illustrates the location of various land use categories. The Comprehensive Plan map delineates the unincorporated area in various categories, or plan designations, which appear on the map as different colors.

Residential Lands

There are three separate categories for residential use, ranging from low to high density. Low density residential is predominantly for single-family residential development with a density range of five to ten units per gross acre. Medium density residential provides land for single-family attached housing, garden apartment and multi-family developments ranging from 10 to 22 units per gross acre and **high density** of 43 units per gross acre. Public facilities, churches, institutions and other special uses may be allowed in these designations if certain conditions are met. Where offices are determined to be appropriate, office residential zones can be applied in the medium and high density designations.

Urban Low Density Residential (UL)

This designation provides for predominantly single-family residential development with densities of between five and ten units per gross acre. Minimum densities will assure that new development will occur in a manner which maximizes the efficiency of public services. New development shall provide for connection to public sewer and water. Duplex and attached single-family homes through infill provisions or approval of a Planned Unit Development may be permitted. In addition, public facilities, churches, institutions and other special uses may be allowed in this designation if certain conditions are met. The base zones which implement this 20-Year Plan designation are the R1-20, R1-10, R1-7.5, R1-6 and R1-5 zones. The zones may be applied in a manner that provides for densities slightly higher than existing urban development, but the density increase should continue to protect the character of the existing area.

Urban Medium Density Residential (UM)

This designation provides land for single family attached housing, garden apartment and multifamily developments ranging from 10 to 22 dwelling units per gross acre. Minimum densities assure that areas build out to the density planned, ensuring that the urban areas accommodate anticipated residential needs. Areas planned for urban medium residential use and assisted living facilities shall be located near commercial uses and transportation facilities in order to efficiently provide these services. Public facilities and institutions are allowed under certain conditions. The implementing base zones in this designation are the R-12, R-18 and R-22 zones. Where Offices are determined to be appropriate, the Office Residential OR-15, OR-18 and OR-22 zones can be applied in this designation.

Urban High Density Residential (UH)

These areas provide for the highest density housing in the urban area with 43 units per gross acre. Minimum densities assure that these areas build out to the density planned, ensuring that the urban areas accommodate anticipated residential needs including assisted living facilities. Areas with this designation shall be located in transit corridors and near commercial and employment centers to provide demand for commercial and transportation services while providing easy access to employment. Institutions and public facilities are allowed in this zone under certain conditions. Base zones in this designation are the R-30 and R-43. Where Offices are determined to be appropriate, Office Residential OR-30 and OR-43 zones can be applied in this designation.

Commercial (C)

With the 2016 comprehensive plan update, the county has consolidated the three commercial comprehensive plan designations into one Commercial (C) comprehensive plan designation with the

three commercial zoning districts remaining. Three distinct categories for urban commercial use include the following:

Neighborhood Commercial (NC)

These Commercial center areas provide services within walking distance for the frequent needs of the surrounding residents and are implemented by the Neighborhood Commercial base zone. These areas are located in the urban growth boundary and will generally be small areas which are generally designed to serve neighborhoods. Developments in these areas will be designed to be compatible with the surrounding residentially zoned neighborhoods.

New neighborhood commercial areas should generally be less than five acres in size spaced less than five miles from similar uses or zones, serve a population of up to 10,000, locate at neighborhood collector or larger crossroads and serve a primary trade area within a 1.5 mile radius.

Community Commercial (CC)

A commercial center area provides services to several neighborhoods in urban areas of Clark County and is implemented with the Community Commercial zone. New community commercial areas should generally be between five and 20 acres in size, spaced two to four miles from similar uses or zones, serve a population of 10,000 to 20,000, locate at minor or major arterial crossroads and serve a primary trade area between 2 to 4 miles.

General Commercial (GC)

General Commercial areas provide a full range of goods and services necessary to serve large areas of the county and traveling public. This designation is implemented with the General Commercial base zone. These areas are generally located at interchanges, along state highways and interstates and adjacent to major and minor arterial roadways. New general commercial areas should generally be more than 20 acres in size, spaced more than four miles from similar uses or zones, serve a population of more than 20,000 and serve a primary trade area between 3 to 6 miles.

Mixed Use (MU)

The Mixed Use designation intends to allow mixed use developments to provide the community with a mix of mutually supporting retail, service, office and residential uses. Areas within this designation are implemented with the list of uses allowed in the Mixed Use (MX) zone. Areas within this designation are implemented with the list of uses allowed in the Mixed Use (MX) zone and are intended to achieve the goals and objectives of the Community Framework Plan and the comprehensive plan:

- enhance livability, environmental quality and economic vitality;
- accommodate and respect surrounding land uses by providing a gradual transition into lower density neighborhoods that may encircle a potential mixed-use site;
- maximize efficient use of public facilities and services; provide a variety of housing types and densities;
- reduce the number of automobile trips and encourage alternative modes of transportation;
- and create a safe, attractive and convenient environment for living, working, recreating and traveling; and,
- shall be accomplished through design requirements governing such elements as scale, bulk, street orientation, landscaping and parking as contained in the Mixed Use Design Standards.

Industrial (I)

Areas within this designation are implemented with Light Industrial (IL), Business Park (BP) and Industrial Railroad (IR) base zones and are intended to provide the community with employment opportunities such as compatible office and attractive new non-polluting industries. Areas designated Industrial also provides for more intensive job related land uses that pay family wages, such as professional offices, research and technology related industries.

- Light Industrial (IL) base zones are intended to provide for light manufacturing, warehousing, transportation and other land intensive uses. Services and uses which support industrial uses are allowed in these areas but limited in size and location to serve workers within the industrial area.
- The Business Park (BP) base zone provides for uses permitted in the business park and is intended to provide for campus like development with higher job densities and family wage jobs than in traditional industrial areas.
- The Industrial Railroad (IR) base zone provides land uses that require and take advantage of rail access. This designation is appropriate for industrial and manufacturing uses including manufacturing, assembly, fabrication, processing and bulk handling and storage (warehousing).
- Airport (A) base zone provides land uses for airports that allow public use.

Heavy Industrial (IH)

This designation is implemented with a heavy industrial (IH) base zone and provides land for heavy manufacturing, warehousing and industrial uses that may be incompatible with other categories of land uses. This designation is appropriate for areas which have extensive rail and shipping facilities.

Public Facility (PF)

This designation is applied to land uses that have already constructed facilities or are for public use. Public schools, government buildings, water towers, sewer treatment plants and other publicly owned uses are included in this designation. The implementing base zone is Public Facility (PF), University (U) and Airport (A).

Airport (A)

This designation is applied to airports that allow public use. It is implemented with an Airport (A) and Heavy Industrial (IH) base zones.

Parks/Open Space (P/OS)

These areas provide visual and psychological relief from man-made development in the urban area. Open space also provides opportunities for recreational activity and environmental preservation, maintenance and enhancement. Open space may include, but is not limited to developed parks, trails and greenways, special areas, public and private recreational facilities, critical lands and public gathering spaces. It is implemented with a Public/Open Space (P/OS) and Parks/Wildlife Refuge (P/WL) base zones.

Bonneville Power Administration (BPA)

These areas are owned by the Bonneville Power Administration (BPA) where they operate their transmission facilities.

Rural Lands

The Rural (R-5, R-10,R-20) designations are intended to provide lands for residential living in the rural area. Natural resource activities such as farming and forestry are allowed and encouraged to occur as small scale activities in conjunction with the residential uses in the area. These areas are subject to normal and accepted forestry and farming practices. The Rural 5, 10 and 20 comprehensive plan designations are implemented with corresponding Rural 5, 10 and 20 base zones. A Rural 10 designation is applied within the rural area to prevent premature subdivision of future urban areas where the lands are adjacent to designated Urban Reserves, where the predominant size is equal or greater than 10 acres, to act as a buffer to Natural Resource lands or to protect environmentally critical areas consistent with applicable county ordinance and related regulations. This allows for efficient urban development when land is added to the urban growth areas. A Rural 20 designation applies to rural areas where the lands act as a buffer to Natural Resource designated lands, are used for small scale forest or farm production or contain significant environmentally constrained areas as defined by applicable county code and related regulations.

Rural Center (RC)

The rural center residential zones are to provide lands for residential living in the Rural Centers at densities consistent with the comprehensive plan. These districts are only permitted in the designated Rural Centers and are implemented with the RC-1 and RC-2.5 base zones.

Rural Commercial (CR)

This commercial district is located in rural areas outside of urban growth boundaries in existing commercial areas and within designated Rural Centers. These areas are generally located at convenient locations at minor or major arterial crossroads and sized to accommodate the rural population. Rural commercial areas are not intended to serve the general traveling public in rural areas located between urban population centers. Rural commercial areas within designated Rural Centers are implemented with the CR-2 base zone. Existing commercial areas outside of these Rural Centers are implemented with the CR-1 base zone. All new rural commercial applications shall address the criteria for new commercial areas through a market and land use analysis.

Rural Industrial (RI)

This industrial designation is to provide for industrial uses in the rural area that are primarily dependent on the natural resources derived from the rural area. The Heavy Industrial base zone implements this designation.

Rural Industrial Land Bank (RILB)

A rural industrial land bank is a master planned location for major industrial developments established consistent with RCW 36.70A.367. The minimum size of the land bank is 100 acres.

"Major industrial development" means a master planned location suitable for manufacturing or industrial businesses that: (i) Requires a parcel of land so large that no suitable parcels are available within an urban growth area; (ii) is a natural resource-based industry requiring a location near agricultural land, forest land, or mineral resource land upon which it is dependent; or (iii) requires a location with characteristics such as proximity to transportation facilities or related industries such that there is no suitable location in an urban growth area. The major industrial development may not be for the purpose of retail commercial development or multitenant office parks.

"Industrial land bank" means up to two master planned locations, each consisting of a parcel or parcels of contiguous land, sufficiently large so as not to be readily available within the urban growth

area of a city, or otherwise meeting the criteria in "major industrial development" above and is suitable for manufacturing, industrial, or commercial businesses and designated by Clark County through the comprehensive planning process specifically for major industrial use.

Resource Lands

Agriculture Lands (AG)

These lands have the growing capacity, productivity; soil composition and surrounding land use to have long-term commercial significance for agriculture and associated resource production. This designation is implemented by the Agriculture (AG-20) base zone.

Agriculture/Wildlife (AG/WL)

This designation is applied to areas in the Columbia River lowlands which have the characteristics to support long-term commercially-significant agriculture and are valuable seasonal wildlife habitat. The primary uses in this area are commercial agriculture, wildlife habitat management and recreation. This designation is implemented by the Agriculture/Wildlife (AG/WL) base zone.

Forest Tier I

This designation is applied to those lands which have the physical characteristics that are capable of management for the long-term production of commercially significant forest products and other natural resources such as minerals. This tier is primarily applied to larger parcels and major industrial forestry landowners. The Forest-80 (FR-80) base zone, implements this designation.

Forest Tier II

This designation is applied to those lands which have the physical characteristics that are capable of management for the long-term production of commercially significant forest products and other natural resources, such as minerals. The Forest-40 (FR-40) base zone implements this designation.

Previously Developed Agriculture and Forest Zoned Property

Land divisions of remainder or parent parcels created under previous Agriculture or Forest Zoning District "Cluster" provisions, which are now within a resource zone or rural residential zone, cannot further divide until brought into the urban growth area.

Overlays

An overlay zone lies on top of an existing base zone and provides an additional layer of development standards or special provisions in addition to those in the underlying zone. Overlays are used to accomplish a variety of land use and development goals such as:

- providing design guidelines for a particular area,
- maintaining current codes while addressing a special need of a particular area within a zone(s),
- protecting valuable resources, such as historic and natural resources,
- helping meet goals and objectives of the community,
- protecting the quality of surface water.

For example, overlays may be applied to protect the historical nature of an area (e.g. materials, façade design, or color). Overlays can manage development in or near environmentally sensitive areas, such as groundwater recharge areas (e.g. to ensure water quality and quantity), special

habitat (e.g. species or feature protection) or floodplains (e.g. prevent flood damage). Common requirements may include building setbacks, density standards, lot sizes, impervious surface reduction and vegetation requirements.

Highway 99 Overlay

This overlay district implements the Highway 99 Sub-Area Plan. Underlying zoning districts remain unchanged, however there are additional or alternative permitted uses and design standards. The overlay district provides for the use of a hybrid form-based code which establishes minimum setback standards, minimum and maximum height standards and different parking requirements and modifies other regulations for the underlying zoning districts within the sub-area.

Mill Creek Overlay

This overlay implements the Mill Creek Sub-Area plan. The overlay provides for special provisions and modifies other regulations for the underlying zoning districts within the sub-area.

Urban Holding Overlay

The Urban Holding Overlay protects areas from premature land division and development that would preclude efficient transition to urban development or large-scale industrial development. The Urban Holding Overlay is implemented by Urban Holding-10 (UH-10) and Urban Holding-20 (UH-20) zoning overlay districts. Removal of the Urban Holding Overlay shall be consistent with the special implementation procedures provided for in Chapter 14, Procedure Guidelines. Designation and removal of the overlay is through a Type IV process.

Urban Reserve Overlay

The Urban Reserve Overlay lies on the fringe of the Urban Growth Boundaries and protects areas from premature land division and development that would preclude efficient transition to urban development. These lands are identified as being future additions to Urban Growth Areas and may be added to the urban area as necessary through amendments to the Comprehensive Plan. The Urban Reserve Overlay is implemented by Urban Reserve-10 (UR-10) zoning overlay for future urban residential development and Urban Reserve-20 (UR-20) zoning overlay for all other types of future urban development.

Surface Mining Overlay

This designation is implemented with an overlay zone and recognizes existing mining areas and is to allow for the future mining of minerals in an economically feasible way. Other land use controls which flow from 20-Year Plan policies or state or federal law apply to development proposals that are identified on zoning or other adopted maps but are not specifically identified on the 20-Year Plan Map.

Existing Historic Resort Overlay

This designation is implemented with an overlay zone and recognizes the following existing historic resort: Alderbrook. Criteria for approving additional existing historic resorts through the Annual Review or period plan updates are set forth in RCW 36.70A.362.

Railroad Industrial Overlay

This district is implemented with an overlay zone and recognizes the importance of the County railroad as an economic development asset. The development standards in the overlay closely match those of the County's industrial zoning districts.

Equestrian Overlay

This overlay promotes equestrian activities by allowing the development of communities with a focus on equestrian facilities, access to trails and on sustaining the area's rich equestrian tradition. An equestrian overlay may only be established on parcels located outside of the Urban Growth Boundary.

Freight Rail Dependent Uses Overlay

This designation is implemented with an overlay that identifies parcels where freight rail dependent uses adjacent to the short line railroad may be permitted.

Airport Environs Overlay

This overlay is intended to identify and protect existing and/or future/new general aviation public use airports that have been or maybe significantly impacted by adjacent development.

Rural Center Mixed Use Overlay

The rural center mixed use overlay is intended to provide the opportunity for a limited number of residential lots within rural centers to develop with a mix of retail, service, office and residential uses. Maintaining the rural character of rural centers is the paramount goal when considering mixed use development.

Concurrency

A critical aspect of land development is the availability and delivery of public services needed to serve that development. The GMA reinforces and formalizes this concept, known as concurrency, to require that necessary public services be available as part of the concurrency management program with new development. GMA requires that at minimum, specific levels of service standards for transportation be adopted by local jurisdictions and those development proposals which cannot demonstrate compliance with these adopted service standards be denied. If they so choose, jurisdictions may also adopt levels of service for sewer, water, storm drainage, schools, parks, fire and police.

Further information and policies regarding service concurrency are contained in the applicable element chapters. The establishment of level-of-service standards has significant impact on future land use development patterns as well as service delivery. Table 6.1 in the Capital Facilities and Utilities Element summarizes generalized service provision anticipated in the urban and rural areas of Clark County. The descriptions are not precise standards to be used for regulatory purposes.

Goals and Policies

The 20-Year Plan policies listed in this element directly follow the mandates of the GMA and the Clark County Community Framework Plan, adopted by Clark County in May 1993 pursuant to GMA.

Washington State Goals and Mandates

As noted earlier, the GMA lists 14 broad goals regarding land use in general, as well as specific mandates regarding the designation of urban growth boundaries and provisions for development within the boundaries. Above all else, the GMA requires more compact growth patterns to allow for more efficient service delivery. GMA requires that a clear distinction be made between urban and rural lands. Participating counties must adopt urban growth boundaries in which urban growth will be encouraged and outside of which only nonurban growth may occur.

Similarly, urban level public services must be in place, or be capable of being provided within the boundaries, but only rural level services should be provided outside the boundaries. The boundaries must be large enough to accommodate urban growth levels projected by the state to occur over a 20-year period and may include areas outside of existing city limits but only if those areas are characterized by existing urban growth or are adjacent to areas of existing urban growth.

In both the urban and rural areas, cities or counties must adopt level-of-service standards for basic services such as transportation, sewer, water and stormwater provisions and must ensure that new development proposals are capable of meeting those levels of service standards. The goals and mandates of the GMA are presented in more detail in the Introduction of the 20-Year Plan.

Community Framework Plan

Pursuant to the GMA, Clark County adopted the Community Framework Plan to establish an overall vision for the long-term growth of Clark County consistent with the GMA and to articulate basic policies related to land use to implement that overall vision. The Community Framework Plan also contains policies, which were adopted to establish a procedure for bridging the gap between the Community Framework Plan, which is very general in nature and the actual 20-Year Plan policies, which are more specific.

Buildable Lands Review and Evaluation Program

Buildable Lands Review and Evaluation Program Amendments to the GMA in 1997 require Clark County and its cities to collect data on buildable lands and analyze how planning goals are being achieved. The amendments, often referred to as the Buildable Lands Program, require local governments to monitor the amount and density of residential, commercial and industrial development that has occurred since adoption of a jurisdiction's Growth Management comprehensive plan. If the results of the seven-year buildable land evaluation reveal deficiencies in buildable land supply within UGA's, Clark County and the cities are required first to adopt and implement reasonable measures that will remedy the buildable land supply shortfall before adjusting UGA boundaries. More information about the Buildable Lands program can be found on the county's website at: www.clark.wa.gov/community-planning/monitoring.

The Buildable Lands Program, at minimum should answer the following questions:

- What is the actual density and type of housing that has been constructed in UGA's since the
 last comprehensive plan was adopted or the last seven-year evaluation completed? Are
 urban densities being achieved within UGA's? If not, what measures could be taken, other
 than adjusting UGA's, to comply with the GMA?
- How much land was actually developed for residential use and at what density since the
 comprehensive plan was adopted or the last seven-year evaluation completed? Based on this
 and other relevant information, how much land would be needed for residential
 development during the remainder of the 20-year comprehensive planning period?
- How much land was actually developed for residential use and at what density since the comprehensive plan was adopted or the last seven-year evaluation completed? Based on this and other relevant information, how much land would be needed for residential development during the remainder of the 20-year comprehensive planning period?
- To what extent have capital facilities, critical areas and rural development affected the supply of land suitable for development over the comprehensive plan's 20-year timeframe?
- Is there enough suitable land in Clark County and each city to accommodate countywide population growth for the 20-year planning period?

- Does the evaluation demonstrate any inconsistencies between the actual level of residential, commercial and industrial development that occurred during the seven-year review period compared to the vision contained in Clark countywide planning policies and comprehensive plans and the goals and requirements of the GMA?
- What measures can be taken that are reasonably likely to increase consistency during the subsequent seven-year period, if the comparison above shows inconsistency?

Land Use Element policies

The Land Use Element for 20-year comprehensive plans determines the general distribution and 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 uses. The Land Use Element includes population densities, building intensities and estimates of future population growth. The land use element is to provide for protection of groundwater resources and where applicable, address drainage, flooding and run-off problems and provide for coordinated solutions. The following policies are to coordinate the efforts of Clark County and cities in designating land uses, densities and intensities to achieve the pattern described above in their respective Comprehensive Growth Management Plans.

1.1 Countywide Planning Policies

- 1.1.1 Clark County, municipalities and special districts will work together to establish urban growth areas within which urban growth shall be encouraged and outside of which growth may occur only if it is not urban in nature. Each municipality within Clark County shall be included within an urban growth area. An urban growth area may include territory located outside of a city if such territory is characterized by urban growth or is adjacent to areas characterized by urban growth.
- 1.1.2 Urban growth areas shall include areas and densities sufficient to permit the urban growth that is projected to occur in Clark County for the succeeding 20-year period.
- 1.1.3 Urban growth shall be located primarily in areas already characterized by urban growth that have existing public facility and service capacities to adequately serve such development and second in areas already characterized by urban growth that will be served by a combination of both existing public facilities and services that are provided by either public or private sources. Urban governmental services shall be provided in urban areas. These services may also be provided in rural areas, but only at levels appropriate to serve rural development. Urban governmental services include those services historically and typically delivered by cities or special districts and include storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection, public transit services and other public utilities not normally associated with non-urban areas.
- 1.1.4 An urban growth area may include more than a single city.
- 1.1.5 Urban growth is defined as growth that makes intensive use of land for the location of buildings, structures and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, fiber, or the extraction of mineral resources.

- 1.1.6 Clark County and cities shall review their designated urban growth area or areas in compliance with Chapter 36.70A. The purpose of the review and evaluation program shall be to determine whether Clark County and its cities are achieving urban densities within Urban Growth Areas. This shall be accomplished by comparing the growth and development assumptions, targets and objectives contained in these policies (and in county and city comprehensive plans) with actual growth and development that has occurred.
- 1.1.7 Each municipality within Clark County shall annually provide to Clark County parcel specific information on land developed or permitted for building and development in three categories: residential, commercial and industrial. Clark County and municipalities shall follow the guidelines specified in the Plan Monitoring Procedures Report for the collection, monitoring and analysis of development activity and potential residential/employment capacity.
- 1.1.8 Clark County, in cooperation with the municipalities, shall prepare a Buildable Lands Capacity Report consistent with Chapter 36.70A. The report will detail growth, development, capacity, needs and consistency between comprehensive plan goals and actual densities for Clark County and the municipalities within it.
- 1.1.9 Clark County and municipalities shall use the results of the Buildable Lands Capacity Report to determine the most appropriate means to address inconsistencies between land capacity and needs. In addressing these inconsistencies, Clark County and municipalities shall identify reasonable measures, other than adjusting urban growth areas that will be taken to comply with the requirements of Chapter 36.70A.
- 1.1.10 Population projections used for designating urban growth areas will be based upon information provided by the Office of Financial Management and appropriate bistate/regional sources.
- 1.1.11 Interagency Cooperation. Clark County and each municipality will work together to:
 - establish a Technical Advisory Committee to develop an ongoing coordination program within the urban growth area;
 - provide opportunities for each jurisdiction to participate, review and comment on the proposed plans and implementing regulations of the other;
 - coordinate activities as they relate to the urban growth area;
 - coordinate activities with all special districts;
 - seek opportunities for joint efforts, or the combining of operations, to achieve greater efficiency and effectiveness in service provision; and,
 - conduct joint hearings within the urban growth areas to consider adoption of Comprehensive Plans.
- 1.1.12 Coordination of land use planning and development:
 - Clark County and each municipality shall cooperatively prepare land use and transportation plans and consistent development guidelines for the urban area.
 - Comprehensive Plans must be coordinated. The comprehensive plan of each county or city shall be coordinated with and consistent with, the comprehensive plans adopted by other counties or cities with which Clark County or city has, in part, common borders or related regional issues. The city and Clark County shall

- play partnership roles in the production of plans which provide the opportunity for public and mutual participation, review and comment.
- Conversion of industrial or employment lands to non-industrial or nonemployment center districts may occur within the following parameter:
 - Protect and preserve lands zoned heavy industrial for heavy industrial uses.
 - Protect employment center lands from conversion to residential.
 - Consider rezoning of employment center lands to non-retail commercial or business park if the proponent can show that (a) the zone change would accommodate unforeseen and rapidly changing commercial development needs and (b) the proposed designation is more suitable than the current designation given the land's site-specific characteristics and (c) the proposed zone change will generate jobs at a higher density than the current comprehensive plan zone allocation.
- Urban development shall be limited to areas designated by the urban growth boundary. Clark County and each local jurisdiction urban areas would have a higher average density than currently exists, approximately 4, 6 to 8, units per net residential acre depending on the specific urban area. No more than 75 percent of the new housing stock would be of a single product type (e.g., singlefamily detached residential or attached multi-family). This would not apply to the Yacolt urban growth area due to wastewater management issues.
- 1.1.13 Urban Growth Area Centers (UGA) have a full range of urban levels of services and can be divided into three main categories in the following density tiers:
 - Vancouver Urban Growth Area is now or will be a major urban area activity centers with a full range of residential, commercial and industrial uses, high-capacity transit corridors, schools, major cultural and public facilities. Major urban areas centers, have or will have, urban densities of development of at least 8 units per net residential acre (6 gross units per acre) as an overall average. Areas along high capacity transit corridors and priority public transit corridors may have higher than average densities while other areas would have lower densities (e.g. established neighborhoods and neighborhoods on the fringes of the urban area). Regional institutions and services (government, museums, etc.) should be located in the urban core.
 - Urban Growth Areas of Battle Ground, Camas, Ridgefield and Washougal, will have a full range of residential, commercial and industrial uses, schools, neighborhood, community and regional parks and are within walking distance to HCT corridors or public transit. These areas will have employment opportunities and lower densities than a major urban area centers, averaging at least 6 units per net residential acre (4.5 gross units per acre). Higher densities occur along transit corridors and in the community center, with lower densities in established neighborhoods and on the outskirts of the community. These urban growth areas centers should have a center focus that combines commercial, civic, cultural and recreational uses.
 - La Center Urban Growth Area is located in predominantly a residential area with at least 4 housing units per net residential acre (3 gross units per acre) and includes pedestrian-oriented commercial uses, schools and small parks. There are no standards for the Yacolt urban growth area due to lack of public sewer. A mix

- of residential uses and densities are or will be permitted. Neighborhoods are to have a focus around parks, schools, or common areas.
- 1.1.14 Rural Centers are outside of urban growth areas centers and urban reserve areas and provide public facilities (e.g., fire stations, post offices, schools) and commercial facilities to support rural lifestyles. Rural centers have residential densities consistent with the surrounding rural minimum lot sizes and do not have a full range of urban levels of services
- 1.1.15 Establish consistent regional criteria to determine the size of urban growth areas for the 20-year comprehensive plans that:
 - Assume the need for residential market factor lands added to the amount called for in the population forecast to build in flexibility.
 - include a household size of 2.66 people per household
 - conserve designated agriculture, forest or mineral resource lands;
 - ensure an adequate supply of buildable land;
 - have the anticipated financial capability to provide infrastructure/services needed for the 20-year growth management population projections; and,
 - balance industrial, commercial and residential lands.
- 1.1.16 Establish consistent regional criteria for urban growth area boundaries for the 20year comprehensive plans that consider the following:
 - geographic, topographic, man-made and natural features (such as drainages, steep slopes, riparian corridors, wetland areas, etc.);
 - public facility and service availability, limits and extensions;
 - jurisdictional and special district boundaries;
 - location of designated natural resource lands and critical areas; and,
 - minimize split designations of parcels.

La Center UGA

- 1.1.17 There shall be no net material increase in cardroom capacity within the La Center Urban Growth Area.
- 1.1.18 An additional 120 acres +/- of industrial land shall be added to the La Center Urban Area as an out-of-cycle subarea amendment if the United States government recognizes a new tribal reservation within the La Center Urban Area.

County 20-Year Planning Policies

Goal: Adopt Urban Growth Area (UGA) boundaries to efficiently accommodate residential and employment increases projected within the boundaries over the next 20 years.

1.2 Policies

- 1.2.1 The UGAs shall be consistent with the following general goals:
 - reduce the inappropriate conversion of undeveloped land into sprawling, lowdensity development;
 - provide for the efficient provision of public services;
 - protect natural resource, environmentally sensitive and rural areas;
 - encourage a clear distinction between urban and rural areas;

- maintain densities which support a multi-modal transportation system;
- support variety, choice and balance in living and working environments;
- promote a variety of residential densities; and,
- include sufficient vacant and buildable land.
- 1.2.2 The UGAs shall be consistent with the following more specific criteria:
 - Each UGA shall provide sufficient urban land to accommodate future population/employment projections through the designated planning period.
 - Cities shall be located within UGAs. Urban services shall be provided within those areas. Urban services should generally not be provided outside UGAs. (See Chapter 6, Capital Facilities and Utilities for urban and rural services.)
 - Lands included within UGAs shall either be already characterized by urban growth or adjacent to such lands.
 - Existing urban land uses and densities should be included within UGAs.
 - Land within the UGA shall not contain areas designated for long-term agriculture or forestry resource use.
 - UGAs shall provide a balance of industrial, commercial and residential lands.
 - The UGAs should utilize natural features (such as drainage ways, steep slopes, open space and riparian corridors) to define the boundaries.
 - No UGA expansion into the 100-year floodplain of a river segment that is located west of the Cascade crest and when the river has a mean annual flow of 1,000 or more cubic feet per second per RCW36.70A.110(8).
 - Each UGA shall have the anticipated financial capability to provide infrastructure/services needed in the area over the planning period under adopted concurrency standards.

Vancouver Urban Growth Area

- 1.2.3 Ensure coordination of environmental protection, preservation and enhancement programs and regulations.
- 1.2.4 Coordinate and cooperate with other governmental agencies, districts and private and commercial interests throughout the Vancouver/Portland Metropolitan area in open space, park and recreation planning and development.
- 1.2.5 Restrict amendments to the urban growth boundary to encourage infill development.
- 1.2.6 Concentrate development in areas already served by public facilities and services.

 Use the provision or planned provision of public services and facilities as a means of directing development into desirable areas.
- 1.2.7 Water service should be extended throughout the Vancouver urban area in accordance with the timing and phasing established in the Vancouver six-year capital facilities plan. Extension of public water service should not be permitted outside the Vancouver urban area.
- 1.2.8 Encourage retrofitting areas with sewer and prohibit new development on septic tanks in the urban growth area.

Washougal Urban Growth Area

1.2.9 Recognizing the authority of the National Scenic Area legislation, as a matter of policy Clark County favors the exclusion of the Washougal UGA from the National Scenic Area.

Yacolt Urban Growth Area

1.2.10 The Yacolt Urban Growth Boundary will be reevaluated by Clark County at such time as the Town of Yacolt develops a plan assuring that public sewer will be available.

Goal: Encourage more compact and efficiently served urban forms and reduce the inappropriate conversion of land to sprawling, low-density development.

1.3 Policies

- 1.3.1 Urban densities and uses may occur throughout the urban growth area if it is provided with adequate services. Development and redevelopment in the UGA should be strongly encouraged to occur in greater intensity in major centers, transit routes and other areas characterized by both existing higher density urban development and existing urban services. Development and redevelopment should be encouraged to occur with less intensity in areas where urban development is of lower density or has not yet occurred, or in areas where urban services do not yet exist.
- 1.3.2 Devise specific policies and standards to promote higher density urban, commercial and mixed-use development and to support pedestrian and transit travel within high-density residential and commercial areas.
- 1.3.3 Encourage and provide incentives for infill development throughout urban areas.
- 1.3.4 Zoning ordinances and other implementing measures shall specify maximum and minimum residential densities with the residential zoning districts.
- 1.3.6 Property rights of landowners should be protected from arbitrary and discriminatory actions.

Goal: Integrate land uses to reduce sprawl, promote physical activity through active transportation and foster neighborhood and community identity.

1.4 Policies

- 1.4.1 Interrelated uses should generally be encouraged to locate in close proximity of each other:
 - Frequently used commercial activities and the residential areas they serve should be allowed and encouraged to locate near to one another.
 - Schools or other frequently used public facilities and the residential areas they serve should be allowed and encouraged to locate near to one another.
 - Commercial, industrial or other employers and the residential areas they serve should be allowed and encouraged to locate near to one another, as long as negative impacts from non-residential uses on the residential areas are mitigated.

- 1.4.2 Encourage mixed-use developments, which provide opportunities to combine residential, commercial or other uses within individual structures, or within adjacent structures or developments.
- 1.4.3 Promote the development of identifiable residential neighborhoods and shopping districts through the encouragement of more compact development patterns and the use of shared design and landscaping characteristics and the development of landmarks.
- 1.4.4 Encourage compact commercial development with an appropriate mix of uses.
- 1.4.5 Commercial developments should utilize shared facilities and infrastructure, including but not limited to common wall structures, shared parking lots, access points, sidewalks, signs or innovative design features.
- 1.4.6 Commercial development should be designed and located as follows:
 - Features to both allow for and encourage pedestrian access to and between commercial developments and roadways shall be provided.
 - Storefront design with zero or minimal front setbacks should be used. Frontal parking should be minimized. Side or rear lot parking should be encouraged.
- 1.4.7 Higher intensity uses should be located on or near streets served by transit.
- 1.4.8 Streets, pedestrian paths and bike paths should contribute to a system of fully connected routes to all destinations.
- 1.4.9 Access to the transit system should be provided.
 - Transit stations should be located at major activity centers and along transit streets and nodes.
 - Neighborhoods and commercial nodes should have access to the public transportation system.
 - Transit stops should be located within convenient walking distance of residential and employment populations.
 - Transit shelters should be provided where appropriate.
 - Bicycle parking should be included in commercial, industrial and public facility sites.

Strategies

- Review proposals for UGA expansions for consistency with the above policies and the requirements of RCW 36.70A.215.
- Consider the above policies in the evaluation of zone change proposals.
- Encourage urban Planned Unit Developments which allow for better integration of related land uses, such as commercial and residential uses.
- Review zoning and site plan review standards to allow and encourage individual developments containing a mix of uses.
- Develop and adopt plan and Industrial Railroad zoning district with use provisions consistent with land use objectives.
- Review zoning and site plan review standards to encourage the provision of more compact and pedestrian and transit friendly commercial development.

Vancouver Urban Growth Area

- Develop parking standards that reflects the community's desire which should include redevelopment potential of under-utilized parking lot parcels, establishing maximum parking requirements and shared parking.
- Establish city- and county-sponsored neighborhood associations supported by staff liaisons throughout the Vancouver urban area.
- Develop standards for affordable housing which consider parking requirements, vehicle trip generation, levels-of-service, neighborhood character and overall livability.



Chapter 2

Housing Element

Chapter 2 Housing Element

Introduction

The purpose of the Housing Element is to identify the need for and mechanisms that will lead to the construction and preservation of decent housing for all economic segments of the Clark County population. Region-wide in orientation, the Housing Element addresses all of Clark County. It sets policy direction for lands under county government jurisdiction, is coordinated to the greatest extent possible with housing policies developed by cities and towns and provides practical implementation guidance. The need for mechanisms to ensure a variety of housing prices and neighborhood designs is discussed as well as the types of housing that should be available in the future.

Relationship to other elements and plans

The Housing Element of the 20-Year Plan builds upon principles and policies established in earlier county comprehensive plans. Earlier plans discussed housing primarily in light of its land use implications. This plan addresses housing in broader terms, reaching beyond land use patterns and densities to discuss issues such as affordability, special needs and community character.

The Housing Element also builds upon principles and policy direction provided by the Countywide Planning Policies and the Community Framework Plan. These policies, developed through an extensive public participation process, are intended to provide long-term, overall guidance for Clark County and its cities in developing the Housing Element for the 20-Year Plan.

Clark County/Consolidated Housing and Community Development Plan

The Housing Element of the 20-Year Plan has a relationship to the Clark County Consolidated Housing and Community Development Plan (HCD). Each jurisdiction that receives assistance from the US Department of Housing and Urban Development (HUD) is required to prepare a plan that addresses the needs for low-income people. Clark County recently completed a five-year HCD plan for 2015-2019 which is designed to:

- provide an assessment of housing and community development needs in Clark County;
- identify resources and key players;
- develop strategies and goals to ensure affordable housing and decent living environments
 for person who earn 80-percent or less of the area's median income (\$58,800 for a family of
 four HUD 2015 data), including homeowners, renters, the elderly, families, people with
 special housing needs and people who are homeless;
- develop strategies and goals to ensure support for programs and facilities that promote viable communities and address community development, infrastructure and human service needs of urban and rural areas; and
- report the annual use of HUD entitlement funds.

The Housing Element uses many of the statistics and needs assessments prepared in the HCD. Implementation of the policies in the Housing Element through ordinances and programs will assist in meeting needs identified in the HCD.

Special needs populations, such as people who are homeless, people at risk for homelessness, the frail/elderly, single parents, physically disabled, victims of domestic abuse, veterans, chronically

mentally ill, developmentally disabled, migrant farm workers and persons living with HIV/AIDS or chemical addictions are addressed in both the Housing Element and the HCD.

Housing affordability is a key component within the Growth Management legislation. Housing affordability will be affected by policies adopted in the other elements including transportation, public facilities, utilities, open space and recreation, land use and (for the county only) rural lands. Likewise, the pattern and density of housing development will affect the cost to the county; to local utilities to extend services such as water lines, sewer lines, transit service, fire protection, etc.; and, ultimately, to the businesses and residents of Clark County in user fees and taxes.

Updates of the county zoning ordinance, land division ordinance, Transportation Impact Fee (TIF) and Parks Impact Fee (PIF) ordinances and new ordinances and programs created as a result of this planning process, will implement the goals and policies established in the Housing Element. These land use and development ordinances are prepared by the respective municipal jurisdictions and should be reviewed for compatibility with the plan.

Housing Element requirements

The Growth Management Act of 1990 (GMA), as amended, requires that 20-Year Comprehensive Plans have a housing element that:

- Recognizes the vitality and character of established residential neighborhoods;
- Includes an inventory and analysis of existing and projected housing needs;
- Includes a statement of goals, policies and objectives for the preservation, improvement and development of housing;
- Identifies sufficient land for housing, including, but not limited to, government assisted housing, housing for low income families, manufactured housing, multi-family housing and group homes and foster care facilities; and
- Makes adequate provisions for existing and projected needs of all economic segments of the community.

The Procedural Criteria for Adopting Comprehensive Plans and Development Regulations for the Act further specify that the Housing Element of the 20-Year Plan (WAC 365-195-310) shall, at a minimum, contain:

- An inventory and analysis of existing and projected housing needs;
- A statement of the goals, policies and objectives for the improvement, preservation and development of housing;
- Identification of sufficient land for housing, including but not limited to, government assisted housing, housing for low income families, manufactured housing, multifamily housing and group homes and foster care facilities; and
- Adequate provision for existing and projected housing needs of all economic segments of the community.

The Act and its Procedural Criteria provide the legislative framework for preparation of the Housing Element.

Organization of the element

The Housing Element consists of three sections: the Background and Existing Conditions section including statistics supporting the county's Housing Element. It summarizes existing conditions and

information in Clark County and focuses on inventory data, which support the policy orientation on growth management; 2) the Goals and Policies section, on an issue by issue basis, presents a comprehensive set of goals and policies to guide the implementation of the plan; and 3) the Strategy section consists of a set of planning strategies related to housing in Clark County. See HCD for additional information on county housing issues.

Background and existing conditions

The housing needs of Clark County are determined by the characteristics of its existing and projected population (age, household size, income, special needs, etc.), when compared to the characteristics of the existing and expected housing supply (size, cost, condition, etc.). Clark County is expected to add approximately 128, 586 people or 48,340 households over the next twenty years. The issue facing local governments is where to direct this growth given environmental constraints and the cost of providing public services and how to ensure that a range of housing types and prices are available.

Much of the data contained in this section comes from the HCD prepared by Clark County Department of Community Services. The HCD is required under the Cranston-Gonzalez National Affordable Housing Act of 1990. All jurisdictions eligible for funding under this act and wishing to participate in the program are required to prepare a plan identifying the different types of housing needed in the community and setting priorities for addressing them.

This report also contains data from the U.S. Bureau of the Census for 1990, 2000 and 2010. Between the 2000 and 2010 census, data was being collected through the American Community Survey (ACS). Some of the data previously collected in the decennial census was no longer being asked in the long form decennial census and was only available through the ACS. This makes comparison to previous decennial census information a challenge. The ACS data provided in this report is primarily of the 5-year survey which is more reliable than the 1-year or 3-year survey.

Population

Table 2.1 shows the population trends of the cities and unincorporated areas of Clark County from 1990 to 2015. There has been a significant increase in the overall population of the county in the last two and a half decades. Clark County has increased 90 percent in population since 1990 with a 30 percent increase since 2000.

Area	1990	2000	2010	2014	2015
Clark County	238,053	345,238	425,363	442,800	451,820
Unincorporated	173,844	166,305	203,339	210,140	214,585
Incorporated	64,209	178,933	220,024	232,660	237,235
Battle Ground	3,758	9,322	17,571	18,680	19,250
Camas	6,798	12,534	19,355	20,880	21,210
La Center	483	1,654	2,800	3,050	3,100
Ridgefield	1,332	2,147	4,763	6,035	6,400
Vancouver	46,380	143,560	161,791	167,400	170,400
Washougal	4,764	8,595	14,095	14,910	15,170
Woodland*	94	92	83	85	85
Yacolt	600	1,055	1,566	1,620	1,620

Table 2.1 | Population Trends in Clark County, 1980-2015

Sources: OFM Forecasting, State of Washington web site. The 2010, 2014 and 2015 population numbers are based on April 1, 2015 estimates. Note: * The portion of the City of Woodland population that resides in Clark County.

This growth has occurred in both unincorporated areas and in cities. The unincorporated areas had a 23 percent increase in population since 1990 and a 4.4 percent decrease between 1990 and 2000.

This decrease is in large part due to a large annexation of previously developed unincorporated Clark County into Vancouver in 1997. Incorporated areas of the county grew substantially in the past twenty five years by 269 percent since 1990, and 33 percent since 2000. By 2035, the county anticipates a population increase of 128,586 or a 36 percent increase over the 2010 census count of 425,363 with a total population of 577,431.

Age

Table 2.2 shows the changes in the distribution of the age of the county's population since 1990. The data show the largest population group for 2010 are children aged 0-19 (122,255). Persons aged 40-59 were the next largest group (120,008). Clark County's population continues to be family households with children. Housing policy should make efforts to address the needs of this significant population.

Table 2.2 | Age Distribution of Clark County Residents, -1990-2010

				% Change	% Change
Age	1990	2000	2010	1990-2000	2000 -2010
0-19	74,164	108,037	123,429	46%	14%
20-39	75,080	97,649	108,959	30%	12%
40-59	54,623	95,130	120,008	74%	26%
60-85+	34,186	44,422	72,967	30%	50%
Total	238,053	345,238	425,363	45%	23%

Source: U.S. Bureau of the Census; Office of Program Planning and Fiscal Management, Corrected 1990 Population by County by 5-Year Age Groups, State of Washington. April, 2000.

Comparing percentage change data provides insight into future growth trends. The largest percentage increase occurred in the 60-85+ group, reflecting the aging of the baby boomer generation. This trend will continue and require more attention be paid to the housing needs of an aging population. Young adults may find themselves increasingly pushed out of Clark County's market, compared to persons aged 40-59 who may have more financial ability to pay for housing.

Race and Ethnicity

According to the 2010 U.S. Census, the total minority population represents 15 percent (44,747) of the county's population, up from 7 percent in 1990. The HCD contains information on special populations and their housing needs in 2000. It reviewed the percentage of minority persons in each census tract and found no concentrations of minority persons in any one area of the county. In recent years, there has been an influx of immigrants from Eastern Europe and Russia into Clark County. These new residents, while not racial minorities, are a distinct ethnic community. Their housing needs are being met by the private market, although they may require assistance adjusting to their new communities. Table 2.3 shows the distribution of population by race in Clark County in 1990 and 2000. From 2000 to 2010, the Hispanic population in Clark County also substantially increased from 4.7 percent (16,248) to 7.6 percent (32,166).

Table 2.3 | Clark County Population by Race and Ethnicity

	Total Persons	% of County Population	Total Persons	% of County Population
Race and Ethnicity	2000	2000	2010	2010
White	306,648	89.0%	363,397	85.4%
Black	5,813,	1.7%	8,426	2.0%
Native American	2,910	0.8%	3,624	0.9%
Asian/Pacific Islander*	12,369	3.6%	20,212	4.7%
Two or More Races	10,641	3.1%	17,219	4.0%
Hispanic	16,248	4.7%	32,166	7.6%

Other Race	6,857	2.0%	12,485	2.9%
Total**	345,238	100%	425,363	100%

Source: U.S. Bureau of the Census. * Native Hawaiian and Other Pacific Islander were separated from Asian in 2010 and accounts for .6% of total (2,708) persons **Hispanic is considered ethnicity, not a separate race category and is not included in total percentage.

Households

A household is all of the people living in one housing unit, whether or not they are related. A single person renting an apartment is a household, just as is a family living in a single-family house. The number and type of households in a community can indicate the housing needs of that community. Table 2.4 gives historic information on the numbers of households in Clark County and each of its cities. As is the case with population, most of the household growth has occurred in incorporated communities over the past 20 years.

Table 2.4 | Number of Households in Clark County, 1980-2010

Jurisdiction/Area	1990	2000	2010	Change 1990-2000	Change 2000-2010
Total Clark County	88,571	127,208	167,413	+38,637	++40,205
Total Incorporated Clark County	26,630	69,129	91,915	+42,499	+22,786
Total Unincorporated Clark	61,941	58,079	75,498	-3,862	+17,419
County					
Battle Ground	1,341	3,071	5,952	+1,730	+2,881
Camas	2,438	4,480	7,072	+2,042	+2,592
La Center	129	552	981	+423	+429
Ridgefield	441	739	1,695	+298	+956
Vancouver	20,135	56,638	70,005	+36,493	13.367
Washougal	1,898	3,294	5,673	+1,396	+2,379
Woodland (part)	49	46	53	-3	+7
Yacolt	199	319	484	+120	+165

Source: U.S. Bureau of the Census.

The county's growth patterns will change as a result of adopting this plan to implement the GMA. Household growth, like population growth, will be directed to cities or urban growth areas which will eventually be annexed to cities. If growth patterns in the future are similar to those of the past, households in rural areas will be larger on average than those in urban areas, by approximately 10 percent. Table 2.5 shows the county's household growth patterns since 1980.

Table 2.5 Household Characteristics in Clark County, 1980-2010

Year	Total Households	Persons Per Household	Senior Households	Non-Senior Households
1980	68,750	2.76	11,086	57,664
1990	88,571	2.66	15,243	73,328
2000	127,208	2.69	23,131	104,077
2010	158,099	2.67	35,395	122,704

Source: U.S. Bureau of the Census and Washington Office of Financial Management.

Income

The relationship of household income to housing prices is the main factor affecting the ability of Clark County's residents to secure adequate housing. Table 2.6 compares median household incomes for Clark County and each of the cities. Median income is defined as the mid-point of all of the reported incomes; that is, half the households had higher incomes and half the households had lower incomes than the mid-point, with the county median household income very similar to the statewide average.

Table 2.6 | Median Household Incomes in Clark County, 1990-2010

Jurisdiction/Area	2000	2010	Change 2000-2010
Total Clark County	\$48,376	58,262	20%
Battle Ground	\$45,070	57,134	27%
Camas	\$60,187	77,334	28%
La Center	\$55,333	71, 522	29%
Ridgefield	\$46,012	76,295	65%
Vancouver	\$41,618	48,875	17%
Washougal	\$38,719	61,121	58%
Yacolt	\$39,444	53,452	35%
Washington State	\$45,776	57,244	25%

Source: U.S. Bureau of the Census

The definitions of extremely low, very low and moderate-income households are established by the U.S. Department of Housing and Urban Development (HUD). These terms are based on a percentage of the area's median household income for a family of four. They are used to evaluate income levels in Clark County. Table 2.7 shows the numbers of households in each income category for 2000 and 2012.

Table 2.7 | Households by Income Group in Clark County, 2000 – 2012

	2000		2012	
INCOME GROUP	# Households	PERCENT OF TOTAL	# Households	PERCENT OF TOTAL
VERY LOW INCOME (LESS THAN 50% OF MEDIAN)	26,902	23%	33,715	21%
Low Income (50% to 80% of median)	21,970	16%	28,970	18%
Moderate Income* (81% to 95% of median)	10,966	8%	17,610	11%
MIDDLE AND UPPER INCOME* (MORE THAN 95% OF MEDIAN)	67,422	53%	78,070	50%
MEDIAN INCOME**	\$4	8,376	\$70	,786

Source: 2008-2012 Comprehensive Housing Affordability Strategy (CHAS). * 2008-2012 CHAS data for moderate income parameter changed to >80% to <=100 HUD Adjusted Median Family Income (HAMFI); Middle and Upper Income is >100% HAMFI ** 2008-2012 CHAS data uses estimates of median family income for the Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area (MSA)

Extremely low-income households include households whose incomes are 30% of median and below. Very low-income households are those whose incomes are less than 50 percent of the area's median family income. In 2000, a family of four making between \$14,513 and \$24, 188 fell into this category for a total of 26,902 households or 23 percent. For 2012, a family of four making less than \$35,393 fell into this category. This represents a two percent decrease in the number of families with very low incomes between 2000 and 2012 but constitutes more than one-fifth of the county's households. Low-income households are those whose incomes are between 50 percent and 80 percent of the area's median family income. A family of four making between \$24,188 and \$38,701 fell into this category. There were 21,970 households (16 percent of the total) that were defined as low income in2000. In 2012, a family of four making between \$35,393 and \$56,629 fell into this category for a total of 28,970 households, or 18 percent. This represents a two percent increase in the number of families with low incomes between 2000 and 2012. Together, in 2012 low income and very low-income households constituted 39 percent of the county's households.

Moderate-income households are those whose incomes are between 80 percent and 95 percent of the area's median family income. In 2000, a family of four making between \$31,800 and \$48,376 fell into this category. There were 10,966 households (8 percent of the total) that were defined as

moderate income in 2000. In 2012, a family of four making between \$57,337 and \$70,786 fell into this category. This represents a 3 percent increase in the number of moderate-income families between 2000 and 2012. Together, in 2012 moderate, low and very low-income households constituted 50 percent of Clark County's households.

Percent of Income Spent on Housing

HUD defines housing cost burden as the extent to which gross housing costs, including utility costs, exceed 30 percent of gross income, based on data published by the U.S. Census Bureau. This is the threshold at which the cost of housing typically becomes a burden. At this point the money available for other necessary expenses such as food and medical care is reduced.

Generally, upper income households can afford a higher percentage of income for housing than can lower income households. The percentage of income spent on housing increases as income decreases. The lowest income households are, therefore, most likely to be overpaying for housing relative to their income and in need of assistance.

The HCD notes that between 2000 and 2012, the median home value increased from \$153,100 to \$254,200, a 66% increase. During the same time period, the median contract rent increased from \$606 to \$773 per month; a 28% increase. The median sale prices are still increasing faster than wages in the county. This means that more and more people are being priced out of the market. Based on the projected increases in housing costs, new housing could be unaffordable to extremely low, very low, low income and moderate-income households of Clark County.

Special Housing Needs

Some people in Clark County need modified housing units or special services in order to live independently. Other people require living in a group home or institutional environment. While some of these people will have the resources to take care of their needs, many will not. The HCD identified these special housing needs in Clark County and made recommendations for serving those needs:

Physically Challenged Persons

- **Physically Challenged:** The US Census Bureau, 2010-2014 ACS 5-year estimate identifies approximately 34,603 people under the age of 64 have a disability, mobility and/or self-care limitations.
- Frail Elderly: In 2012, 37 percent of Clark County seniors report having a disability (ACS 2010-2012).
- **Developmentally Disabled:** As of 2015, the Clark County Department of Community Services estimates that there are approximately 7,926 persons (1.7 percent of the county population) with developmental disabilities in the county. As of 2015, there are 2,373 individuals known to the state Developmental Disabilities Administration who are eligible to receive state funded services. (see Developmental Disabilities Comprehensive Plan 2010-2014)

The majority of the housing need for physically challenged persons is among the elderly. These people may need special housing with ramps instead of stairs, elevators for units with two or more stories and modified facilities. The federal Americans with Disabilities Act (ADA) of 1990 require changes to building and zoning codes to improve access for disabled persons. These codes will apply to new construction and to major rehabilitation or remodeling of existing units.

Experience in states which have had similar legislation for the past decade indicates that adaptations to ensure accessibility and mobility for the disabled add less than \$1,000 on average to the cost of

new multi-family housing. It is more expensive and not always possible to modify an existing unit for handicapped accessibility. Older units, particularly older multi-family structures, are very expensive to retrofit for disabled occupants because space is rarely available for modifications such as elevator shafts, ramps and widened doorways. Much of the existing multi-family housing (traditionally the more affordable housing) cannot economically be modified to meet the needs of disabled residents.

Senior Citizens

Senior citizens are defined as people over age 62. The elderly are generally considered a special needs group because of the high correlation between age and disability. Also, many seniors live on a fixed income. They cannot afford higher rents and if they own their own home they may not be able to afford the cost of increasing taxes or maintenance. A fixed income also may not permit them to rent a new apartment in a new facility that would provide them with a full range of care services.

In2010, there were 48,710 senior citizens living in Clark County. Of which 68 percent (33,002) of senior citizens live in family households headed by people over age 65 -Table 2.8. Another26 percent (12,604) live alone. At least 2 percent (1,172) of the senior citizens live in-group quarters (e.g. nursing or retirement homes) and 4percent (1,932) live with family or friends.

Table 2.8 | Senior Citizens Housing Arrangements in Clark County, 2000

Household Type	Total Numbers of Persons	Percent of Total
Family Household	33,002	68
Non-Family Households	14,536	30
Living Alone	12,604	
Group Quarters	1,172	2
Total	48,710	100

Source: U.S. Bureau of the Census

The population of elderly residents is increasing and will continue to increase through the end of the decade. In addition, people are living longer and the number of people over 75 is increasing. Currently the 2010 census reports that there are 20,628 persons over the age of 75 living in Clark County. The majority of the elderly populations prefer to live independently in family units or alone. This population would be well served by a variety of housing types that lend_themselves to smaller, affordable and accessible rental and housing units. Elderly persons who live with family or friends might benefit from zoning provisions that allow for another, smaller unit to be built on single-family lots.

Homeless Persons

HUD defines "homeless" as those persons or families which "(1) lack a fixed, regular and adequate nighttime residence or (2) whose nighttime residence is a public or private emergency shelter, an institution that provides temporary residence for individuals intended to be institutionalized, or a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings." This definition does not include persons forced to live with friends or relatives, in unsafe or inappropriate housing. This definition also excludes recently homeless persons who are in transitional housing programs but have not yet attained housing self-sufficiency.

The Council for the Homeless notes that the fastest growing groups of homeless persons in Clark County are two parent families with children, single women with children, single persons and older adults. The Emergency Shelter Clearinghouse operates a referral hotline from 9:00 am until 8:00 pm seven days a week to refer homeless persons to available shelter.

Families with Children: This is Clark County's largest un-housed population. Both single and two parent families are sheltered in all except one shelter facility on a space available basis. Most shelters allow a 30-day stay.

Youths: Southwest Washington had no community-based services to help homeless and runaway at-risk youth and their families, which led to the opening of the area's first-ever emergency shelter in 1996. The Oak Bridge and Oak Grove Youth shelters assist more than 385 youth in crisis every year.

Domestic Violence: There is currently one emergency shelter (28 spaces) in Clark County for victims of domestic violence. In 2014, Safe Choice, the domestic violence shelter, provided 5,115 bed-nights of emergency shelter.

Based on this information, homeless persons have a significant need for housing in Clark County. Housing policies should address the needs of this population, as well as the needs of persons at 30 percent of area median income and below. Since some homeless families and individuals have disabilities or require a period of extra support, a strategy should include permanent supportive housing.

Projected Household Growth

The population growth forecast of OFM is translated into approximately 48,340 additional households who will be seeking housing in Clark County by the year 2035. Table 2.9 highlights the percent change of 10 years and the average annual change within the county. Based on growth projections from the Washington Office of Financial Management (OFM), the county will grow at a rate of 1.26 percent per year. The characteristics of these households are likely to change over the period covered by the 20-Year Plan as the population of the county, the state and the United States as a whole age. In 1990, households with elderly heads made up 6.4 percent of the total households. Projections indicate that elderly households will increase to 17.5 percent of the total in 2010, almost a threefold increase.

Year	Total Population	10-year Increase	10-year % Change	Average Annual % Change
1950	85,307	NA	NA	NA
1960	93,809	8,502	10.0	1.0
1970	128,454	34,645	36.9	3.7
1980	192,227	63,773	49.6	2.0
1990	238,053	45,826	23.8	2.4
2000	345,238	107,185	45	4.7
2010	425,363	80,125	23.2	2.1
2035	577,431	N/A	N/A	N/A

Table 2.9 | Population Trends, 1950-2035 in Clark County

Sources: Washington State Office of Financial Management, April 1 Intercensal and Postcensal Estimates of the Total Resident Population by Year 1968-2002; Washington State Growth Management Population Projections for Counties: 2010 to 2040

Housing Resources

Table 2.10 shows the number and type of housing units in Clark County for the period 1980-2010. The total number of housing units in Clark County in 2010 was 169,520. Single family homes make up 73 percent (122,935) of this stock. Multi-family homes constitute 22 percent (38,096) of this stock. Manufactured homes make up 4.7 percent (8,031) of the housing stock of Clark County.

Table 2.10 | Number of Housing Types in Clark County, 1990-2010

Housing Types	1990	2000	2010
Single Family Units*	63,681	94,664	122,935
Multi-Family Units	21,033	30,217	38,096
Manufactured/Mobile Home Units**	7,520	8,833	8,031
Unknown	615	316	458
Total Units	92,849	134,030	169,520

Source: U.S. Bureau of the Census * Includes attached and detached units and 2010-2014 American Community Survey (ACS) 5-year Estimates **The ACS uses the term mobile home instead of manufactured

Using 1990-2010 figures, the total number of housing units in the county has risen by 26 percent since 2000 and 83 percent since 1990. The number of single family units has risen 30 percent since 2000 and 93 percent since 1990. Multi-family units have increased in number by 26 percent since 2000 and 81 percent since 1990. Manufactured housing has shown the smallest increase of 17 percent over 1990 figures but more significantly a 9 percent decline since 2000.

County funding for affordable housing

In the spring of 2003, Clark County memorialized the recommendations to dedicate document recording fees to affordable housing as presented by community stakeholders. This funding source was developed as a result of House Bill 2060, which was passed by the Washington State Legislature during the 2002 session. SB 2060 established a dedicated source of revenue for affordable housing, a \$10 recording fee. The fees are collected by County Auditor who may retain up to 5 percent for administration. The remaining funds are split into two categories. Sixty percent (60%) of the funds are to go to local jurisdictions for the sole use of housing for people between 0 - 50% of the area median income. The remaining 40 percent goes to the Department of Commerce for allocation of operational support to state funded projects that service households from 0 – 30% of the area median income.

The CDBG and HOME Program staff hosted two community meetings to solicit recommendations for the use of the local funding. The total is estimated to be \$750,000 annually. The community group developed the following recommendations regarding the distribution of funds:

Capital funds for transitional and permanent housing: Thirty percent (30%) of the funds would be used for development of transitional and permanent housing, including acquisition and rehab or new construction costs. New construction is only an eligible use if vacancy rates are under 10%. The document recording fee revenues can leverage other capital resources such as HOME and CDBG.

Operating funds for shelters, transitional and permanent housing: Forty percent (40%) of the funds would be used to maintain the current level of shelter services, provide operating subsidies to transitional or permanent housing providers, or rental assistance vouchers to private for-profit and non-profit housing providers.

Creation of a Local Housing Bond: Approximately 1/3 (a flat \$250,000) per year of the available revenue would be used to purchase a 10-year low-income housing bond. Bond proceeds, estimated at approximately \$2,000,000, will be deposited in an interest bearing account for the purpose of land or housing acquisition. The land banking approach, made possible with the bond, would allow Clark County to secure property while costs and interest rates are as low as they are likely to be in the foreseeable future. This bonding mechanism would also assist Clark

County and the cities within the county to meet their housing goals as outlined in the Growth Management Act, including goals for affordable housing.

The Clark County Housing Review Board (CHRB), a local group of citizens appointed by the county, was given responsibility for oversight of the Clark County funds associated with SB 2060. The county approved the plan and goals designed by the CHRB. In response to the approved plan, staff worked with stakeholders to implement the plan goals.

Manufactured housing is a major source of affordable housing in Clark County. Manufactured housing units are distinguished from "mobile homes" because they are more durable and less mobile in nature. Once manufactured housing units are sited they are rarely moved. Additionally, manufactured housing meets HUD standards, which makes it possible to get a loan to purchase a new manufactured home with little or no down payment. The buyer can also purchase the land to site the manufactured home on contract with little down payment. This is a very attractive option for those with little savings.

Housing Tenure

Table 2.11 shows housing units by type of occupancy over time. In 2010, five percent (9.314) of the total units were vacant. This is considered a normal or healthy vacancy rate. The remaining 95 percent (158,099) were occupied. Of these, 66 percent (104,003) of the units in Clark County were owner-occupied. The remaining 34 percent (54,096) were occupied by renters.

Table 2.11 | Number of Housing Units by Occupancy Type in Clark County, 1980-2000

Housing Occupancy Type	1990	2000	2010
Total Housing Units	92,849	134,030	167,413
Vacant Units	4,409	6,822	9.314
Occupied Units	88,440	127,208	158,099
Owner-Occupied Units	56,872	85,550	104,003
Renter Occupied Units	31,568	41,658	54,096

Source: U.S. Bureau of the Census

Housing Costs

The HCD report notes that affordable housing is generally associated with an adequate supply of older housing. The 2000 Census indicated that Clark County has over 7,481 housing units that were built in 1939 or earlier. This is 2.9 percent of the current housing stock. There are 5,063 owner-occupied units and 2,418 rental units that were built in 1939 or earlier. Future affordability will be greatly affected by market conditions. However, it can be assumed that existing older housing stock will continue to provide many of the more affordable units in the future, unless there is some form of public intervention in helping to reduce the costs of new units.

Rental Costs

Table 2.12 shows the average rental costs for the Vancouver area for the period of 2011-2016. The data reflects modest increase for each size of unit from 2011-2015 and then a large increase of approximately 27% in the 2016 data. There is a much larger increase across the board in 2016 that seems to more accurately reflect the housing affordability crisis.

Table 2.12 | Fair Market Rents in the Clark County, 2010-2015

Year	One Bedroom	Two Bedroom	Three Bedroom
2011	\$783	\$905	\$1,318
2012	771	891	1,297
2013	756	912	1,344
2014	774	922	1,359
2015	793	944	1,391
2016	\$1,021	\$1,208	\$1,757

Source: US Department of Housing and Urban Development

FY2011-2016 Fair Market Rent

Renters in Clark County are diverse. For some moderate and upper income households, renting is a choice despite the fact that they have the financial means to buy a home. For some young households, renting is a stepping stone to future homeownership. For many low and moderate-income households, however, renting is the only financially feasible choice due to the high cost of ownership. The rising cost of renting has the greatest effect on the most vulnerable of Clark County's population. Once rents get too high low-income households are forced to double up with family members, live in an apartment that is far away from their job, school, or social networks or sometimes are even forced into homelessness.

Subsidized Housing

According to HCD, rent assistance programs are available to assist the 4,325 low-income renter households in need of rent assistance. Single person non-elderly (or non-disabled) households are not eligible for assisted housing under the programs now offered in the county.

The Vancouver Housing Authority (VHA) serves a total of 3,153 Clark County households with rental assistance and subsidized housing. The VHA owns 1,054 units of federally subsidized Low Rent Public Housing and Section 8 New Construction. This program includes 150 units at Skyline Crest (a development that is also home to the RISE & STARS Community Center); two downtown Vancouver high-rises for elderly, frail elderly and disabled people; 30 units at Fruit Valley; 14 in Camas; 12 in Ridgefield; and 269 units scattered throughout Clark County.

In 2003, the VHA contracted with U.S. Department of Housing and Urban Development to administer 2,300 Housing Choice and Mod Rehab rental vouchers. Both the low-rent public housing and the voucher program are designed to allow low-income families, elderly and disabled residents to pay 30 percent of their income for rent.

The VHA also contracts with several nonprofit corporations to manage two properties for disabled people, two group homes, three properties that provide transitional housing and five properties for low-income seniors. In addition, the VHA owns 100 units of Medicaid assisted living for low-income frail elderly people and 2,136 non-subsidized affordable workforce housing units. Workforce housing is defined as housing that is closer to market rate and is used as an investment to provide local funding for deeply subsidized housing.

Market and institutional influences on housing production

Typical of most communities in the Unites States, the primary influences on housing price in the county include, but are not limited to:

- land use controls which limit both the areas where housing may be built and the density of development, with a resulting impact on land cost and development costs;
- building code requirements (such as those related to the Americans with Disabilities Act; energy efficiency, etc.) which may increase construction costs and ultimately increase housing price;
- off-site improvement requirements;
- finance costs such as interest rates, other loan costs;
- tax limitations measures that limit the public sector's ability to subsidize housing development;
- materials and construction costs; and,
- in-migration and mismatches in housing supply and demand.

Most notably, the construction costs and home purchase prices rise with interest rates. Since the large number of savings and loan failures in the late 1980s, federal regulators have reduced the percentage of an institution's portfolio, which can be in real estate development. This has resulted in making financing of residential development more difficult. Similarly, increases in land costs or construction costs will increase the cost of the housing which is developed unless more units can be built on the same site. Rising energy costs increase the costs of construction and maintenance of housing units; however, conservation measures can reduce lifecycle costs for energy.

The housing needs continuum in Clark County

Housing affordability issues impact all households in all income groups. Every household has an income at one level or another and must find housing that meets but does not exceed the requirements of the income level. Sometimes this relationship is called "attainability." Households at higher incomes have fewer housing affordability problems, largely because their incomes allow greater flexibility to access housing at, or less than, their incomes. In addition, there are generally more housing units available within their income ranges. Persons with lower incomes have more housing affordability problems partially because their ability to access housing in their target price range is limited by persons from higher ranges "buying down," and by limited numbers of units. In addition, the lower the income range, the less potential the household has for "buying down".

What is affordable housing? Housing affordability is defined by financial lenders, government officials and ordinary citizens in different ways. Lenders generally claim that affordable housing is housing expenditure at or below 30 percent of household income. A household earning \$58,262 (the county median in 2010) should spend no more than \$17,479 per year or \$ 1,457 per month on housing. This may be in rent or in house payments.

It is apparent that the definition of affordable housing has altered over time and continues to be in dispute depending on the perspective of the groups involved. Lenders and bureaucrats respond in a manner assessing the total debt limit that appears to be a reasonable lending risk at any point in time. Families respond in terms of their personal preferences and their other debts. Low and moderate-income advocates respond in terms of the impracticality of accumulating four figure down payments and in terms of the potentially disastrous impact on people with fragile incomes when every available penny is committed to housing. There are six components when addressing the affordability issue as follows:

- availability of properly zoned and buildable land;
- cost of borrowing money;

- regulatory restrictions influence affordability;
- consumer expectations;
- wage/housing balance, which is the relationship between the wages earned by people in the community and the housing price; and
- jobs/housing balance, which is the relationship between the location of jobs and the location housing.

All these components need to be addressed in determining the affordability issue for a community. This Chapter defines housing affordability as a range of expenditure, which should be between 30 percent of income and/or house purchases at 2.5 times household income. These are conservative measures, which serve to decrease the amount of expenditure suitable for housing from those levels illustrated by many lenders in their standard publications. It is believed that these measures, however, are more reflective of the real level of expenses that moderate and low income households can bear, noting that most households have standing financial commitments that decrease their loan to value ratios.

Summary and Conclusions

The inventory and analysis presented in this Chapter lead to the identification of a variety of factors that will affect the ability of households in Clark County to find suitable affordable housing. The following section highlights the issues effecting housing affordability for all segments of the population in the future.

The cost for land and construction of new housing has been increasing rapidly over the past seven years. If the trend continues, then there will be even less affordable new housing built in the county. The needs of middle as well as lower income households will be more difficult to meet with new housing.

Restrictions on local government funding resources have resulted in increasing use of development impact fees to pay for the cost of extending services to new housing developments. However, these impact fees increase the cost of the new housing. The goal of making new development "pay its own way" may run counter to the goal of producing an adequate supply of affordable housing.

Changes in federal regulation of the banking and savings and loan industries have affected the availability of financing for residential development and the types of projects being financed. It is much harder to finance projects now and financial institutions are requiring greater equity participation by the developer in each project. It is also more difficult to find financing for unusual or creative housing designs, which might reduce the cost of each home to the purchaser or renter. Federal, state and local governments should consider public subsidies in order to ensure that such housing is available.

Increasing federal, state and local environmental protection regulations have reduced the amount of land available for development and increased the time and cost involved in producing housing. The goal of protecting sensitive environmental resources may run counter to the goal of producing an adequate supply.

The Community Reinvestment Act (CRA) requires that financial institutions demonstrate that they invest a portion of their funds in the community where they are located and where their customers live. The Act is particularly concerned with investment loans for home purchase and rehabilitation

loans in older neighborhoods. The intent is to discourage "redlining" or the practice of refusing to make loans for properties located in older or predominantly minority neighborhoods. The CRA provides an opportunity for local developers and non-profit agencies to work with the banks and savings and loans to develop affordable housing and to maintain or improve existing housing in older neighborhoods.

Until the early 1980s, the federal government provided most of the support for the creation and maintenance of affordable housing, including tax incentives and direct funding of construction and operating costs. The withdrawal of this support, coupled with a changing economic environment, has severely reduced the availability of affordable housing. The absence of the federal government and lack of history or experience of the state and local government and the private sector in funding affordable housing has resulted in a confusion of roles and responsibilities. In order to provide the housing needed by the low and middle income population, it will be necessary for the county, cities, state and the private sector to create new working relationships if the needs for financing, construction or acquisition and maintenance of housing are to be met.

Fair Housing

The goal of fair housing is to encourage freedom of choice in the sale or rental of dwellings. Fair housing rights are established both through federal law (Title VIII of the Civil Rights Act of 1968) and Washington State legislation (WAC 49.60.222 through 224). The private sector and public sector housing agencies are very familiar with these principles as they apply to buyer/seller or landlord/tenant relationships. Discrimination based on race, color, age, sex, religion and national origin is prohibited.

In 1988, the Federal Fair Housing Act was amended in a manner that makes it evident that it is not legal to deny persons with disabilities the opportunity to live in a community. The amendment also makes it clear that persons may not be discriminated against on the basis of family status. The Washington Housing Policy Act, adopted in 1993, reinforces these principles by prohibiting local ordinances that treat households with disabilities differently from other households. For the purpose of this 20-Year plan, written in 1993 and updated in 2002, low-income persons are not considered a group protected under fair housing laws. If applied, income tests must be applied to all groups (e.g., disabled, racial, national origin) equally.

Several of the groups specifically noted in fair housing laws are commonly referred to as "special populations." Special populations include the physically disabled, mentally disabled, mentally ill, homeless and other persons who may experience barriers to housing because of a disability or condition. Special needs populations are among the most noticeable persons needing fair housing protection. Fair housing, however, is a broader concept that attempts to protect all citizens from unfair or discriminatory treatment.

In the development of land use regulations, communities must examine whether the effect of a regulation, action or policy is exclusionary. Local land use policies, regulations and actions must not have the effect of excluding individuals from Clark County or cities within Clark County. Persons should be able to find a variety of housing opportunities.

The 20-Year Plan proposes that an essential element in the continued achievement of fair housing is a land use regulatory approach that allows anyone seeking housing to take "managed risks". That is, regulations should protect public health and safety, but not to the point that the regulations have

the effect of excluding populations from finding housing that they can afford. Fair housing should not become a paternalistic approach to protection that eventually excludes the disabled, elderly, or other individuals. The 20-Year Plan also works toward fair housing by using the household, rather than the family, as the basic definition for an assemblage of persons in a dwelling unit.

Household is a broader term that allows for non-nuclear families, unrelated individuals, domestic partnerships, caregivers and other arrangements. A household orientation reflects the increasing diversity of living arrangements in the county.

Incentives for fair housing and a greater awareness of how the principle serves to protect all persons will be increasingly necessary in the future as Clark County's population grows and diversifies. Fair housing requires the attention of many segments of the community. Appropriate land use practices are a necessary step. These practices must be reinforced by fair lending practices, underwriting standards, appraisals, bonding and by other implementation policies and procedures that effectuate, on a daily basis, principles of fairness. Central to fairness is a clear understanding of both the income characteristics of the community and the characteristics of housing. Over time, the county's racial structure, household living arrangements, number of special needs persons, etc. will change. There is a continuing need to educate government officials and citizens to their individual rights and to the rights of others.

Special Needs Housing

It is the intent of this plan to encourage self-determination and independence among individuals with special needs. County and the cities policies, ordinances and codes should treat people with special needs equivalent to the general population. Land use regulations should not discriminate against these households. Land use regulations should be limited to the impact of the use upon the landscape, without consideration of the circumstance of the persons in the household.

People with special needs, just like other segments of the population, want to locate across the county, depending upon personal preferences and upon the locations of family and friends, health care, support services and transit. Housing provided by both the public and private sectors will allow the greatest range of locational choices. Special needs populations live throughout the county at this time, even though they may be under served or be limited in their access to housing. In the next 20 years, neighborhoods across the county should become accessible to special needs individuals. There is a dual responsibility; neighborhoods must become more accepting of people with special needs and people with special needs must become good neighbors in their community.

Just as people with special needs want to live in different neighborhoods, their specific housing needs vary also. Not all disabled persons require housing adapted with rehabilitated kitchens, bathrooms, etc. Not all persons require assistance from a caregiver. It is important that planners have knowledge of the needs of different client groups and avoid generalizations. Providing for people with special needs does not necessarily mean increased levels of social services or infrastructure. It may mean cultivation of a greater awareness of the impact of regulations upon these groups and encouragement of incentives to provide affordable, accessible housing.

The managed risk approach is applicable to all special populations and in particular to individuals traditionally considered "undesirable" because of previous lodging in institutions or correctional facilities. As these individuals rejoin the general public, the public must be protected, but in a reasonable fashion that does not preclude the transition of people to an independent lifestyle.

The Clark County Consolidated Housing and Community Development Plan (HCD) examine the needs of special populations in detail from a short-term perspective. The Housing Element of the 20-Year Plan attempts to address needs from a long-term perspective and to propose public and private sector responses to the needs.

Neighborhood Character and Vitality

Clark County's residential neighborhoods vary in size, density, housing type and amenities. The character of a neighborhood, both its livability and identity, is closely associated with its design, the characteristics of the residents and the services provided. Regardless of the character of the neighborhood, residents generally want a feeling of comfort and security, privacy and a sense of belonging. Neighborhood character is an important element of the *Community Framework Plan* and is a central component of an approach that encourages a hierarchy of well-defined places. Over the next 20 years, preservation of existing neighborhoods will require a conscious acknowledgment of the existing nature of the people, visual character and services. New development in previously undeveloped areas should occur with an identifiable visual and service character. Infill development should occur with a visual and service character compatible with existing development.

A population diverse in its age, ethnicity, income, household structure and size and mental and physical abilities has the potential to create strong and vital neighborhoods. The contribution of individuals, through their participation in public processes or through their daily lives in a neighborhood, influences the character of a neighborhood. Acceptance and appreciation of diverse individuals is a desirable value now and in the future.

This 20-Year plan intends to promote service delivery systems that are highly visible to users, accessible and centrally located on a neighborhood district basis. A major objective of the 20-Year Plan is to ensure that housing remains affordable for all income groups. One of the advantages of the 20-Year Plan is the variety of housing options, which will be available for residents.

Infill

In order to achieve the goals of the 20-Year Plan, Clark County and other jurisdictions must encourage the use of infill parcels for homes and also must ensure that development is compatible with the surrounding neighborhood. Infill is a term used to describe development of parcels that was "passed over" in a first phase of development. Some lots in the urban area were not developed because they continued in rural uses such as horse lots, orchards, etc. In some cases, there was insufficient demand for the land or people chose not to develop right away. The physical development constraints of some parcels, such as drainage ways, steep slopes, etc. may also lead to them being "passed over." The parcels are now surrounded by development, which may be residential, commercial or industrial in nature. In some areas, infill will mean mixing housing with commercial development and may require special consideration of physical constraints, existing infrastructure and adjacent land use.

Infill development is central to achieving target densities and to reducing sprawl. Targeted infill development sites can also serve to focus public investment in areas, which have existing urban development but need additional infrastructure to support increased densities. This type of infill development could include co-locating employment centers with housing, thereby reducing vehicle miles traveled, lessening congestion and reducing the overall costs for infrastructure.

Accessory Units

Accessory units are another method for increasing density in a manner that may be affordable. Accessory housing units are complete living quarters constructed within an existing single family lot. They occur through conversion of an attic, a basement, a garage or other space. They are always secondary in size to the existing dwelling, usually less than 900 square feet. Common names for these units include granny flats, mother-in-law apartments and bachelor units. Some communities allow accessory units to be free standing. Freestanding units are generally called echo units or accessory cottages. Accessory units combine the advantages of small size, maximizing use of existing dwellings and income for homeowners as advantages. They must be carefully planned so that negative impacts on neighborhood character (such as architectural incompatibility, traffic and parking) are avoided. Clark County has had an Accessory Dwelling Unit ordinance in effect since 1992.

Variety in Neighborhoods

In order to implement the 20-Year Plan in a manner that preserves and enhances neighborhoods while also maintaining identity and livability, Clark County and local jurisdictions will need to identify the features that make an attractive residential development and ensure that future development include these features. Over time, greater breadth and variety in neighborhood design should be allowed. The flexibility should also be accompanied by consistency and predictability in the development process. A major objective of the 20-Year Plan is to ensure that housing remains affordable for all income groups. One of the advantages of the 20-Year Plan is the variety of housing options, which will be available for residents. These will include single-family homes on a variety of lot sizes, as well as multi-family homes (apartments, condominiums, town houses) and mobile homes. This variety is expected to make it easier for the home building community to develop housing in a range of prices affordable and attractive to all county residents.

Fair Share

The state GMA directs all communities to formulate policies that allow accommodation of their "fair share" of housing types and income groups. The growth management act does not explicitly require a numerical approach to fair share. In general, the fair share process should provide low and moderate income housing targets for cities, urban growth areas and county rural areas that are achievable in a progressive manner over the 20-year planning period. The allocation process should identify programs and finance mechanisms that will result in the construction and rehabilitation of housing so that the targets are meaningful. Noting the complexity of the task, Clark County determined that preparation of a fair share allocation is a complex process in and of itself and requires a participatory process supported by thorough technical analysis. Formulation of a fair share approach is supported by this plan and is an implementation technique requiring immediate funding and analysis.

The fair share principle has a close relationship to the question of neighborhood character. In accordance with the fair share concept, a community may need to provide for income groups and housing types that are not part of its traditional character. In addition, existing neighborhoods may experience a change in character in order to provide housing for persons of higher or lower income than currently exist. These changes are expected to occur throughout Clark County in a progressive manner. Achievement of a fair share concept will require adequate financing, community design, public involvement and attention to the impact of change upon residents of an area.

Rehabilitation and Preservation

The Framework Plan concept, with its emphasis on a hierarchy of identifiable places, supports the preservation and rehabilitation of existing structures. Because existing structures provide much of the character of places, their preservation into the future will provide a basis for definition of community character. Existing structures also provide an opportunity for increased residential density with minimal community disruption when accessory units are allowed within structures and on existing lots. In addition, accessory units and existing houses are often among the most affordable units in the real estate market. Rehabilitation of existing structures also reflects an environmentally conscious approach to neighborhoods with an orientation toward stewardship and reuse of existing resources.

The Community Framework Plan, with its emphasis on increased density in urban areas also acknowledges that over time existing structures may be replaced with higher density structures, mixed uses or other innovations in land use. In concept, the removal of a housing unit in residential areas either through demolition or conversion to another use should be accompanied by the replacement of a residential use in the same neighborhood district. The intent of this plan is to place a priority upon rehabilitation and preservation of structures, while acknowledging that over time not all structures can or should be retained. In every case, all costs of rehabilitation, including life cycle costs and potential tax credits, must be considered.

Housing rehabilitation must be integrated with a concern for the persons in a structure and must respond to their social and service needs. Rehabilitated strategies must be tailored to the character of the area served. Rehabilitated buildings should be safe and habitable, but should not be required to meet the same codes as new construction.

Rehabilitation strategies specifically tailored to the condition of the neighborhood, integrating physical, demographic and economic needs provide an opportunity to re-use existing housing stock. Not only is this wise conservation of natural, human and physical/cultural resources, it also preserves the units most likely to be affordable to low and moderate income persons. As a technique to provide affordability, rehabilitation cannot be overlooked or underappreciated.

It is the intent of this Chapter to advocate for safe and habitable housing for all Clark County residents. In order to accomplish this aim and also to preserve affordability, it is essential that building codes allow a tiered approach to acceptable building condition. The cost of rehabilitating structures to the same standards as new construction often is prohibitive, dissuades owners from making improvements and increases the cost of dwellings. Provision also should be made for certified historic preservation and restoration projects, allowing rehabilitation to safe and habitable levels without meeting the same codes as non-historic rehabilitation or new construction. Achievement of this objective may require a statewide approach to revision of codes and a concerted effort on the part of both the public sector (including planners and building officials) and the private sector. Currently there is a low-income home owner rehabilitation program funded with CDBG in Clark County.

Affordability

The concern for housing affordability is a nationwide issue. Much of Clark County's growth in the last 20 years can be attributed to its affordability compared to the surrounding region. Clark County and city officials see maintenance of affordability into the future as an important objective. The 20-Year

Plan, as a government document, provides an opportunity to focus on the leadership role that local government can take to work cooperatively with all segments of the community in order to increase affordability within the context of protecting public health, safety and welfare. Provision of affordable housing for the individual should not come about at the cost of the community as a whole. The interests of the community as a whole, however, include the need to provide housing which is affordable for individuals.

Consumer expectations also play an important role in affordability. Consumers in all income ranges exhibit a trend toward increasing expectations for size and amenities. These add to the cost of housing. For most consumers, a house is their single most significant financial investment. Houses are more than a place to live, they impose a significant financial responsibility upon owners and offer and important windfall profit opportunity. In the 1980s and 1990s, homeowners have become increasingly protective of the value, both real and perceived, of their homes. This is often exhibited as NIMBYism (Not In My Back Yard) where property owners strenuously object to the introduction of new housing that differs from existing housing in type or value. Many of these objections are based in the fear of people of differing incomes, race, age, or ethnicity and their perceived impacts on the value of property. NIMBYism influences housing affordability and it results in excessive delays in permit review processes or effectively excludes legitimate housing types or income groups from neighborhoods. In the planning process, this intolerance must not be underestimated but must be recognized and planned for in education programs, public hearing processes and in programs that attempt to create a sense of community that extends beyond the financial commitment of a house purchase.

Just as supply and demand interact to influence cost, housing price and local wages interact to influence affordability. A dual effort to increase local wages while also retaining moderately priced housing, will keep housing affordable to more of the population. Housing affordability is a relationship between an individual's income and the price of housing.

From the perspective of community planning, it is desirable to provide both jobs and housing within a community for the benefit of individuals and the community tax base. The relationship of jobs and housing is described in two ways:

- the wage/housing balance is the relationship between the wages earned by people in the community and the housing price. Ideally, there is a sufficient number of housing units affordable to all levels of wage earners and
- the jobs/housing balance is the relationship between the location of jobs and the location of housing. Ideally, jobs are created in locations that are convenient to housing.

In both relationships, the planning objective is to create opportunities so people who want to live close to work may do so. There is no requirement (or assurance) that the people working a particular job will live in the proximal housing, or vice versa. The two principles may be applied separately or together when looking at a community's affordability strategy. The intent of the Housing Element is to assure that communities investigate both relationships and attempt to achieve both a jobs/housing and wage/housing balance within their urban area.

Traditionally, planners have looked at a jobs/housing balance and have tried to promote housing opportunities in locations close to the workplace. This helps community diversity and reduces commute trips. Now with the interest in affordability, communities are also looking at wage/housing balances, trying to promote availability of housing that workers can afford close to their jobs.

Chapter 9 Economic Development Element of the 20-Year Plan includes general policies and strategies and also includes strategies to improve wages. Many of the Housing Element's programs and regulations provide tools to address the housing affordability issue. The local plans will address the location issue and the wage/housing issue through their statements on the need for affordable housing.

Inclusionary Zoning

An innovative tool to provide affordable housing is a voluntary inclusionary zoning program. A voluntary inclusionary program would be based on incentives for developers to build a percentage (usually 10 - 15%) of housing in their subdivision as affordable. The units would be smaller, simpler homes in a compatible design with the rest of the subdivision. In exchange for the affordable units, developers would be given incentives that would make it profitable for them, such as density incentives, expedited review, or impact fee waivers.

Inclusionary zoning does several things. It can integrate low and moderate income housing units into market rate subdivisions and avoid concentrations of low-income housing into one neighborhood. Increased density in some neighborhoods can encourage the viability of transit. Employers located in suburban communities benefit as well by having an accessible low and moderate-income workforce.

Neighborhood character is important to preserve and inclusionary zoning allows this to happen by giving the design control to the developer. Unlike infill, the affordable units are part of the subdivision plan and can be designed to be similar to their surrounding homes. This allows a community to retain its character while accommodating affordable housing. Inclusionary zoning can be an important tool to provide affordable housing to the growing number of households in Clark County that are priced out of the market. Homeownership prices have been escalating in the county, which has priced many working families out of homeownership.

Inclusionary zoning can provide homeownership opportunities for those families by making it profitable for developers to build homes that those families can afford. Inclusionary zoning, through partnerships with non-profits and public agencies, can also provide affordable rental opportunities in new subdivisions.

Several other tools are available to the public sector to help influence the availability of affordable housing, such as publicly subsidized rental housing and community land trusts to foster a permanent inventory of affordable housing. Clark County has invested in the Southwest Washington Community Land Trust.

Financing Affordable Housing

Finance of housing and in particular affordable housing is a specialized market niche that requires the cooperation of land developers, builders, government and lenders. Finance plays a vital role in the final cost of housing and its associated infrastructure. The intent of this plan is to both identify and advocate for finance mechanisms for housing and associated infrastructure that are stable. Both housing and infrastructure improvements are long-term investments. Mechanisms that are predictable over time may stabilize risk and increase the potential for project funding. This does not imply that new finance mechanisms and institutional structures will not or should not arise over time, or that interim finance mechanisms are not appropriate. Rather a long-term view of finance mechanisms is necessary. In the last twenty years, the nation's financial institutions, lending systems

and local taxing mechanisms have undergone radical change. More change should be expected in the next twenty years.

Another important component of this plan is the recognition that the public, not-for- profit and private finance sectors all play an important role in housing finance. A healthy and complete housing finance system will involve the participation of all three sectors in a manner that most appropriately reflects public purpose, capital requirements, costs, interest rates and other influences on the financial markets. Public sector financing of housing is traditionally identified with housing for the lowest income groups and involves the deepest direct subsidies. The public sector is also involved in middle and high-income subsidies to housing through tax policies. The public sector's role is changing as the need for partnership approaches to finance emerges.

The not-for-profit sector is an emerging finance sector. Working with private sector partners, the nonprofit sector can access public funds in order to meet a public purpose while the private sector partner can offer the deep financial backing required to develop housing. The Vancouver Housing Authority has partnered in this way to develop eleven properties that use bond financing to develop affordable housing for households at or below 80% of area median income. Two of the developments include tax credit equity, allowing the rents to be affordable to households at or below 60% of area median income. These properties will remain a community asset to be used for future affordable housing needs.

Private sector finance is the mainstay of housing development. Increasingly, in order to meet the needs of low and moderate income persons, the private finance institutions need the assistance of the public and not-for-profit sector. The private sector also has responsibilities to invest in communities through the Community Reinvestment Act. CRA goals often give impetus both to partnerships with the other sectors and to innovative financing techniques.

Housing Types, Housing Tenure, Sufficient Land and All Income Groups

The Growth Management Act is clear in its direction that comprehensive plans are to provide sufficient land and opportunities for a variety of housing types, ranging from site built to offsite manufactured. It is clear in its direction that special needs housing must be accommodated within the community. It is also clear that the housing and land use elements of local plans must be structured in a manner that makes it possible for persons of all income groups to have a degree of choice in their geographic search for housing. Sufficient land must be available for housing so that all income groups can exercise a choice to live in a community.

The Land Use Element, Chapter 1 of the 20-Year Plan provides, in both policy and mapped form, is a vision of the location of land uses in the future. The Land Use Element contains areas planned for residential, commercial, industrial, forest, agricultural, recreation and other land uses. The residential plan identifies areas for single and multiple family uses at a variety of densities. It includes mixed-use areas where combinations of commercial, institutional and residential uses are allowed. It also includes agricultural and forest areas where residential uses are allowed at a low density. The Land Use Element specifies target densities for the uses.

Goals and Policies

Clark County has developed general goals and policies it will use to direct housing development. The Clark County Housing policies are as follows:

2.1 Countywide Planning Policies

- 2.1.0 The county and each municipality shall prepare an inventory and analysis of existing and projected housing.
- 2.1.1 The Comprehensive Plan of the county and each municipality shall identify sufficient land for housing, including, but not limited to, government-assisted housing, housing for low-income families, manufactured housing, multifamily housing and group homes and foster care facilities. All jurisdictions will cooperate to plan for a "fair share" of the region's affordable housing needs and housing for special needs population.
- 2.1.2 Link economic development and housing strategies to achieve parity between job development and housing affordability.
- 2.1.3 Link transportation and housing strategies to assure reasonable access to multimodel transportation systems and to encourage housing opportunities in locations that will support the development of public transportation.
- 2.1.4 Link housing strategies with the locations of work sites and jobs.
- 2.1.5 Link housing strategies with the availability of public facilities and public services.
- 2.1.6 Encourage infill housing within cities and towns and urban growth areas.
- 2.1.7 Encourage flexible and cost efficient land use regulations that allow for the creation of alternative housing types which will meet the needs of an economically diverse population.

County 20-Year Planning Policies

Goal: Provide for diversity in the type, density, location and affordability of housing throughout the county and its cities. Encourage and support equal access to housing for rental and homeowners and protect public health and safety.

2.2 Policies:

- 2.2.1 Ensure that implementation measures recognize variety of family structure.
- 2.2.2 Encourage a variety of housing types and densities, including mixed-use centers, services and amenities.
- 2.2.3 Clark County shall create a voluntary inclusionary zoning program in residential and mixed-use zones_with bonus incentives strategies. A demonstration project should be created to illustrate profitability to finance institutions and developers and to illustrate the effectiveness of the policy to the public.
- 2.2.4 Develop a fair share housing allocation that provides low and moderate income housing targets for cities and urban growth areas. The program should include a housing inventory, incentives and financing mechanisms.
- 2.2.5 Preserve the character of stable residential neighborhoods through selective and innovative zoning techniques.

- 2.2.6 Encourage a variety of housing types and densities in residential neighborhoods.
- 2.2.7 Encourage infill as a development and redevelopment concept. Appropriate development regulations that accomplish infill should consider:
 - impact on older/existing neighborhoods;
 - development that is appropriate to surrounding residential density, housing type, affordability or use characteristics;
 - encouragement of affordable units;
 - maintenance of neighborhood integrity and compatibility; and,
 - provision of development standards and processes for infill regardless of the sector (public, not-for-profit, or private sectors) creating it.
- 2.2.8 Assure that policies, codes and ordinances promote neighborhood designs that are pedestrian and transit friendly and discourage reliance upon the automobile.
- 2.2.9 The county should take appropriate action to encourage the preservation and expansion of the current stock of federally subsidized affordable housing.

Washougal Urban Growth Area

- 2.2.10 The Development Code will provide for mobile and manufactured housing in a manner that ensures that such developments contribute to the design quality, landscape standards and safety of the community.
- 2.2.11 The Development Code will encourage innovative housing design for efficient, low cost, high-density housing.
- 2.2.12 The Development Code will provide for group homes and other institutional housing for special needs persons.
- 2.2.13 The City will encourage individual and neighborhood beautification programs using garden clubs, schools and other local groups.

Goal: Plan for increasing housing needs of low-income and special needs households.

2.3 Policies

- 2.3.1 Assure that codes and ordinances allow for a continuum of care and housing opportunities for special needs populations, such as emergency housing, transitional housing, extensive support, minimal support, independent living, family based living, or institutions.
- 2.3.2 Clark County or local jurisdictions shall plan for low-income and special needs housing that is well served by public transit.
- 2.3.3 Ordinances shall allow for housing for special needs populations as permitted/conditional uses, by basing siting decisions on the impact of the use upon the landscape, not on the circumstances of the occupants.
- 2.3.4 Building and site plan codes shall encourage the development, rehabilitation and adaptation of housing that responds to the physical needs of special populations.

- 2.3.5 Encourage both the public and private sector (including financial institutions) to invest in the creation of special needs housing.
- 2.3.6 Continue to coordinate the development of special needs housing with social service providers and with public agencies that provide services and capital.
- 2.3.7 Encourage provision of very low and low income housing through the use of document recording fees dedicated to affordable housing.

Goal: Provide assistance for maintenance and rehabilitation of housing for Clark County residents.

2.4 Policies

- 2.4.1 Encourage programs in deteriorating older neighborhoods that address structural, demographic and economic issues.
- 2.4.2 Work with building officials to encourage rehabilitation that provide for safe and sanitary housing.
- 2.4.3 Encourage voluntary housing rehabilitation programs.
- 2.4.4 In areas where housing is rated as fair or below by the local assessor, focus public investment on infrastructure surrounding the dwelling as well as rehabilitation efforts.
- 2.4.5 Maintain the housing stock by rehabilitation homes rated as fair or below by the local assessor.
- 2.4.6 Enhance the safety of housing by reducing the lead based paint hazard.
- 2.4.7 Encourage the creation of housing that is energy efficient, resource efficient and has high indoor air quality.

Goal: Promote an active role in affordable housing using a combination of regulatory, partnership and finance techniques.

2.5 Policies

- 2.5.1 Ensure that policies, codes and regulations, including public development covenants, provide the opportunity to site affordable housing types, in particular off-site manufactured homes and accessory units.
- 2.5.2 Enhance provision of affordable housing for persons with incomes less than 30 percent of the median family income by using available federal and state programs and by promoting private/public partnerships which focus on this affordability range.
- 2.5.3 Enhance provision of affordable housing through the development of at least one and preferably more than one, private/not for profit/government partnership with the purpose of creating housing priced for persons with incomes between 30 and 90 percent of the median family income.

Goal: Establish a secure funding mechanism to support development of affordable housing. Coordinate and concentrate public expenditures to make positive and visible impacts on targeted neighborhoods.

2.6 Policies

- 2.6.1 Assess the impacts of fee waivers, exemptions and other deductions or exclusions on the housing needs continuum.
- 2.6.2 Target the work of housing partnerships (private, not for profit or profit) to various income levels, to encourage rental and home ownership opportunities.
- 2.6.3 Encourage and stimulate financing for affordable housing including innovative, single room occupancy.

Goal: Support diversity in the mix of housing types in the community, while improving home ownership tenure.

2.7 Policies

2.7.1 Provide opportunities for new development to occur. There shall be no more than 75 percent of any single product type of housing in any jurisdiction (e.g., single-family detached residential).

Strategies to achieve these opportunities include but are not limited to:

- Minimum density for single family. These should average: eight dwelling units per acre within the Vancouver urban growth area, six units per acre with the Battle Ground, Camas, Ridgefield and Washougal urban growth area and four units per acre within the La Center urban growth area.
- Minimum density for multi-family.
- Provisions for Accessory Dwelling Units.
- Provision for duplexes in single family.
- Provisions for townhouses/row houses.
- Allowance of manufactured home parks.
- Provision for diversified housing types allowed as part of a Planned Unit Development.
- Recognition of the flexibility allowed in housing types as part of a Mixed Use Development (e.g., living units above commercial areas).
- Recognition of Assisted Living Units as a housing type.
- Provision for diversified housing types allowed as part of a mixed use development.
- Recognition of Senior Housing Units as a housing type.
- 2.7.2 Consider the dislocation impacts of programs that promote conversion of units from rentals to owner occupied.
- 2.7.3 Encourage housing that is created using the principles of Universal Design.

Strategies

The following strategies are proposed as a means to achieve the goals and policies of the Housing Element. These are a range of strategies that the county is considering and some of these strategies may be implemented over time.

- Develop a program to assist municipalities in accommodating diverse households.
- Maintain a tenant/landlord handbook to focus on tenant/landlord rights and responsibilities as well as fair housing legislation.
- Provide targeted information regarding fair housing such as booths at public events, web site and a more active role in support of fair housing regulations.
- Work with financial institutions, not for profits and the public sector to create mechanisms such as reverse mortgage programs, loan pools, housing trust funds, local funding and other tools to finance rehabilitation and construction of affordable housing.
- The county supports the extension of contracts for federally subsidized affordable housing that are up for renewal.
- The county supports the purchase of expired federally subsidized affordable housing by nonprofits or the Vancouver Housing Authority in order to preserve the affordability of the housing.
- Maintain an outreach/education program to explain all aspects of home ownership and tenancy including maintenance, repair, landscaping, credit, prevention of discrimination and predatory lending.
- Continue to enhance partnerships between public and private sector interests to work with Home Investment Partnership, state agencies, financial institutions, builders, etc., to develop housing appropriate for all groups along the housing continuum.
- Promote affordable housing demonstration projects at a variety of densities and incorporating a variety of housing types such as elderly housing, smaller cottage_one-story housing in order to illustrate what can be accomplished using local builders, financing, etc.
- Promote employer sponsored homeowner programs.
- Provide information to the lending community regarding the planning process and its impact on the development process.
- Encourage the use of low income tax credits and bond financing for equity in construction financing.
- Encourage the development of custom lending targeted for difficult to finance projects.
- Develop finance mechanisms to preserve and rehabilitate small apartment complexes (8-20 units).
- Enhance the local (nonfederal) renewable housing fund, such as 2060, for people with low incomes and special needs. Resources for the fund might be the result of bond issues, mileage, existing revenue or reallocation of the real estate excise tax (REET).
- Promote the facilitation of low-income housing projects through the use of the Development Coordinator. Provide guidance for these projects on process, available options and compliance with state and local codes.
- Develop a voluntary inclusionary zoning program.
- Develop affordable housing program to address the impacts of mobile home park conversion on residents.
- Encourage the preservation and expansion of rental housing for seniors with incomes below 60 percent (establisher federal guidelines) of the area's median income.

- Encourage weatherization of homes to reduce energy costs. Provide information, education and assistance to moderate income households who do not qualify for the federal weatherization assistance program but cannot afford the initial weatherization investment.
- Develop a Clark County Universal Design Information Guide to assist homeowners in increasing the ease and flexibility of their home.
- Consider incorporating universal design principles in Clark County's building code review process.
- Encourage the development of accessory dwelling units (ADUs) by exempting them from site plan review. Consider exempting ADUs from TIFs and PIFs.
- Consider more flexibility in the creation of duplexes by allowing them in all single family zones.
- Encourage new developments of senior housing to be within a half-mile of transit, services and retail amenities.
- Consider cohousing to be developed in single family residential zones.
- Consider assisted living facilities in single-family residential zones as a conditional use.
- Consider developing a shared housing program.
- Partner with the Building Industry Association to provide a universal-designed home and information at the Clark County Parade of Homes.
- Consider zone changes to allow more areas to support diverse housing types, including small-lot single-family, multifamily, duplexes and accessory dwelling units.



Chapter 3

Rural & Natural Resource Element

Chapter 3 Rural and Natural Resource Element

Introduction

Clark County's rural and resource areas are characterized by forests, large and small scale farms, rivers and streams that provide quality habitat for fish and wildlife and a wide variety of homes found in Rural Centers and scattered on lots in a broad range of sizes. Many rural residential communities are focused in areas with historic roots of large-scale commercial forestry, farming and mining. Also, rural residential communities are focused on scenic resources such as rivers and views or to lifestyle activities such as the keeping of horses.

The soils and terrain in the rural and resource areas create significant environmentally sensitive areas, such as steep, erodible slopes, wetlands and ground water recharge areas. Maintenance of tree cover, natural vegetation and wetlands are critical to prevention of erosion, flooding, property and habitat damage, the continued functioning of the ecosystem and preservation of rural character.

Growth Management Act

Statewide planning goals were adopted in 1990 as part of the Growth Management Act (GMA) to guide development and adoption of comprehensive plans and development regulations. A basic principle of the GMA is that growth should first be directed to areas already characterized by growth and where growth can be supported with adequate urban facilities and services. By directing development to areas where facilities are currently provided or can be efficiently provided in the future, the county can better utilize limited resources in both rural and urban areas. Additionally, by generally directing growth to such areas, Clark County can ensure that a distinct option for rural living will be available for generations to come. This Chapter satisfies the GMA's mandatory Rural Element (RCW 36.70A.070 (5)) by:

- designating rural lands "lands that are not designated for urban growth, agriculture, forest or mineral resources";
- providing a projected 20-year population growth;
- identifying rural government services;
- providing a variety of densities for residential, commercial and industrial land uses; and,
- addressing rural character of such lands, which can include critical areas as well as small-scale farm and forestry activities.

This Chapter also satisfies the GMA's Goal 8 to maintain and enhance natural resource-based industries and designated resource lands (RCW36.70A.020 (8)).

Clark County's Rural Communities

Clark County's rural area contains predominately low-density residential development, farms, forests, watersheds crucial to fisheries and flood control, mining areas, small rural commercial centers, historic sites and buildings, archaeological sites and regionally important recreation areas. Designation and conservation of a rural area maintains rural community character as a valued part of the county's diversity. It also provides choices in living environments, maintains a link to Clark

County's heritage, allows small-scale farming and forestry and helps protect environmental quality and sensitive resources.

As defined by WAC 365-195-210(19), rural lands are those areas which lie outside of urban growth areas and do not include designated long-term resource lands (agriculture, forest or mineral resources). In Clark County, the rural area represents a lifestyle based on historical development patterns and resource-based industries such as commercial forestry, Christmas trees, dairies, berry farming, orchards and mining. Today much of the county's rural lands include a mix of resource, small commercial, recreational and residential uses.

No single attribute describes the rural landscape. Instead combinations of characteristics which are found in rural settings impart the sense of what we commonly describe as rural. These factors are cumulative in nature and the more of these factors that are present influence feelings of whether a particular area is rural. In many cases these characteristics are subjective and frequently not all of them are found in each area. When describing rural conditions the public will often describe these areas in terms of a certain lifestyle. The factors listed below are those that usually describe "rural character."

- the presence of large lots;
- limited public services present (water, sewer, police, fire, roads, etc.);
- different expectations of levels of services provided;
- small scale resource activity;
- undeveloped nature of the landscape;
- wildlife and natural conditions predominate;
- closer relationship between nature and residents;
- personal open space;
- a sense of separation from intense human activity;
- a sense of self sufficiency; and
- rural commercial supporting rural area population.

Planning for rural lands in Clark County is important for the following reasons:

- to maintain a rural character;
- to recognize their location at the urban fringe, where they are susceptible to sprawl development which can overwhelm the existing character, infrastructure and way of life;
- to serve as transition areas between urban and resource uses because urban and resource uses are dependent on each other, but are not always compatible;
- to provide services and goods that support resource activities;
- to supply nearby urban residents with locally harvested resource products which are fresh and often less costly;
- to allow the efficient provision of public facilities and services by clearly delineating between urban and rural uses so that growth is directed to more compact urban centers;
- to add an important dimension to the quality of life through the existence of rural lands, open space and natural or critical areas;
- to provide for the planned future expansion of urban uses, if necessary or needed, in the rural lands that border designated urban areas; and,
- to protect and enhance streams and riparian habitat necessary for sustaining healthy populations of salmonids.

The Rural and Natural Resource Element is an integral part of the county's 20-Year Plan. This element concentrates on how future land use needs within rural and resource lands will be met and the methodology used to designate resource lands. This element emphasizes how rural and resource lands should be used in the future, supporting the ongoing and future resource activities (farming, forestry and mineral extraction) and encouraging such activities on a smaller scale in the rural non-resource lands. Together, this element in concert with the rest of the 20-Year Plan supports the long-range vision for Clark County.

Rural Population Growth

The Rural Area is not expected to accommodate large amounts of growth, but allows for low-density residential development and other traditional rural uses. The GMA requires that rural development be contained and controlled to ensure the protection of rural character, assure the visual compatibility of rural development with the surrounding rural area, protect environmentally sensitive areas and habitat and protect against conflicts with natural resource uses such as farming, forestry and mining. As of January 2015, 62,205 people resided within the rural and resource lands, or those areas outside of the urban growth areas.

It is anticipated that 12,859 people or 10 percent of the new growth will be accommodated in the rural area. The total county population projection (including urban and rural areas) over the next 20 years is approximately 577,431 persons.

Rural Land Distribution

Clark County is approximately 420,000 acres in size, of which approximately 320,000 acres are outside the Urban Growth Area. The predominate land uses outside the Urban Growth Area include forest, agriculture and single family residential development. Table 3.1 illustrates the distribution of land uses based on 1994, 2004 and 2016 zoning categories throughout the rural and resource lands.

Table 3.1 | Acreage Totals Based on 1994, 2007 and 2016 Zoning Categories

Zoning	Acres	Acres	Acres	
	1994	2007	2016	
R-5, R-10, R-20	105,102	100,117	102,213	
AG-20, AG/WL	39,802	35,760	37,460	
FR-40, FR-80	157,516	158,068	158,099	

Rural Commercial / Industrial Uses

Existing commercial and industrial uses are located within the rural and resource areas of Clark County. The majority of existing commercial uses can be found within Rural Centers (275 acres), although there is some commercial use outside these centers (85 acres). Currently, the majority of industrial land is found within the cities or the proposed urban growth areas. Industrial land within the rural area is limited to the Brush Prairie area and Chelatchie Prairie, the site of the abandoned sawmill.

Commercial and industrial lands, especially regarding the relationship with employment, are discussed in more detail in Chapter 1, Land Use and Chapter 9, Economic Development. CR-1 and IH are the zoning designations applied to rural commercial and industrial parcels.

Rural Center

Rural Centers are distinguished by small lot development with a definite edge, surrounded by a rural landscape of generally open land used for agriculture, forestry, large lot residential development, recreation and environmental protection purposes. These centers are often at the crossroads where historical development has allowed for both smaller lots and commercial uses within these nodes of development. Within these centers rural residential development is based on historical patterns. Commercial activities located at crossroads provide rural residents with an opportunity to meet many of their daily needs without going into one of the cities.

Within the Rural Centers, the following land uses have been identified: residential, commercial, industrial, public facilities, parks and open space. The commercial and industrial designations are similar to past comprehensive plan maps with some additional commercial areas designated. The commercial and industrial activities within these centers should support opportunity for job growth, tax base to support schools, rural and resource needs and not draw people from the urban area.

Commercial uses to be encouraged in Rural Centers include post offices, veterinary clinics, day care, schools, small medical practices, shopping services and housing opportunities compatible with surrounding roads and utilities. These, in turn, reinforce the center's rural character and distinct sense of community. The Rural Centers of Clark County are as follows: Brush Prairie, Meadow Glade, Hockinson, Dollars Corner, Farger Lake, Amboy and Chelatchie Prairie. Table 3.2 and 3.3 provides acreage information on existing land uses within these Rural Centers.

Table 3.2 | Acreage of Land Uses in Clark County's Rural Centers, 1994

	Land Uses in Acres				
Rural Centers	Residential	Commercial	Industrial	Public	Total
Amboy	364	23	NA	13	400
Brush Prairie	242	49	36		327
Chelatchie	279	15	229		523
Dollars Corner	223	106	NA		329
Hockinson	236	28	NA		264
Meadow Glade	1284	15	9		1,308

Source: Assessor's Data Base

Table 3.3 | Acreage of Land Uses in Clark County's Rural Centers, 2016

	Land Uses in Acres					
Rural Centers	Residential	Commercial	Industrial	Public	Total	
Amboy	325	26	0	40	401	
Brush Prairie	229	63	25	10	327	
Chelatchie	192	11	234	42	479	
Dollars Corner	219	115	0	4	338	
Fargher Lake ¹	68	21	0	4	92	
Hockinson	237	32	0	30	299	
Meadow Glade ²	482	8	0	0	490	

Source: Assessor's Data Base

¹ Fargher Lake was created in 2000.

²Meadow Glade is within the proposed Battle Ground UGA expansion.

Designation Criteria

A variety of different attributes were assessed to determine the future land uses within the rural and resource lands of the county. As required by the Growth Management Act legislation, the conservation of resource lands (agriculture, forestry and mineral) was analyzed and based on the criteria provided, resource lands were designated. After identifying resource lands, the rural lands were analyzed with regard to lot patterns and sizes and current uses, including the commercial activity within the Rural Centers. Furthermore, rural lot sizes providing for primarily residential development were considered in light of the county's ability to properly serve such sites. The GMA designation criteria for both rural and resource lands were used in the determination of minimum lot sizes for all land use designations. This determination was also based on the population allocation to these areas and the ability to provide services. These land use designations emphasize the predominate types of uses be it resource-based or more residential in nature.

The policies (pages 3-14 through 3-23) for the rural area govern the use of lands, which are not reserved for agriculture, forest, or mineral resources, nor are they designated for urban development. Land uses, densities and intensities of rural development are to be compatible with both adjacent urban areas and designated natural resource lands. A minimum lot size of one dwelling per five, ten, or twenty acres has been designated throughout the rural area based on existing lot patterns; buffers to adjacent resource lands; preservation of rural character and continued small scale farming and forestry.

The policies for the resource areas govern the use of lands that are reserved for agriculture, forest and mineral resources. More specific designation criteria for these three resource land categories are found under the following three headings: Forest lands, Agricultural Lands and Mineral Lands.

Resource Lands

Clark County is fortunate to have a variety of lands rich in natural resources including forests, farmland and deposits of gravel, sand and other minerals. These natural resources are a component of the economy, providing jobs, tax revenue and valuable products and materials for local use and export. Farmlands and forests also provide aesthetic, recreational and environmental benefits to the public while contributing to the diverse character of the county. The resource land designations are tailored to each of the resources and at a minimum address the guidelines provided by state law. Below is a brief description of the state minimum guidelines and methodology used in designating forestry, agriculture and mineral resource lands. The majority of this work was developed with the assistance of three citizen focus groups, each responsible for a specific resource.

Forest lands

The Washington Department of Commerce (Commerce) provided counties and cities with guidelines to assist in classifying and designating resource lands. These guidelines include criteria for identifying forest resource lands. According to Commerce, the private forestland grading system of the state Department of Revenue should be used in classifying forest resource lands, which includes the identification of quality soils for forestry. Long-term commercially significant forestlands generally have a predominance of higher private forestland grades.

Forest land is defined by the Growth Management Act as "land primarily useful for growing trees, including Christmas trees...for commercial purposes and that has long-term commercial significance for growing trees commercially" (WAC 365-190-060). Long-term commercial significance "includes the growing capacity, productivity and soil composition of the land for long-term commercial

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

The effects of proximity to population areas and the possibility of more intense uses of the surrounding lands are also important factors in classifying forestlands. Commerce provides seven indicators as guidelines for local governments to use in classifying forestlands:

- the availability of public services and facilities conducive to the conversion of forest lands;
- the proximity of forestland to urban and suburban areas and rural settlements: forestlands of long-term commercial significance are located outside the urban and suburban areas and rural settlements;
- forestlands consist of predominantly large parcels;
- the compatibility and intensity of adjacent and nearby land use and settlement patterns with forestlands of long-term commercial significance;
- property tax classification: property is assessed as open space or forestland pursuant to RCW 84.33 or 84.34;
- local economic conditions which affect the ability to manage timberlands for long-term commercial production and significance; and
- history of land development permits issued nearby.

The delineation of forest lands began by quantifying and mapping Commerce's seven indicators. With the exception of soil grades (Figure 21), which are uniformly outstanding throughout the county, maps were created showing parcel size, tree cover, tax status, physical structures, roads, utilities, zoning, slope and rainfall. Urban areas and areas close to urban and suburban areas where few stands of timber remain were not mapped.

The maps were used to identify forest resources within the county. The task was made easier by the Washington Forest Protection Association, which represents many large and small forest owners and the Washington Department of Natural Resources. These groups' classified lands under their ownership for designation as long-term forest resource land. Other lands were designated based on the criteria outlined above.

Agricultural Lands

Agricultural land is defined by the GMA as "land primarily devoted to the commercial production of horticulture, viticulture, floriculture, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees or livestock and that has long-term commercial significance for agricultural production" (WAC 365--190-050). Long term commercial significance "includes the growing capacity, productivity and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas and the possibility of more intense uses of the land."

Quality soils are a primary factor in classifying and designating agricultural resource lands (Figure 22A and Figure 22B). Commerce requires that the land capability classification system of the United States Department of Agriculture Soil Conservation Service be used in classifying agricultural resource land. This system includes eight classes of soils published in soil surveys. As with forestlands, the effects of proximity to population areas and the possibility of more intense uses of the land are important factors in classifying agricultural lands. Commerce provides 10 indicators to

assess these factors; however, it is left up to the local jurisdictions to interpret these guidelines in the designation of resource lands:

- the availability of public facilities,
- tax status,
- the availability of public services,
- relationship or proximity to urban growth areas,
- predominant parcel size,
- land use settlement patterns and their compatibility with agricultural practices,
- intensity of nearby land uses,
- history of land development permits issued nearby,
- land values under alternative uses and
- proximity to markets.

The classification and designation of agricultural land began by quantifying and mapping Commerce's ten indicators. Maps were created showing prime and unique soil, agricultural cover, forest cover, parcel size, tax status, physical structures, roads, utilities and zoning. Heavily forested areas and urban areas were not mapped.

The maps were used to identify Clark County's most productive farmland. This process identified farm areas that included major patterns of high quality soils and agricultural activity in areas with generally larger parcels. These lands became candidate areas for consideration as agricultural resource lands of long-term commercial significance. Commerce's guidelines again were used to more closely examine candidate areas with serious limiting factors and to determine the relative value of candidate areas for agricultural use. The Vancouver Lake lowland candidate area, with its high quality of soils, large parcels and wildlife values, was placed in a special class. The remaining candidate areas were divided into three tiers.

After completion of this work, looking at forestry and agriculture on an individual basis, it was found that there were a number of areas where farming activity was occurring adjacent to forestry and vice versa or where parcels were not identified up because both farming and forestry activity was occurring on the site, with neither being the predominant use. Therefore, all the "edges" of the resource areas were re-evaluated. Reconsideration of the land use designations in these areas was done by a task force in 1998. Through that review, much of the 35,000 acres of land designated as Agri-Forest under the 1994 Comprehensive Plan was redesignated to Rural 20, 10 or 5, representing 20, 10 or 5-acre minimum lot sizes. Approximately 3,500 acres of the land was disputed by an alternative task force contingent. Consideration was remanded back to the county by the courts. The Clark County Board of Commissioners voted to retain the rural designation rather than a resource designation.

GMA allows the use of innovative zoning techniques in areas designated as agricultural lands of long-term commercial significance (RCW 36.70A.177). Listed among five examples is the use of cluster zoning. A clustering provision was included in the 2016 Comprehensive Plan update.

Mineral Lands

The Growth Management Act (RCW 36.70A.040 (3) (b)) requires Clark County and each city within it to designate mineral resource lands and to adopt development regulations conserving those resource lands from which the extraction of minerals occurs or can be anticipated. The Act

specifically requires the designation of "mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals."

There are three key issues to the designation and conservation of mineral resource lands. These issues include:

- defining what types of mineral resources are potentially significant in the county;
- defining the extent and long-term significance of aggregate that is needed to meet the demand of the county's projected population; and,
- determining how to balance a variety of land uses within mineral resource areas.

The mineral resources identified and mined in Clark County consist of two aggregate types: sand and gravel (round rock) and quarry rock.

The primary uses of sand and gravel deposits are aggregate for Portland cement "ready mix" concrete and asphalt concrete, drain rock, base rock and fill. There are four principle sand and gravel mining areas in Clark County: the North County-Woodland Area, East Fork of the Lewis River, Orchards and East Mill Plain. The deposits in the northern half of the county are primarily recent alluvium and Pleistocene terrace deposits. The thickness of the alluvial deposits ranges from a few feet to tens of feet, while the terrace deposits are approximately 30-60 feet thick. The rocks have not been weathered and are fairly hard.

The most abundant gravel deposits lie in the southern portion of the county (Orchards, East Mill Plain). These are primarily recent alluvium and Pleistocene flood deposits. The gravel here is uniform in size, un-weathered and contains a high percentage of hard, non-reactive rocks. This area also has little overburden and a close proximity to markets. Deposits range from 60 to 100 feet thick, with thickness generally decreasing with distance north from the Columbia River. The expansion of the Vancouver and Camas urban areas has made a major portion of this resource permanently inaccessible.

The second type of aggregate quarry rock is typically used as base rock for roads, riprap and jetty rock or as crushed aggregate. In southwest Washington, most quarry rock is of marine volcanic origin, characterized by poor strength and durability due to contact with sea water during extrusion of lavas. However, there are several locations in Clark County where high-quality basalt bedrock is found capable of producing substantial amounts of durable aggregate. Currently seven rock quarries are in active operation in the county. With the exception of Fisher Quarry, most rock quarries are located in the north and east portions of the county a considerable distance from the market.

Mineral resource lands of long-term commercial significance were designated as part of the 1994 Comprehensive Plan as required by WAC 365-190-070. Mineral resource lands consist of areas that appear to contain the resource, based on the best available geological information; are primarily not within environmentally sensitive areas (e.g., 100-year floodplain, high quality wetland areas); and are at least 80 acres in size, or include at least one 40-acre parcel or two 20-acre parcels which are currently vacant. Parcel size is not a requirement if the land is adjacent to an existing mining site.

The Department of Natural Resources published an updated map showing known and potential mineral resources in 2005 (Figure 23). Identified mining areas are designated with the Surface Mining Overlay (SMO) District, which is an overlay zone that can be combined with any other zoning district. Areas where the SMO was applied were updated in 2014.

Development standards in Title 40 were revised in 2014 to help maintain a balance between surface mining and adjacent land uses. Extraction of mineral deposits in the Surface Mining Overlay District is a permitted use outright, while rock crushing, asphalt plants and concrete batch plants can be approved as conditional uses. Special standards include maximum permissible noise levels, hours of operation, drainage provisions and land restoration requirements. The provisions of this district also apply to surface mining operations that were active prior to the adoption of these standards.

Critical/Sensitive Lands

Identification and protection of critical areas is a key component of the GMA legislation. The critical areas component, including maps, definitions and policies, can be found in **Chapter 4, Environmental Element**. Critical areas can be found within the urban areas and within the rural and resource areas of the county. These critical areas include flood hazard areas, geological hazard areas, wetlands, shoreline and surface waters, wildlife conservation areas, aquifer recharge areas and scenic areas.

Parks and Open Space

Realizing the importance of parks and recreation to the livability of the community, Clark County adopted its first Parks Comprehensive Plan in 1965. Clark County owns and operates approximately 4,006 acres of park and open space lands. These lands are divided into these categories: neighborhood, community and regional parks and open spaces. This includes 12 regional parks, three special facilities acres and conservation areas and greenway systems. Many of these parks are in the rural area, including Moulton Falls, Lewisville Park, Lacamas Lake, Siouxon and Whipple Creek Park. Recreational facilities are discussed in more detail in Chapter 7, Parks and Open Space.

Master Planned Resorts

The Growth Management Act allows counties to permit master planned resorts. A master planned resort means a self-contained and fully integrated planned unit development, in a setting of significant natural amenities, with primary focus on destination resort facilities consisting of short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreational facilities. A master planned resort may include other residential uses within its boundaries, but only if the residential uses are integrated into and support the on-site recreational nature of the resort (RCW.36.70A.360).

Capital Facilities and Utilities

Capital facilities are the basic services that the public sector provides to support land development including roads, public schools, fire and police protection, parks, libraries and utilities. Within the rural area, water availability is provided either through private wells or by Clark Public Utilities. Sewage disposal is predominately provided by on-site septic disposal. However, there are areas, which have sanitary sewer systems due to failures of the septic systems, such as Meadow Glade and Hockinson. Utilities are discussed in greater detail in Chapter 6, Capital Facilities and Utilities.

Transportation

Land use and transportation are closely linked, even within the rural and resource areas. Within the rural area, the functional classification for roads includes Rural Principal Arterials, Rural Minor Arterials and other rural roads such as Major and Minor Collectors and local roads. Analysis of rural road definitions and deficiencies is discussed in the Transportation Element Chapter 5.

Equestrian Element

Clark County recognizes the contributions of equestrian livestock husbandry, training, competition and recreation activities to the overall rural quality of life in Clark County. These activities provide a

lifestyle value to numerous county residents and visitors and economic revenue for rural residents and business owners. There are numerous organizations that support the equestrian industry by providing education and promoting equine husbandry, including the Clark County Extension Service, Future Farmers of America, 4H, the Clark County Executive Horse Council, the Mt. St. Helens Chapter of the Backcountry Horsemen and numerous other special interest equestrian-related groups.

As growth continues to occur throughout the county, open land to sustain livestock and existing or potential trail segments may be lost to uncoordinated land development and road improvements. Also, requirements of the Endangered Species Act may limit livestock management choices and the location of new equestrian facilities on land constrained by large riparian corridors. Additionally, with the county's emphasis on preserving agricultural and forestry lands within the Resource and Rural Districts, the development of large equestrian facilities of a size and scale that would be incompatible with agricultural and forestry practices within these districts should be discouraged.

The Equestrian Community plays a vital role in Clark County's economy and rural character. Clark County is unique in the Portland metropolitan area for having many one- to ten-acre exurban parcels. These properties, many of which host equine uses, are a premium attraction for some. According to the Clark County Equine Impact report (Clark County Executive Horse Council, 2009), 4.8% of Clark County households own equines. The estimated number of equines in Clark County is approximately 28,902.

Community Framework Plan

Clark County adopted the Community Framework Plan in April 1993. The Framework Plan established a consensus among the citizens of the county about the lands, which would eventually be committed to urban uses and those which should remain rural. The Framework Plan is not a detailed plan, but a plan that provides a framework through policies that guide the development of the 20-Year Plan. The Framework Plan policies are discussed in Chapter 1 Land Use Element. Policies that relate to rural lands can be found in most elements of the plan including Land Use, Rural and Resource Lands, Transportation, Public Facilities, Utilities, Parks and Open Space, Economic Development and Community Design.

Goals and Policies

3.0 Countywide Planning Policies

- 3.0.1 The county shall recognize existing development and provide lands, which allow rural development in areas, which are developed or committed to development of a rural character.
- 3.0.2 The county and each municipality shall cooperate to ensure the preservation and protection of natural resources, critical areas, open space and recreational lands within and near the urban area through adequate and compatible policies and regulations.

County 20-Year Plan Policies

Rural Areas - General

Goal: Compatible with maintaining rural character and rural (levels of service) (services), ensure that lands outside of urban growth areas are viable places to live and work.

3.1 Policies

- 3.1.1 Clark County shall maintain and protect the character of rural lands defined as those lands outside of urban growth areas by promoting:
 - Large lot residential development compatible with adjacent farming, forestry and mining and not needing urban facilities and services;
 - Non-residential development in Rural Centers;
 - Economic development activities consistent with the preservation of rural character;
 - Agriculture, forestry and mining activities;
 - Regional parks, trails and open space;
 - Environmental quality, particularly as evidenced by the health of wildlife and fisheries (especially salmon and trout), aquifers used for potable water, surface water bodies and natural drainage systems; and
 - Historic character and resources including archaeological and cultural sites important to the local community.
- 3.1.2 Land use designations shown on the Clark County Comprehensive Plan Land Use Map include areas that are rural in character and meet one or more of the following criteria:
 - Generally characterized by a larger lot size;
 - Do not require urban levels of public services;
 - Opportunities exist for farming and mineral activities;
 - The area is contiguous with other rural lands or can serve as a buffer between large-lot residential development and resource activities or urban areas;
 - The area is not needed to provide capacity for population or employment growth in the 20-year forecast; and,
 - The area has outstanding scenic, historic, environmental, resource or aesthetic values.
- 3.1.3 Clark County's Rural Area is considered to be permanent and shall not be redesignated to an Urban Growth Area until reviewed pursuant to the Growth Management Act (RCW 36.70A.130(3) and Countywide Planning Policy 3.0.
- 3.1.4 Master Planned Resorts may be approved in an area outside of established Urban Growth Boundaries consistent with the requirements for plan amendments in the Clark County Code.
- 3.1.5 Encourage cooperative resource management among farmland and timberland owners, farm foresters, rural residents, environmental groups and local, state and federal resource agencies for managing private and public farm and forestlands and public resources.
- 3.1.6 Rural development shall not be allowed unless appropriate facilities and services (water, storm drainage, roads and approved sanitary treatment) are in place or planned.

- 3.17 Rural lands generally shall be served by septic tanks and individual wells (when public water is not available). Wastewater treatment shall be provided by individual on-site treatment systems or approved alternative sewage treatment technologies.
- 3.1.8 Sewer lines shall not be extended into rural areas except to correct existing health hazards. Sewer lines shall not be extended until other means for treatment, such as state approved alternative technologies, have been assessed and determined not to be feasible due to environmental constraints.
- 3.1.9 Rural and Resource land designations within the Columbia River Gorge National Scenic Area are consistent with the requirements of the National Scenic Area legislation. The minimum lot size requirements and uses shall only be authorized to the extent that they are consistent with the National Scenic Area legislation established to implement the requirement of the scenic area.
- 3.1.10 Activities in rural areas shall be conducted in a manner consistent with the Clark County Shoreline Master Program, if in shoreline jurisdiction.

Rural Lands

Goal: Compatible with maintaining rural character and rural (levels of service) (services), provide for lands outside of urban growth areas that are predominately for residential uses.

3.2 Policies

- 3.2.1 Rural lands as designated on the Comprehensive Plan Land Use Map are generally for rural residential development, for accessory uses such as home businesses and for small-scale resource uses.
- 3.2.2 Land designated as Rural are characterized by a range of lot sizes and generally are not characterized by high-quality soils.
- 3.2.3 Those areas with a Rural Comprehensive Plan designation of Rural 5, Rural 10, and Rural 20 shall have residential densities of one dwelling unit per 5, 10 and 20 acres (R-5, R-10 and R-20), respectively.
- 3.3.4 Clustering of parcels is allowed consistent with platting and zoning requirements and the Clark County Code.
- 3.2.5 If schools and related facilities need to be sited in rural areas, preference shall be to locate first in Rural Centers and then, as a last resort, in areas designated as Rural.

Rural Centers

Goal: Maintain the character of the designated Rural Centers within the surrounding rural area.

3.3 Policies

- 3.3.1 Rural Centers as designated on the Comprehensive Plan Land Use Map are distinct areas that:
 - provide a focus for the surrounding rural area that is appropriate in character and scale in the rural environment;

- provide appropriate commercial developments to serve adjoining rural areas;
- provide services to tourists and other visitors recreating in the area; and,
- provide an opportunity to develop facilities that can function as a community center in those areas where an incorporated town no longer serves that role for the surrounding area.

3.3.2 Rural Centers:

- are generally characterized by smaller lot patterns;
- have residential development and small-scale business that provides convenience shopping and services to nearby residents;
- have access to arterial roadways; and,
- are surrounded by rural landscapes of generally open land used for agriculture, forestry, large lot residential, recreational and environmental protection purposes.

Rural Centers identified on the Comprehensive Plan Land Use Map are: Amboy, Brush Prairie, Chelatchie Prairie, Dollars Corner, Fargher Lake, Hockinson and Meadow Glade.

- 3.3.3 Rural Centers shall have a residential density of between one unit per acre and one unit per five acres (RC-1, RC-2.5 and R-5) based on the historical pattern in the area. In no case shall density exceed one unit per acre.
- 3.3.4 Rural commercial development should support the needs of rural residents and natural resources activities rather than urban area uses. Appropriate uses for Rural Centers include:
 - resource-based industrial development consistent with rural character and levels of service:
 - commercial uses supporting resource uses, such as packing, first state processing and processing which provides value added to the resource products may occur in resource areas; and,
 - post offices, veterinary clinics, day care, small medical practices and schools that
 provide employment, shopping services and housing opportunities within Rural
 Centers. The scale should be compatible with surrounding roads and utilities,
 which reinforce the rural character and distinct sense of community.
- 3.3.5 If schools and related facilities need to be sited in rural areas, preference shall be to locate first in Rural Centers and then, as a last resort, in areas designated as Rural.
- 3.3.6 Rural Center designation criteria are as follows:
 - an area proposed as a Rural Center had to have existed as of July 1, 1990, identifiable by pre-existing small lot development patterns, natural features as boundaries and access to arterials;
 - proponents of a new Rural Center shall submit to the county a petition signed by at least 60 percent of the property owners of the land within the boundaries of the proposed new Rural Center;
 - an expansion of an existing Rural Center shall be considered and evaluated by the county through the annual review process under CCC40.560 and pursuant to RCW36.70A.070(5)(d).

• a new Rural Center shall be considered and evaluated by the county through the docket process under CCC40.560 and pursuant to RCW 36.70A.070(5)(d).

Forest lands

Goal: To maintain and enhance the conservation of productive forestlands and discourage incompatible uses associated with forestry activities.

3.4 Policies

- 3.4.1 Forest lands as designated in the Comprehensive Plan Land Use Map shall be managed primarily for the conservation of long-term commercial significant forest lands for productive economic use.
- 3.4.2 Primary land use activities on forest lands are commercial forest management, agriculture, mineral extraction, public recreation uses and other non-forest related economic activities relying on forest lands.
- 3.4.3 Those areas with Forest Tier I and Forest Tier II Comprehensive Plan designations shall have a residential density of one dwelling unit per 80 and 40 acres (FR-80 and FR-40 respectively).
- 3.4.4 Clustering of parcels is allowed consistent with platting and zoning requirements and the Clark County Code.
- 3.4.5 Forest activities shall be encouraged by:
 - supporting land trades that result in consolidated forest ownership;
 - working with forest landowners and managers to identify and develop other incentives for continued forestry; and,
 - taking into consideration in capital improvements plans maintaining public roads adequate to accommodate the transport of forest commodities.
- 3.4.6 Land use activities within or adjacent to forestland shall be located and designed to minimize conflicts with forest management and other activities on forestland to include the following:
 - residential development on lands adjacent to designated forestland shall be located away from the forestland and should provide for a buffer between residential and forest activity;
 - special development standards for access, lot size and configuration, fire
 protection, water supply and dwelling unit location shall be adopted for
 dwellings within or adjacent to designated forest lands; and
 - notification shall be placed on all plats and binding site plans that the adjacent land is in resource use and subject to a variety of activities that may not be compatible with residential development.
- 3.4.7 Special purpose districts and local improvement districts in lands designated in the 20-Year Plan for forest use will only be used when the services or facilities provided by the special purpose district or local improvement district through taxes, assessments, rates or charges directly benefit those forest lands.

- 3.4.8 Resource activities on forest lands performed in accordance with county, state and federal laws should not be considered public nuisances nor be subject to legal action as public nuisances.
- 3.4.9 In identifying and designating commercial forest land, the following factors shall be taken into consideration: operational factors, growing capacity, site productivity and soil composition, surrounding land use, parcel size, economic viability, tax status and public service levels that are conductive to long-term continuance in forest management.

Agricultural Lands

Goal: To maintain and enhance productive agriculture lands and minimize incompatibilities with adjacent uses.

3.5 Policies

- 3.5.1 Agriculture lands as designated in the Comprehensive Plan Land Use Map shall be managed primarily for the conservation of long-term commercial significant agriculture lands for productive economic use.
- 3.5.2 Primary land use activities on agriculture lands are commercial agriculture management, agriculture-related uses, temporary worker facilities, forest activities and other non-agriculture related economic activities relying on agriculture lands.
- 3.5.3 Those areas with Agriculture Comprehensive Plan designations shall have a residential density of one dwelling unit per 20 acres (AG-20).
- 3.5.4 Clustering of parcels is allowed consistent with platting and zoning requirements and the Clark County Code.
- 3.5.5 Those areas with Agriculture/Wildlife Comprehensive Plan designations shall have a residential density of one dwelling unit per 160 acres (AG/WL).
- 3.5.6 Agriculture activities shall be encouraged by:
 - limiting residential development in or near agricultural areas;
 - limiting public services and facilities which lead to the conversion of agricultural lands to non-resource uses;
 - maintaining public roads in capital improvement plans to accommodate the transport of agricultural commodities;
 - cooperative resource management among agricultural land owners, environmental groups, state and federal resource agencies and federally recognized Native American tribes for managing the county's public and private agricultural lands;
 - supporting land trades that result in consolidated agricultural ownership;
 - encouraging the maintenance of agricultural lands in current use property tax classifications, including those classifications as provided for in RCW 84.34 and CCC Chapter 3.08;

- working with agricultural landowners and managers to identify and develop other incentives for continued farming; and,
- encouraging agricultural land use as a clean industry incorporating tax breaks, right to farm, purchase of development rights, transfer of development rights and other economic means and develop strategies to support farming practices.
- 3.5.7 Minimum parcel size should be adequate to allow reasonable and economic agricultural use.
- 3.5.8 Special purpose taxing districts and local improvement districts in lands designated in the 20-Year Plan for agricultural use will only be used when the services or facilities provided by the special purpose district or local improvement district through taxes, assessments, rates or charges, directly benefit those agricultural lands.
- 3.5.9 Land use activities within or adjacent to agricultural land shall be located and designed to minimize conflicts with agricultural management and other activities on agricultural land, to include the following:
 - residential development adjacent to agricultural land shall be approximately buffered from agricultural activities;
 - public services and utilities within and adjacent to designated agricultural areas should be designed to prevent negative impacts on agriculture and allow for continued resource activity;
 - notification shall be placed on all plats and binding site plans that the adjacent land is in resource use and subject to a variety of activities that may not be compatible with residential development.
- 3.5.10 Agricultural activities performed in accordance with county, state and federal laws should not be considered public nuisances nor be subject to legal action as public nuisances.

Mineral Lands

Goal: To protect and ensure appropriate use of gravel and mineral resources of the county and minimize conflict between surface mining and surrounding land uses.

3.6 Policies

- 3.6.1 Support the conservation of mineral lands for productive economic use by identifying and designating lands that have long-term commercial significance for mineral extraction and that are not already characterized by urban growth.
- 3.6.2 Designate mineral resource lands based on the following:
 - geological, environmental and economic factors;
 - surrounding land uses, zoning and parcel size; and,
 - the suitability of public access roads to be used as haul roads.
- 3.6.3 Ensure that mineral extraction and processing operations minimize and mitigate any significant adverse impacts on water, fish, wildlife and nearby land uses.

- 3.6.4 Ensure that the use of adjacent lands will not interfere with the continued use of designated Mineral Resources lands for the extraction of minerals in the accustomed manner and in accordance with best management practices.
- 3.6.5 Establish notification standards whereby developments on lands in the vicinity of designated mineral resource lands are given notice that they are locating in or adjacent to a potential mining area.
- 3.6.6 The Surface Mining Overlay shall not be designated within Rural (R) zones except to allow the expansion of an existing mining site.
- 3.6.7 Surface mining other than Columbia River dredging shall not occur within any 100year floodplain except for projects with an approved Habitat Conservation Plan.

Urban Reserve Lands

Goal: To identify a limited set of lands outside of but adjacent to urban growth areas that will be first priority lands for inclusion as needed urbanizable lands in subsequent UGA expansions.

3.7 Policies

- 3.7.1 If designated, Urban Reserve areas shall abut established urban growth areas in all cases.
- 3.7.2 Those areas with an Urban Reserve Comprehensive Plan overlay designation shall have a residential density of one dwelling unit per 10 and 20 acres. The Urban Reserve Overlay is implemented by Urban Reserve-10 (UR-10) for future urban residential development and Urban Reserve-20 for all other types of future urban development. When applied, the underlying zoning will remain.
- 3.7.3 Urban reserve areas shall be based on the following:
 - the efficiency with which the proposed reserve can be provided with urban services in the future;
 - the unique land needs of specific urban activities assess from a regional perspective;
 - the provision of green spaces between communities;
 - the efficiencies with which the proposed reserve can be urbanized;
 - the proximity of jobs and housing to each other;
 - the balance of growth opportunities throughout the region so that costs and benefits can be shared;
 - the impact on the regional transportation system; and,
 - the protection of designated agricultural and forest resource lands from nearby urbanization.
- 3.7.4 All divisions of land in the urban reserve area shall be subject to the land division review process and result in parcels of 10 acres or more in size.
- 3.7.5 Urban reserve lands shall be the first priority lands for inclusion in urban growth boundaries.

- 3.7.6 Prior to the inclusion of the urban reserve area in urban growth areas, the county will:
 - work with cities to prepare and adopt general transportation, sewer and drainage system plans for the urban reserve area which identify areas with the urban reserve area appropriate for siting of public facilities; and,
 - work with cities, special districts and school districts to prepare and adopt plans for siting of public facilities and schools.

Rural Industrial Land Bank

GOAL: Support the creation of a rural industrial land bank consistent with the growth management act to provide a master planned location for living wage jobs and industries supporting rural communities in an environmentally sensitive manner.

3.8 Policies

- 3.8.1. Designate a rural industrial land bank that is compatible with surrounding land uses and that creates long term value for both the community and the industrial users. The maximum size of industrial land bank sites shall be 700 acres.
- 3.8.2 Develop rural major industrial developments within the designated rural industrial land bank that promotes sustainable development by minimizing our environmental impacts, protecting natural resources and reducing waste.
- 3.8.3 Anticipate changing market and industrial needs and maintain the flexibility required for a variety of light industrial uses within the rural industrial land bank.
- 3.8.4 Ensure rural major industrial development within the rural industrial land bank respects and preserves critical areas functions and values and develops a stormwater solution that mimics the natural hydrology of the site while developing buffers both internally and externally. Incorporate low impact development strategies.
- 3.8.5 Ensure infrastructure requirements are met to maximize the land value. Coordinate infrastructure analysis and planning with public and private agencies so that their long term planning can anticipate the future light industrial development within the rural industrial land bank.
- 3.8.6 Develop a roadway and site infrastructure backbone within the rural industrial land bank that allows for phased development based on the market needs. Accommodate rail access.
- 3.8.7 Promote a level of predictability for future light industrial developers and the County through the flexibility of standards and consolidated reviews.

Freight Rail Dependent Uses

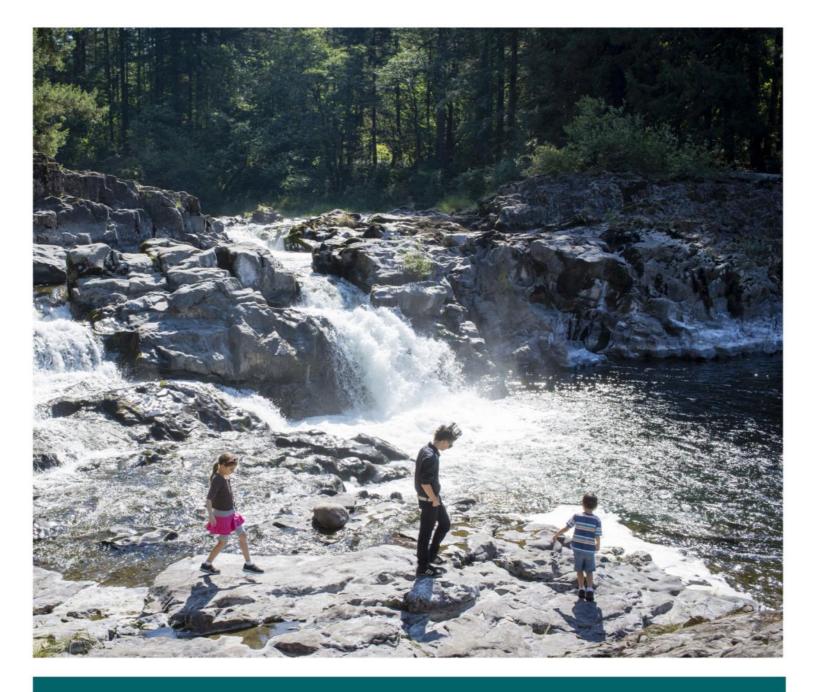
Goal: Support freight rail dependent uses where the use is dependent on and makes use of the short line railroad, as defined by the Surface Transportation Board.

3.9 Policies

3.9.1: Support freight rail dependent uses in rural lands, as well as agriculture, forest and mineral resource lands, where the use is dependent on and makes use of the short line railroad within the county.

3.9.2: Freight rail dependent uses will be allowed on parcels with a freight rail dependent use overlay, where such uses minimize impacts on adjacent rural and resource uses.

3.9.3: Freight rail dependent uses means buildings and other infrastructure that are used in the fabrication, processing, storage, and transport of goods where the use is dependent on and makes use of an adjacent short line railroad. Such facilities are both urban and rural development. Clark County may include development of freight rail dependent uses on land adjacent to a short line railroad in the transportation element of this plan. The County may also modify development regulations to include development of freight rail dependent uses that do not require urban governmental services in rural lands.



Chapter 4

Environmental Element

Chapter 4 Environmental Element

Introduction

Clark County contains a diverse mixture of natural resources, parklands and open spaces. Of the county's 656 square miles, almost half is in forest and agricultural lands. Air, water and land resources are essential to the very existence of human development. They influence every aspect of quality of life, from the local climate to the availability of safe drinking water to flood control and drainage patterns to recreational opportunities and to the habitat that we share with plants and animals.

The Environmental Element provides specific environmental goals and requirements as the basis for development regulations and general goals for land use planning and parks acquisition. The Environmental Element addresses land development throughout the entire unincorporated area of the county and includes various environmental policies that apply to the entire county.

Relationship of the Environmental Element to other elements and plans

The Growth Management Act (GMA) recognizes that environmental protection is important to the citizens of the State of Washington. The GMA contains three goals that relate to the natural environment:

- **Environment.** This goal requires protection of the environment and enhancement of the state's high quality of life, including air and water quality.
- Open Space and Recreation. This goal encourages the retention of open space, the
 development of recreational opportunities, the conservation of fish and wildlife habitat,
 increasing access to natural resource lands and water and the development of parks. (See
 Chapter 7 for a more complete discussion of county parks, recreation and open space.
- Natural Resource Industries. This goal requires the maintenance and encourages enhancement of natural resource-based industries, including productive timber, agricultural and fisheries industries. The conservation of productive forest lands and productive agricultural lands is encouraged, while incompatible uses are discouraged. (See Chapter 3 for a more complete discussion of the county's natural resource industries).

All development activities create some level of impact on the air, water and land resources of the county. The benefits of development activities are easily measured in terms of economic benefits to the county or its cities. However, there are often unintended consequences of development that are not included in the environmental balance sheet. It is these consequences that are addressed through the programs and policies in the Environmental Element.

The ultimate goal is to recognize the functions and values of the natural environment around us and to maintain or improve those functions and values, independent of the type of development that is proposed. The Environmental Element of the 20-Year Plan is important because protection and enhancement of our environment has the potential to conflict with other 20-Year Plan elements.

Environmental Conditions and Conservation Programs

Critical Areas

The GMA specifically lists five "critical areas" for which local governments must designate and develop protection and enhancement programs. These five are fish and wildlife habitat, wetlands, aquifer recharge areas, flood hazard areas and geological hazard areas. Protection of critical areas and resource lands is a key goal and purpose of the GMA and is a longstanding goal of the Clark County community. The county contains a variety of critical areas, ranging in size and scope from smaller, discrete areas which provide habitat for threatened, sensitive or endangered wildlife species, to broadly based aquifer recharge areas, which encompass most of the lowland area within the county. The soils and terrain in the rural and resource areas create significant environmentally sensitive areas, such as steep, erodible slopes, wetlands and ground water recharge areas (Figure 1). Many types of critical areas geographically overlap.

The benefits that these critical areas yield range from providing wildlife or vegetative ecosystem habitat to limiting or mitigating human concerns over water pollution and flood hazards. Vegetation retention is critical to protecting streams and riparian habitat necessary for sustaining healthy fish and wildlife populations. Critical areas also provide the benefits of recreation, aesthetic enjoyment and water supplies. Maintenance of tree cover, natural vegetation and wetlands are critical to prevention of erosion, flooding, property and habitat damage, the continued functioning of the ecosystem and preservation of rural character.

Unlike residential, commercial, industrial, or other uses, critical areas do not constitute a separate 20-Year Plan or zoning designation, unless they are under public ownership. Policies and programs used to protect and conserve these areas involve a range of federal, state and local programs and standards. Most policies used to address critical areas are therefore regulatory or incentive-based and are applied to privately held lands.

One effective way of protecting critical lands is through public ownership. Publicly owned lands within the urban area are largely confined to parks which emphasize recreational opportunities. Outside urban areas, most publicly owned lands emphasize wildlife and other critical land values, although access and passive recreation may be allowed. Protecting sensitive lands through public ownership requires that substantial funds be raised for acquisition and maintenance of the land.

Prohibitions or limitations on structural development also provide critical lands protection. Such programs currently in place in Clark County include the Shoreline Master Program; flood hazard, wetlands protection and habitat conservation ordinances; and prohibitions against placement of structures within designated unstable slope areas. As part of the development review process, the State Environmental Policy Act (SEPA) authorizes the imposition of a wide range of conditions which can prohibit or limit construction within certain areas or enact other mitigation measures to protect environmentally sensitive areas.

Fish and Wildlife Habitat

Most of the land and water area of Clark County provides some form of fish or wildlife habitat. Much of this area is in park land, resource production, or open space. Clark County has several hundred miles of streams and rivers. Under state and federal law, these streams are designated to support a wide range of "beneficial uses" that include water supplies, fish and wildlife habitat and recreation. The ability of these streams to meet these beneficial uses is more generally considered stream

health. Stream health has not been comprehensively measured for all streams in the county and much of this work is underway but not yet complete. Available data on stream health shows that streams range from near pristine conditions in remote areas of the Cascade Foothills to fair to poor health in urban areas. Most rural streams could be categorized as being in fair to good health.

There are few lakes in Clark County. Aside from small manmade ponds and seasonal wetland ponds, the only significant lakes within or bordering the county are Vancouver Lake, Battle Ground Lake, Lacamas Lake, Shillapoo Lake, Mud Lake, Lake Merwin and Yale Lake. These areas provide essential habitat for a variety of fish, wildlife and plant species.

Fish of the lower Columbia River are either resident or migratory species. Most migratory species, such as salmon, shad, smelt and steelhead, are anadromous, meaning that they hatch in freshwater, migrate to the ocean as fry, mature in the ocean and then return to freshwater streams to spawn. In addition to critical areas, the GMA requires that local jurisdictions address the requirements of anadromous fish species. There are some resident species, such as sturgeon, whitefish and resident trout, that migrate long distances within freshwater streams to feed or spawn.

Certain areas of critical habitat are readily identifiable because of their protected status under public ownership. The Ridgefield National Wildlife Refuge contains over 5,000 acres of Columbia River floodplain consisting of marshes, lakes, woodlands, grasslands and croplands, which provide migration and wintering habitat for Pacific Flyway waterfowl, as well as many species of water birds, raptors, shore and songbirds. The concentration and diversity of native and migratory bird species in the Refuge are the largest in the county; and includes sandhill cranes, a state endangered species. Several species of mammals, reptiles and amphibians can also be found in the Refuge.

Steigerwald Lake National Wildlife Refuge, located in the southeast corner of the county, includes 627 acres of Columbia River bottomland, consisting of reed canary grass marshes, riparian woodlands and improved pastures. Among the species inhabiting the Refuge are raptors, geese and marsh, water and riparian woodland songbirds. The Vancouver Lake lowlands area provides over 1,000 acres of wildlife habitat within close proximity to Vancouver. Much of this land is owned by the Washington State Department of Fish and Wildlife, which has prepared a management plan to determine how the land will be used.

Wildlife habitat is not restricted to those areas already under public ownership. Riparian corridors and other areas adjacent to or including surface water bodies clearly provide the most wide ranging and significant wildlife habitat. The Washington Department of Fish and Wildlife has identified 36 sites within the county providing game, non-game or fish habitat, of which, 33 are along riparian corridors or other water bodies. Their program provides management recommendations for both priority species and habitat (Figure 2).

Fish and Wildlife Habitat Conservation Programs

The county's habitat conservation ordinance (HCO; CCC Chapter 40.440) was adopted in 1997 and significantly updated in 2006. The stated purpose of the ordinance is to: further the goal of no net loss of habitat functions and values within designated habitat areas by protecting environmentally distinct, fragile and valuable fish and wildlife habitat areas for present and future generations, while also allowing for reasonable use of private property. This ordinance intends to conserve the functional integrity of the habitats needed to perpetually support fish and wildlife populations.

The county updated the HCO in 2006 to reflect the best available information as required by the GMA and has continued to update the ordinance as needed to remain consistent with the new guidance from the Washington Department of Fish & Wildlife (WDFW). Development proposals involving impacts to priority habitats and species often require consultation with WDFW.

Endangered Species Act

Congress passed the Endangered Species Act (ESA) in 1973. It requires the recovery of species that are listed as threatened or endangered. Clark County currently has populations of salmonids that are listed as threatened with extinction under the ESA. Steelhead were listed in March 1998; Chinook and chum in March 1999. Coho were listed as threatened in 2005 and Pacific eulachon were listed in 2010.

Clark County also has populations of, or the potential for, other important fish and wildlife species threatened with extinction under the ESA. These species include gray wolf (listed in 1974), Columbian white-tail deer (listed in 1968), northern spotted owl (listed in 1990), streaked horned lark (listed in 2013), yellow-billed cuckoo (listed in 1997), Oregon spotted frog (listed in 2014), bull trout (listed in 1999), golden paintbrush (listed in 1997), water howelia (listed in 1994) and Bradshaw's lomatium (listed in 1998). Protecting, conserving and enhancing critical stream and riparian habitat and other priority habitats are essential to supporting and recovering threatened and endangered fish and wildlife populations throughout the county.

States, counties and other jurisdictions must comply with the federal Endangered Species Act when species are listed by avoiding harm to any member of the species or the habitat upon which they depend. County policies and regulations must support recovery of those species. The goal is to make Clark County a county where sustainable populations of salmon and other native species are a testimony to a healthy ecosystem; where our well-being is supported by the integrity of the ecosystem we share with other living species; and where, by ensuring healthy habitat for all inhabitants of Clark County, we ensure the quality of life we value.

In 1998, the state adopted the Salmon Recovery Strategy (RCW 77.85) as a guide to statewide salmon recovery efforts. Regionally, the Lower Columbia Fish Recovery Board developed and the National Marine Fisheries Service (NMFS) adopted a salmon and steelhead recovery plan for the lower Columbia River and its tributaries in Washington in 2010. This plan is called the "Washington Lower Columbia Salmon Recovery and Fish &Wildlife Sub-basin Plan". The two overarching goals for this plan are to: 1) restore the region's fish species listed as threatened under the federal Endangered Species Act (ESA) to healthy, harvestable levels and 2) protect and enhance other fish and wildlife species that have been adversely affected by human actions, including the development and operation of the Federal Columbia River Power System. The Lower Columbian Fish Recovery Board and its partners have been actively implementing recovery efforts for the past 18 years. Clark County has implemented or partnered on implementation of many projects targeting recovery efforts during this time.

Clark County complies with all local state and federal regulations pertaining to the protection of ESA listed fish and wildlife populations during the delivery of capital construction projects. Clark County also participates in the Regional Road Maintenance ESA Program (Regional Program). The Regional Program guidelines describe physical, structural and managerial best management practices designed so that when they are used, singularly or in combination, they reduce road maintenance activities' impacts on water and habitat. Participation in the program has resulted in a biological opinion from NMFS and approval under Limit 10 of the ESA section 4(d) rule.

In addition, land use planning will also accommodate state and federally listed wildlife species through implementation of the county's Habitat Conservation Ordinance, Wetland Protection Ordinance and State Environmental Policy Act land use regulations. Protecting and enhancing critical upland habitat is essential to supporting and recovering terrestrial wildlife populations throughout the county.

Water Quality

Clark County has an abundance of streams and groundwater supplies. Groundwater aquifers are capable of providing huge amounts of water to industry, business, residences and agriculture. The federal Clean Water Act lists the "beneficial uses" of the United States' rivers, streams and lakes. Many beneficial uses are features valued in Clark County and are required to be protected and restored under the National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit. These are:

- Surface water supply for industrial water supply, agricultural water supply, domestic water supply and stock watering;
- fish and wildlife production and habitat, including spawning, rearing, migration and harvesting;
- recreation and enjoyment, including contact recreation (swimming, wading, etc.), noncontact recreation (boating and sport fishing) and aesthetic enjoyment; and
- commerce and navigation.

Urbanization influences stream biological health. The Washington Department of Ecology Stormwater Management Manual for Western Washington (2012, revised 2014) describes the effects urbanization has on water bodies. It states that before forests were cleared for farms and towns, rainfall was largely absorbed into the ground where it replenished streams as springs and seeps. As settlement occurs, trees are removed and replaced by fields, buildings and roads. Instead of soaking into the ground and returning to streams as springs, rainwater runs off rapidly and greatly increases stream channel erosion and degrades stream habitat. During the summer, stream flow may be reduced to low levels because less water is available to springs and seeps that feed the stream. The manual also states that along with changing stream flows, urbanization adds various pollutants to surface water and groundwater.

The combination of increased runoff and pollutants in stormwater runoff drastically alters stream habitats. Pesticides washed off landscaped areas can do great harm to aquatic insects that feed fish. Stormwater runoff from roads, business, industrial facilities and residences degrades streams by flushing pollutants that harm fish and other aquatic life. The volumes of water running off paved areas also wash away streambed sediments and the creatures that live there. If sediment is allowed to wash off construction projects and agricultural land it can smother aquatic creatures in the streambed. In order to begin to address this problem, a set of regulations was added to the Clean Water Act in 1987 to decrease problems caused by stormwater runoff. The Clark County Stormwater Management Program is a direct response to that mandate.

Clark County performs many activities to meet requirements of a Washington Department of Ecology permit to discharge stormwater to county water bodies and groundwater. The program contains the following main program elements:

- regulatory program for development and pollution control;
- operation and maintenance of storm sewers and roads to reduce polluted runoff;

- inspection of business sites and stormwater facilities for compliance with pollution control standards;
- watershed planning;
- monitoring, data management and evaluation to provide information to manage stormwater:
- public involvement and education about untreated stormwater runoff and pollutant reduction; and
- stormwater capital improvements to reduce the potential harm caused to streams by stormwater runoff.

The regulatory program largely consists of implementing development regulations (CCC Chapter 40.386) requiring stormwater control facilities such as ponds and low impact development practices for development projects. Chapter 40.386 also requires construction projects to minimize erosion and sediment washed into streams from land development and land-disturbing activities. The water quality ordinance (CCC Chapter 13.26A) addresses pollutants associated with everyday activities such as disposal of used motor oil and vehicle wash water. In 2012 (and amended in 2014), the Department of Ecology published the Stormwater Management Manual for Western Washington, which provides best available science for stormwater requirements relating to development and re-development, stormwater maintenance standards and pollution control standards for existing businesses. The county's 2013 NPDES municipal stormwater permit required the county to update its stormwater and erosion control ordinance (CCC Chapter 40.386 Θ) and stormwater manual to be equivalent with the state stormwater manual. The 2015 county stormwater manual also implements the state mandate for development projects to use low impact stormwater facilities where feasible.

The operation and maintenance program involves maintenance and repair of county stormwater controls such as ponds and grassy swales, cleaning of catch basins and sweeping of roads. The purpose is to reduce the amount of pollutants discharged from the system and make sure it operates as designed. The program also includes a program to inspect and ensure that privately operated stormwater facilities are properly cleaned and maintained. The NPDES stormwater program also performs stormwater monitoring and watershed-scale stormwater planning.

Reducing stormwater pollution requires that individuals prevent their homes and businesses from becoming pollution sources. For that reason, information and education is a major part of the stormwater program.

Large areas of the county were developed without the stormwater control facilities that prevent pollution and excessive amounts of runoff from harming streams. The stormwater program includes a program to plan and build stormwater control facilities and stream restoration projects to address stormwater problems created before the program began in 1999. The stormwater capital plan was last adopted in 2013 and will be updated every six years. The program is mapping all existing storm sewer systems and beginning to plan and build projects using stormwater fees from each home, business and government property in unincorporated Clark County.

Wetlands

Wetlands provide valuable wildlife habitat and include marshes, swamps, fens and bogs that perform several other functions. Wetlands can aid hydraulics by moderating water overflow, advancing groundwater recharge and enhancing water quality. Water quality is enhanced by preventing erosion, removing sediments and filtering nutrients and other pollutants from runoff and slowing

down the flow of water which allows time for pesticides and other chemicals to break down. Wetlands also provide vegetative habitat and human recreational and open space amenities.

Some mapping of the highest quality wetlands in Clark County has been completed. Countywide mapping covering the full range of wetland classes is available in a generalized form through National Wetland Inventory and hydric soil mapping; these inventories are inaccurate on a site-specific basis. More precise wetland boundaries are not usually known until site specific analyses are conducted, normally during the review of individual development proposals. Most wetland areas are in low elevations areas within relatively close proximity of rivers and streams, or associated floodplains (Figure 3 and Figure 4).

Wetlands Conservation Program

The county's wetland protection ordinance (WPO; CCC Chapter 40.450) was adopted in 1992, significantly updated in 2006 and then again in 2014. The stated purpose of the ordinance is to:

- further the goal of no net loss of wetland acreage and functions;
- encourage restoration and enhancement of degraded and low quality wetlands;
- provide a greater level of protection for higher-quality wetlands;
- maintain consistency with federal wetland protective measures;
- avoid over-regulation by limiting regulatory applicability to those development proposals which significantly impact important wetlands; and,
- minimize impacts of wetland regulation on private property rights.

The county recently updated the WPO in 2014 to reflect the best available information as required by the GMA, more specifically to reflect changes made to the Washington State Wetland Rating System for Western Washington. This classification system rates wetlands from Category 1 to Category 4 based on their characteristics and the county regulates based on a combination of the type of wetland and the intensity of the use around it. Development proposals involving wetlands often need review by the Army Corps of Engineers (under Section 404 of the Clean Water Act) and the State Department of Ecology.

Wetlands Mitigation Banking

Wetlands mitigation banking is a method of mitigating a decrease in or loss of wetland function by providing wetland functions and values (e.g. creating, restoring, enhancing and/or protecting wetlands) away from the site of a proposed development project. A wetland mitigation bank generates credits that can be used for wetland mitigation for individual projects with wetland impacts. Mitigation banking has a number of benefits over other mitigation strategies including:

- consolidation of small isolated mitigation projects into larger, more ecologically significant sites;
- higher likelihood of long-term mitigation success; and,
- efficiency in permit review for projects using bank credits.

Wetland mitigation banking is not a means of reducing the protection and conservation of wetlands in the urban area. It is only a method to improve mitigation success at a regional scale and streamline permit review for projects that have wetland impacts. The criteria used to evaluate and permit wetland impacts are independent of the type of mitigation proposed and, instead, focus on the benefits and design of the project. A key element to developing an effective wetland mitigation banking program is to maintain a good inventory of existing and historic wetlands in order to allow

mitigation bank developers to locate sites that are well suited to bank development. Another key element is to ensure that the wetland permitting process gives due consideration to the use of mitigation bank credits when they are available. Clark County has an application for mitigation banks. State regulations have been proposed for the program and the county will pursue a program when the regulations are finalized.

Aquifer Recharge Areas

An aquifer is a body of rock (generally sand, gravel, or fractured basalt in Clark County) that transmits groundwater in useable quantities to wells. Almost all of the county's industrial water needs and about 47 percent of public water needs are met by wells located near the Columbia River, where the overlying deposits consist mostly of coarse sand and gravel. Water infiltrates the soil and percolates through surface rocks into the water Table and then travels deeper downward into aquifers, which are water sources in most parts of the county. Recharge of aquifers is often greatly reduced in urban areas because most surfaces are impervious, preventing rainfall from entering the soil. Some aquifer recharge occurs in urban areas through dry wells and septic system drain fields, but these methods may decrease groundwater quality by allowing contaminants to enter the soil.

Since most of the lowland area of the county is covered with permeable alluvial, or sand, gravel and silt deposits, there is no one identifiable point of recharge. Virtually the entire county pervious area functions as an aquifer recharge area to some extent. The most critical aquifer recharge areas are those located near production wells (Figure 6).

Aquifer Protection Programs

Clark County residents and commerce are almost totally dependent on water pumped from relatively shallow aquifers. Both the quantity and quality of this water is critical. The county has several programs to protect aquifer recharge amounts and water quality. The stormwater and erosion control ordinance (CCC Chapter 40.386) for development projects require stormwater infiltration wherever soil conditions make it feasible. This preserves recharge when sites are covered with buildings and pavement. Stormwater regulations also require that this infiltrated stormwater be treated to remove pollutants.

The water quality ordinance (CCC Chapter 13.26A) prohibits discharging pollutants to surface water and groundwater. The county implements the ordinance by actively educating businesses and the public on acceptable ways to manage everyday pollutants such used oil, paint and dirty wash water.

The critical aquifer recharge area (CARA) ordinance (CCC Chapter 40.410) identifies critical areas and places special requirements on higher risk development projects in those areas. The CARA ordinance was updated in 2005 to reflect best available information as required by the GMA.

Source-based policies are typically used to provide protection to larger and less clearly defined critical areas, such as aquifer recharge areas, or to address other concerns related to ground or surface water quality. Sewage regulations, particularly those regarding septic system uses, are administered by Clark County Public Health and are directed toward the protection of critical areas which are not necessarily at the site of the potential pollutant source. Stormwater management policies and programs administered by Clark County are similarly intended to address potential adverse water quality impacts beyond the source site.

Flood Hazard Areas

Flood hazardous areas are another category of critical area and are often associated with riparian corridors. Flood hazard areas are defined and delineated by the Federal Emergency Management Agency (FEMA) to include all areas subject to flooding during 100-year flood events. This definition encompasses areas along most rivers in the county. These areas provide wildlife habitat and hydraulic functions. Building limitations in these areas limit damage to persons and property from the periodic floods (Figure 5).

Flood Protection Programs

It is recognized that approximately 90% of all disasters in the US are flood-related. The avoidance of damage from flooding is accomplished by the application of zoning_regulations and building ordinances. The National Flood Insurance Program (NFIP) was created by Congress in 1968 and significantly amended in 1973 to:

- reduce loss of life and property caused by flooding;
- reduce rising disaster relief costs caused by flooding; and
- make federally-backed flood insurance coverage available to property owners.

The program was designed to achieve these goals by:

- requiring that new and substantially improved buildings be constructed to resist flood damages;
- guiding future development away from flood hazard areas;
- transferring the costs of flood losses from the American taxpayers to floodplain property owners through flood insurance premiums; and
- prohibiting new development in designated floodways that would aggravate flooding.

The National Flood Insurance Program is a voluntary program based on mutual agreement between the federal government and the local community. In exchange for adopting and enforcing a flood plain management ordinance, federally-backed flood insurance is made available to property owners throughout the community.

The National Flood Insurance Act of 1968 created the Federal Insurance Administration and directed it to conduct Flood Insurance Studies (FIS) that identify flood-prone areas within the US and establish and map flood risk zones within those areas. The studies provide technical data for the adoption of floodplain management measures required for NFIP participation by a community and for development of flood-risk information needed to establish flood insurance premiums.

In March of 1977, the county adopted a flood hazard ordinance (CCC Chapter 40.420). Of the county's 86 Flood Rate Insurance Maps (FIRM), more than half were prepared in 1982 and almost 90% of the maps dated prior to 1986. Clark County, in partnership with FEMA, completed updates to the FIRMS and to Chapter 40.420 in 2012. Changes were made to the flood hazard ordinance to bring the ordinance into compliance with federal requirements and to comply with the best available information requirement of the GMA.

Geologically Hazardous Areas

Geologically hazardous areas are not environmentally-valued critical areas such as wetlands or wildlife habitat, even though many contain critical fish and wildlife habitat protected by other ordinances. The primary function of development limitations within geologically hazardous areas is

to limit potential adverse impacts to persons and property. The primary geologically hazardous areas are those of steep and or unstable slopes, which are often, but not exclusively, found along the stream corridors.

Geohazard Protection Programs

The county's geologic hazard areas (geohazards) ordinance (CCC Chapter 40.430) was enacted in 1997. Maps have been produced showing earthquake potential and steep slopes with the susceptibility to landslides and erosion (Figures 7, 8 and 9). The geohazards ordinance was updated in 2005 to reflect better seismic hazard vulnerability information throughout the county and to meet the best available information of the GMA. The county adopted the International Residential Code in 2005. New, more stringent and relevant seismic codes will be incorporated into the permitting and building ordinances as necessary.

Other Hazard Mitigation Programs

Natural hazards (such as floods and landslides, earthquakes, volcano, severe weather, drought, winter storms and wildfires) to Clark County's natural resources, parklands and other environmentally critical areas cause millions of dollars of damage every year. Clark County Emergency Services Agency (CRESA) is currently leading a multi-agency collaborative effort, including the county and its jurisdictions and partners, to update the Multi-Hazard Mitigation Plan. The Multi-Hazard Mitigation Plan is designed to be the foundation of a long-term strategy to reduce disaster losses and break the cycle of damage, reconstruction and repeat damage.

As established by the planning partnership, the purpose of the Multi-Hazard Mitigation Plan is to define natural hazard risk and, through collaboration and partnerships, establish strategies and actions for reducing the impacts of disasters in Clark County.

Goals of the plan include:

- Reduce and prevent the loss of life and property.
- Protect public services and critical facilities from the impacts of natural disasters.
- Increase public awareness of vulnerability to natural hazards and educate on risk reduction strategies.
- Promote community resilience.
- Protect environmental resources and utilize natural systems to reduce natural hazard impacts.
- Develop and implement cost-effective mitigation strategies.

The Multi-Hazard Mitigation Plan strategies and actions are of such value they are to be incorporated into the ordinances and codes of the county wherever possible in order to make natural hazard mitigation a sustainable part of everyday life.

The inclusion of identified Hazard Mitigation strategies and action in order to safeguard the county's natural resources are an important part of the 20-Year Plan. Upon final approval, the county and its Multi-Hazard Mitigation Plan partners will include proven mitigation strategies and actions as one of the primary methods of alleviating damages from future natural disaster hazards. The strategies and actions for hazard mitigation are to be enforceable, sustainable and maintainable for the protection of the land and its residents.

The update to the Multi-Hazard Mitigation Plan is currently scheduled to be completed in July 2016. Once the update is complete and upon approval by the participating jurisdictions, the plan will be

forwarded to the Federal Emergency Management Agency (FEMA) for review and final approval. Once approved, participating jurisdictions are eligible for Federal Mitigation Grant monies. The county will look to include applicable strategies and action in regularly scheduled updates to the 20-year Plan.

Shorelines

The shorelines of rivers, streams and lakes of Clark County are important and sensitive natural resources and encompass other critical areas such as wildlife areas, wetlands and flood areas. They provide habitat, drainage, recreational opportunities, transportation and economic opportunities, some of which may conflict with each other. The State Shoreline Management Act of 1971 (SMA) defines shorelines as being within 200 feet of the ordinary high water mark or associated wetlands of all rivers with mean annual flow of 20 cubic feet per second (cfs) or more and lakes greater than 20 acres in size. This definition encompasses the majority of shorelines for most of the rivers and lakes within Clark County, although shorelines of smaller water bodies also provide many of the same functions.

Clark County's Shoreline Master Program (SMP) was originally adopted in 1974. The Department of Ecology issued new shoreline rules in 2003. The county and its cities formed a Shoreline Coalition in 2008 and applied for an Ecology grant to update SMPs across the county. The county met the deadline of December 1, 2011 to have an SMP submitted to Ecology. The program was approved and took effect in September 2012. Chapter 13 of the Comprehensive Plan contains the county's shoreline policies; CCC Section 40.460 contains shoreline development regulations.

Columbia River Gorge National Scenic Area

Clark County contains a variety of scenic areas, typically located near major river systems. The most prominent is in southeast corner of the county, where approximately 6,000 acres east of the City of Washougal was designated by Congress as part of the Columbia River Gorge National Scenic Area (NSA) in 1986. From 1988 to 1996 specific land use regulations intended to foster the scenic, natural, cultural and recreational functions of these and other similarly designated areas within the Gorge were administered by the US Forest Service and an appointed Columbia River Gorge Commission and staff. In 1996, Clark County adopted an implementing ordinance, which was deemed consistent with the management plan for the NSA by the Gorge Commission and the Secretary of Agriculture. This approval allows for county administration and jurisdiction over these lands.

The gorge management plan was updated in 2004 and an implementing ordinance adopted by the Gorge Commission in 2005. As a result, the county updated its scenic area ordinance (CCC Chapter 40.240) in 2006. One of the ongoing efforts in the NSA is a program to improve air quality in the gorge. There has also been a program underway to evaluate whether or not the management plan and its regulations are meeting the intent of the scenic area act.

Regional Conservation and Greenway Systems

Regional Conservation and Greenway Systems are the "resource-based" open space land types identified in the Clark County Open Space Commission Final Report (August 1992). The Open Space Commission identified 17 functions for open space that were divided into economic, resource, urban-based and other categories and subsequently identified a number of "open space categories" as being of greater importance including the following:

- river systems and associated flood plains, which provide low-intensity recreation, natural vegetation, shore-lines, fisheries and wildlife habitat (for example, the North and East Forks of the Lewis River, Lacamas Lake and Creek, Washougal River, Burnt Bridge Creek and Salmon Creek);
- Columbia River lowlands, providing benefits similar to river systems and flood plains, but of a much larger scale than other county river systems;
- Cascade foothills, providing significant wildlife habitat and vegetation, sensitive water features, remote/low intensity recreation; and
- dispersed open space areas which are site specific and combine resource, economic and urban based areas.

Conservation and greenway systems may be managed for a variety of uses, depending on the attributes of the site. Potential uses include wildlife habitat, low impact access for wildlife viewing and environmental education, regional trails and where appropriate, picnic areas, boat ramps, fishing areas and regional parks. The Greater Clark Parks District coordinates development of management scenarios with the state and federal wildlife agencies. Planning for and developing a park and recreation system which serves the diverse recreational interests of the residents of Clark County and fosters an environmentally sensitive approach toward preservation and enhancement of the county's valuable natural resources such as fish and wildlife habitat, wetlands and water quality. (See Chapter 7 for more details.)

Air Resources

Clark County is located in an air shed that is bounded on the south by West Linn, Oregon, on the north by Woodland, Washington, on the west first by the west Portland hills and then further west by the Coast Range and on the east by the Cascade Mountains. The area experiences mild-wet winters and warm-dry summers. This region is susceptible to concentrations of air pollution near human activity centers. The Vancouver/Portland metropolitan area is considered to be a single interstate air shed by the U.S. Environmental Protection Agency. In topographic terms, the area is located within a bowl fully surrounded by mountains. The region also experiences strong atmospheric summertime inversions that can result in stagnant air conditions and the risk of incurring high air pollution levels. Air pollutants come from a wide variety of sources. Pollutants are often placed into specific source categories:

- Point sources, which are traditionally stationary facilities like power plants, lumber mills, rock quarries and other manufacturing plants and processes. These facilities can generate relatively large volumes of air pollutants from a single location, but their emissions are generally well controlled by air permitting programs which often require pollution control equipment. Clark County's industrial facilities (major sources) contribute less than 5 percent of the county's total ozone precursor air pollutants (e.g., volatile organic compounds (VOCs) and nitrogen oxides (NOx)) and about 7 percent of the total fine particle pollution (PM₂₋₅).
- Area source emissions (such as from wood stoves/fireplaces, outdoor burning, commercial or industrial solvents, dry cleaning chemicals, gas stations, auto body shops, gasoline-powered lawnmowers/blowers/trimmers, household paints, etc.), come from relatively small, individual sources of pollution, which are usually spread over a broad geographic area. Area sources collectively contribute significant levels of emissions, about 18 percent of the county's total VOCs and NOx and about 73 percent of the total fine particle pollution (PM_{2.5}).

Mobile sources include cars, trucks, planes, trains, ships, boats and mobile off-road equipment. In Clark County, pollutants generated by mobile sources in 2001 accounted for 57 percent of the ground

level VOCs and NOx and were also responsible for 85 percent of the total carbon monoxide pollution. In addition, mobile sources emit 19 percent of the county's total PM_{2.5} pollution and significant quantities of numerous other (gaseous) toxic air pollutants. Mobile sources are one of Clark County's largest producers of air pollution Air Quality Conservation Programs

Clark County in the past has exceeded federally defined threshold pollution levels for ozone and carbon monoxide more frequently than allowed by the National Ambient Air Quality Standards (NAAQS) established by the Environmental Protection Agency (EPA). On March 15, 1991, the Governor of Washington designated the urban area of the Vancouver portion of the Portland-Vancouver Interstate Air Quality Maintenance Area as a non-attainment area for ozone (O3) and carbon monoxide (CO).

The Southwest Clean Air Agency (SWCAA) developed air quality maintenance plans to address CO and ozone problems and submitted them to the state in 1995. The maintenance plans, with the identification and implementation of transportation control measures based on the land use assumptions of the 20-Year Plans, had to demonstrate that there would be no violations of NAAQS. Within the non-attainment area, state and federal regulations require additional limitations on outdoor burning and on the sale and use of wood stoves and fireplaces for heating. As a result, outdoor burning was prohibited in non-attainment areas and all new woodstoves purchased in Clark County are required to be certified as meeting stringent statewide emission standards. In addition, most vehicles are subject to regular emission inspection and maintenance tests. However, these testing requirements are being gradually phased out under state law. Testing and other mitigation measures have helped to keep air pollution levels within the NAAQS since 1995. Both the ozone and CO maintenance plans were updated in 2006 and these plans remain in effect today with controls and contingencies in place to maintain compliance with the NAAQS.

Summertime ozone air quality has been good in recent years due in part to relatively moderate summertime temperatures. But even through the hottest periods of last summer there were no exceedances of either the current ozone standard or the newly proposed stricter standard. Looking forward, growth in vehicle miles traveled (VMT), a continuing warming trend and a stricter standard will keep pressure on the county's air resources with respect to summertime ozone and smog pollution. CO levels have not been a problem in Clark County since the original maintenance plan was implemented in the mid-to-late nineties. The decreasing trend in monitored CO levels led to the removal of Clark County's CO monitor in 2006. The 2006 CO maintenance plan update stipulates that as long as the inventory of CO emissions from on-road mobile sources remains below 2002 levels, CO monitoring will not be required.

Clark County has historically been in attainment with the NAAQS for fine particulate matter (PM_{2.5}) since it was established in 1997. The county had a reasonably adequate buffer for maintaining compliance with the standard until it was tightened significantly (i.e., lowered 46%) in 2006. Since that time, 40 exceedance days have been documented at the Vancouver compliance monitor. These high levels of particulate pollution in recent years have put the area at risk of being in non-attainment with the standard. All 40 of the exceedance days have occurred during the winter months on cold days with stagnant air conditions. Chemical analyses of the air samples on these high PM_{2.5} days have indicated that about half of the PM_{2.5} pollution is from wood smoke. Recognizing the potential impact of wood smoke on air quality statewide, the legislature has provided funding to help homeowners replace old wood stoves with new cleaner heat sources and permanently prohibited outdoor burning within all urban growth areas effective in 2007.

Mobile sources continue to be the major source of Clark County's air pollution, contributing 76 percent to the total of NO_x , VOC, CO and $PM_{2.5}$. Mobile sources are also major contributors to greenhouse gas emissions. The next largest contributing category is area sources, contributing 15 percent to the total. This category includes largely the activities of individual citizens carrying out their daily activities. This category includes largely the activities of individual citizens carrying out their daily activities. These activities are called "area sources" because they are individually small sources of air pollution. However, because there are so many citizens the emissions are collectively significant. The most significant component of this category is residential wood burning for home heating (wood stoves, inserts and fireplaces), contributing 10 percent of the total air pollutants and 47 percent to the total $PM_{2.5}$ pollution. Industry's air pollution emissions follow behind the transportation and area source categories. Under existing air quality regulations, new industry locating in the county is required to use the best available control technology to reduce its own emissions.

Land use planning decisions need to incorporate air quality impacts as one of the decision making tools when making land use designations. In particular, emissions of odor causing pollutants which can create a public nuisance must be considered during this process. Computer software exists to perform this activity (e.g., quantify and incorporate air quality impacts into land use planning decisions). Ensuring clean, healthy air year round for Clark County and preserving our scenic panoramas on hot summer days means there needs to be viable alternatives for citizens to perform their daily activities without relying on gasoline powered motor vehicles. Once the citizen has made the decision to turn on their motor vehicle, a high percentage of the vehicle's air pollution emissions are emitted in those first few minutes of vehicle usage.

Designing land use so that it is possible for residents to not have to turn on their motor vehicle needs to be a goal. A combination of walking, using a bicycle or riding a bus needs to be a convenient possibility for performing short shopping trips and getting from home to work. Similarly, integrating bus stops and schedules with the needs of major employers in the Downtown, east Clark County and eventually north Clark County areas is a key to minimizing air pollution emissions from the transportation sector. Ultimately, planning for a transportation system where bus stops also connect to light rail for transportation throughout the region is the single most important means to improve air quality in the county.

Goals and Policies

A variety of programs and policies exist for the protection and conservation of environmentally critical areas. Due to the geographical overlap of many of the types of critical areas, there is a functional overlap of many of the policies. A program to address one type of critical area, such as a building limitation within a floodplain, may often offer some additional protection for other critical areas, such as wildlife habitat or wetland functions.

Washington State Goals and Mandates

As noted earlier, the GMA requires the identification and protection of critical areas (RCW 36.70A.170 and 172). Critical areas can be found within the urban areas and within the rural and resource areas of the county. These critical areas include: flood hazard areas, geologic hazard areas, wetlands, shoreline and surface waters, habitat conservation areas, aquifer recharge areas and scenic areas. Mapped critical areas can be found in Figures 1-11. In addition, the GMA requires that jurisdictions

give special attention to the preservation and enhancement of anadromous fisheries. Policies outlined below are designed to meet the requirements of the GMA.

4.1 Countywide Planning Policies

- 4.1.1 Urban growth areas shall be established consistent with the protection of the environment and the enhancement of the county's high quality of life, including air and water quality and the availability of water. The establishment of urban growth areas shall also be done in a manner consistent with the preservation of land, sites and structures that have historical or archeological significance.
- 4.1.2 The county and each municipality shall cooperate to ensure the preservation and protection of natural resources, critical areas, open space and recreational lands within and near the urban area through adequate and compatible policies and regulations. These policies and regulations shall provide for the long-term viability of terrestrial habitat functions and natural watershed processes identified by scientifically-based assessment.

County 20-year Planning Policies

Goal: Protect and conserve environmentally critical areas.

4.2 Policies

- 4.2.1 Identify the variety and diversity of natural environments and incorporate conservation of such areas into all land use decisions.
- 4.2.2 Encourage habitat protection that will provide a diverse and sustainable population of fish and wildlife.
- 4.2.3 Protect groundwater and surface water as a resource for drinking water, commerce, recreation and for wildlife by:
 - minimizing the amount of impervious area created by developments;
 - promoting the use of non-toxic pesticides and fertilizers;
 - minimizing potential application of sludge or animal waste material in or near sensitive areas such as aquifer recharge areas or surface water bodies as required by state law;
 - providing stormwater management service as specified in the Capital Facilities and Utilities Element (Chapter 6) of the 20-Year Plan; and
 - using biological engineering methods to control stream bank erosion.
- 4.2.4 Reduce risk to life and property from hazards associated with development in geologically hazardous and floodplain areas by:
 - prohibiting or discouraging development in areas of steep slopes or other areas with high potential for geological hazards;
 - limiting the removal of vegetation during development in order to reduce storm runoff and erosion;
 - requiring geotechnical studies to determine construction methods and technologies necessary to further public safety in geologically hazardous areas including landslide areas and steep slopes. Development design and construction

- technology used shall be appropriate to the soil limitations of the particular site; and.
- prohibiting development in the floodway. In the flood fringe, development impacts shall be mitigated through the use of appropriate construction designs, methods and timing. Floodplain functions will be protected to the extent possible.
- 4.2.5 Limit clearing of vegetation from stream banks and restore the integrity of stream banks where degraded by development.
- 4.2.6 Encourage the use of northwest native plants in landscaping, particularly adjacent to critical areas and discourage the use of invasive non-natives (e.g., English ivy).
- 4.2.7 Coordinate with other jurisdictions and agencies to protect environmentally critical lands, particularly ecosystems and watershed processes that span jurisdictional boundaries. Encourage consistency regarding methods of critical area definition, mapping, mitigation strategies and policy treatment.
- 4.2.8 Facilitate public education and outreach programs explaining the variety of critical area and habitat resources that exist in Clark County and the benefits and opportunities for conservation, protection and hazard mitigation.

Goal: Protect and recover endangered species within Clark County.

4.3 Policies

- 4.3.1 In cooperation with the Washington Department of Fish and Wildlife (WDFW), establish appropriate avoidance, minimization and mitigation measures that functionally replace or improve affected species habitat.
- 4.3.2 Solicit review assistance from the (WDFW) for development proposals directly affecting state or federal sensitive, threatened, or endangered species.
- 4.3.3 County operations shall be conducted to meet the requirements outlined in any species recovery program.

Goal: Protect, conserve and recover salmonids within Clark County.

4.4 Policies

- 4.4.1 Restore and maintain properly functioning ecosystem conditions for salmonids in all county waters. Implement recovery plans adopted by the National Marine Fisheries Service (NMFS) and the Lower Columbia Fish Recovery Board.
- 4.4.2 Salmon protections in both urban and rural areas shall be applied using recovery strategies based on best available science and adaptive management principles.
- 4.4.3 Use incentives and public/private partnerships in land use activities to encourage salmon-friendly development and habitat restoration efforts.
- 4.4.4 Restore streams and fish passageways in urban sub-basins and other appropriate watershed basins.

Goal: Require sewer service within urban growth areas and discourage septic use.

4.5 Policies

- 4.5.1 All new development in the urban area should be served by a connection to a public sewer system.
- 4.5.2 Septic systems in urban areas are to be phased out.
- 4.5.3 In rural areas, wastewater treatment shall be provided by individual on-site treatment systems or approved alternative sewage treatment technologies.
- 4.5.4 Existing sewer systems in rural centers shall not be expanded beyond rural center boundaries.
- 4.5.5 Sewer lines shall not be extended except to correct existing health hazards and provided that other means for treatment, such as state approved alternative technologies, have been assessed and determined not to be feasible due to environmental constraints.

GOAL: Protect the waters of the county through a stormwater management program that minimizes impacts from stormwater run-off.

4.6 Policies

- 4.6.1 Minimize impacts to waters of the county through an effective stormwater management program that includes stormwater basin planning and promotion of onsite infiltration to effectively address stormwater in developed and urbanizing areas.
- 4.6.2 Maintain stormwater standards substantially equivalent to those in the Washington DOE Stormwater Management Manual and continue to monitor and update the stormwater control ordinance and related policies and standards to reduce on-site run-off that implement and enhance stormwater management.
- 4.6.3 Continue to monitor and update the stormwater control ordinance and related policies and standards to reduce on-site run-off that implement and enhance stormwater management.
- 4.6.4 Limit the clearing of vegetation in order to reduce storm water runoff and erosion.
- 4.6.5 Establish a coordinated approach with local jurisdictions to solve both surface water and groundwater issues including the development of regional storm water facilities.
- 4.6.6 County operations shall be conducted to meet the requirements outlined in the National Pollutant Discharge Elimination System permit.

Goal: Protect and enhance the shorelines of Clark County.

4.7 Policies

4.7.1 Clark County's Shoreline Master Program as included in Chapter 13 of this comprehensive plan and as codified in CCC Chapter 40.460 shall be implemented to protect and enhance the shorelines of Clark County.

4.7.2 The county and its cities shall implement the mutually-adopted shoreline goals, policies and shoreline designations through development regulations contained in their respective shoreline master programs. Such programs are designed to foster appropriate uses of and access to shorelines of the state while protecting natural resources and shoreline ecological functions. (Countywide Planning Policy)

Goal: Manage the parks and open space of Clark County consistent with protecting water quality and critical areas and with enhancing the recovery of listed species.

4.8 Policies

4.8.1 County Parks will be managed to meet the compliance and recovery objectives as identified through the ESA process and the regional recovery plan.

Goal: Maintain and enhance the region's air quality.

4.9 Policies

- 4.9.1 Clark County's air resource is to be managed to preserve and enhance air quality.
- 4.9.2 Land use planning needs to incorporate air quality impacts as an additional land use planning decision criteria.

Goal: Minimize property damage from geological hazards and flooding.

4.10 Policies

- 4.10.1 Apply reasonable land use and building restrictions in flood hazard areas to minimize the loss of life and property damage.
- 4.10.2 Work with the cities to coordinate a sustainable approach to natural hazard mitigation on identified critical areas, open space and recreational lands to lessen or eliminate hazards before an emergency happens.

Goal: Promote the advancement of energy efficiency, green building, waste reduction, composting and recycling, solar and renewable energy use and local sustainable food production.

4.11 Policies

- 4.11.1 Clark County is committed to fostering a safe, secure future that conserves natural resources while meeting basic human needs, including clean water, air and food, along with shelter, education and employment. This commitment to a sustainable future will be a key consideration in making public policy, developing public programs, operating public facilities and delivering public services.
- 4.11.2 Clark County shall carry out its activities in a manner that can serve as an example of environmentally sustainable practices.
- 4.11.3 County resources and purchasing power will be used to the extent practicable to support environmentally sustainable business practices.

4.11.4 County activities shall be periodically reviewed and updated to reflect best management practices.

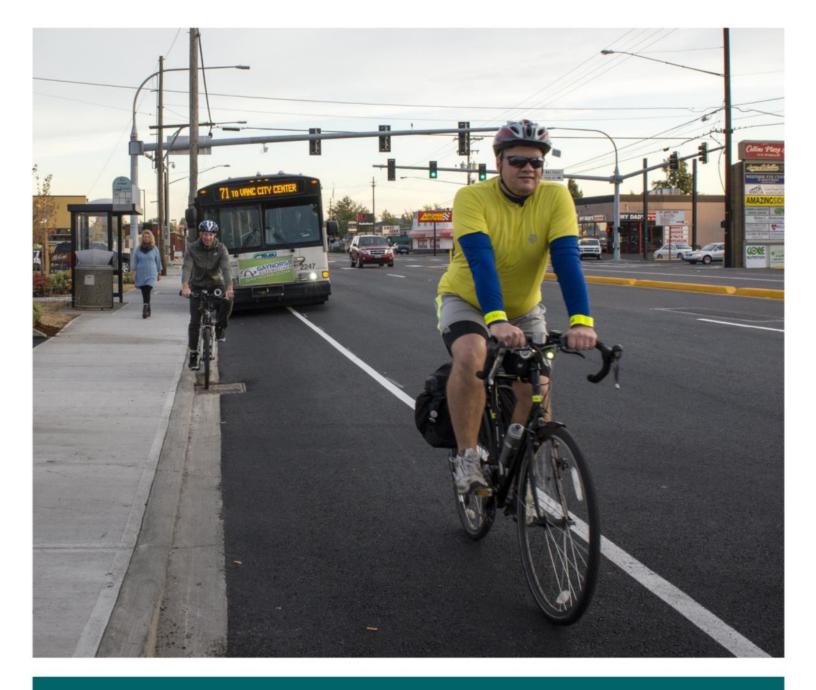
Strategies

The following strategies are proposed as a means to achieve the goals and policies of the Environmental Element. These are a range of strategies that the county is considering and some of these should be implemented over time.

- Develop incentives that encourage open space, recreation and protection of the natural environment.
- Evaluate a variety of funding sources and their feasibility for acquisition of land and other programs to implement the policies within the Environmental, Rural and Natural Resource Elements.
- Develop and implement comprehensive stormwater management plans, including ongoing monitoring and funding for all watersheds in the county that comply with recovery objectives.
- Develop and implement a watershed protection implementation program that is salmonfriendly with the goals of resolving and preventing deterioration of all local water resources within identified watersheds. Develop and implement watershed plans that recognize watershed processes and that address impacts to wildlife habitat. The program shall:
 - protect groundwater;
 - safeguard drinking water quality;
 - protect surface water quality;
 - insure groundwater recharge;
 - control urban flooding;
 - enhance wetland habitat; and
 - establish local funding mechanisms for water quality and water resource protection.
- Develop and implement a protocol to identify natural watershed-wide processes, their interrelationships reach by reach and how they might be degraded by human activities. The
 protocol will be designed to associate the watershed processes with the various
 environmental mandates imposed by the state and federal governments on Clark County and
 the jurisdictions within it. The use of a standardized assessment protocol should streamline
 permitting, promote efficient monitoring and focus restoration and mitigation projects.
- Update ordinances and other regulations to meet salmon recovery goals.
- Investigate the use of a Public Benefit Rating System of property taxation to encourage development, recording and implementation of Stewardship Plans on parcels essential to salmon recovery or other watershed processes.
- Develop measures countywide to ensure erosion and sediment control for new development, re-development and excavation projects.
- Develop regional detention and on-site disposal system.
- Adopt the use of land use planning software that analyzes air quality impacts of proposed land use actions.
- The county will do the following to implement its sustainability policy:
 - Lead by example;
 - Encourage innovation in both public and private pursuits;
 - Promote and demonstrate efficient and effective use of renewable and consumable resources;
 - Collaborate with public and private partners on projects aimed at sustainability;

•	Continuously enhance our perspective and expertise in making sustainable choices on behalf of the citizens and communities of Clark County; and Identify and pursue new opportunities that promote sustainable practices.





Chapter 5

Transportation Element

Chapter 5 Transportation

Introduction

This Transportation Element (TE) is prepared in accordance with the GMA. Contained within the TE are projects and implementation measures necessary to effectively serve planned land use throughout unincorporated Clark County. Importantly, this element provides guidance for the design, construction and operation of transportation facilities and services through the year 2035.

Purpose and Background

The purpose of the TE is to present a plan for transportation facilities and services needed to support the county's 2015-2035 future land use map. The TE recommends specific arterial roadway projects for the unincorporated county in order to meet roadway safety and capacity needs. However, it also recommends various implementation strategies to guide the county in its participation in regional transportation planning. Implementation strategies provide guidance on such issues as:

- land use-transportation concurrency;
- arterial, highway and transit level-of-service;
- transit emphasis corridors;
- access management;
- transportation demand management (TDM);
- non-motorized transportation;
- air quality conformance; and
- freight and goods mobility.

The county's TE provides an estimate of expenditures and revenues associated with implementing various recommended transportation improvements. It also recommends a financial strategy that would ensure needed transportation improvements are funded. It should be noted that the transportation element can be amended and supplemented by special studies that later provide more detailed policy direction and project recommendations. These special studies would maintain consistency with the countywide transportation element, while also qualifying and refining its recommendations.

Description of Historical Growth and Development

Clark County's population was estimated at 448,500 in 2015 making it the 5th most populous county in Washington State. The county was the fastest-growing in the state in the 1990s and was second-fastest over the past decade. Growth was spurred by in-migration of new residents, although in 2010, more people moved out of the county than moved in for the first time since 1984. Even with this decline of in-migration between 2000 and 2010 Clark County still experienced a 28.3% increase in population from 2000 to 2010 which is above the state increase of 18.2%.

The Washington State Office of Financial Management (OFM) provides counties and cities in the State of Washington with county-level growth forecasts to accommodate their planning processes under GMA. OFM's 2012 GMA population projections have a high, medium and low growth series for each county. The projections of 2035 total population for Clark County are:

- High 681,135
- Medium 562,207

• Low - 459,617

OFM considers the medium series to be the most likely projection. The Clark County Council used the medium series — 2035 countywide population of 562,207 — when adopting 2035 initial population targets. The land use assumptions used to estimate future travel demand for this Transportation Element use a 2035 forecast of 577,431 for countywide population.

The Clark County Council adopted a 2035 initial employment target for Clark County of 91,200 jobs. The land use assumptions used to estimate future travel demand for this Transportation Element use a 2035 forecast of 232,500 for countywide employment. Much of the employment growth is expected to occur within the incorporated cities; however, the county will plan for its share of job growth that will occur in unincorporated UGAs.

Growth Management Act Requirements and Policy Foundation

The GMA provides a substantial amount of legal and policy guidance to the county regarding preparation of TEs. The GMA requires a TE that implements and is consistent with, the land use element of the comprehensive plan RCW 36.70A.070 (6). A TE must specifically present:

- land use assumptions used in estimating and forecasting travel;
- estimated traffic impacts to state-owned transportation facilities;
- an inventory of air, water and ground transportation facilities and services;
- level-of-service (LOS) standards for all locally owned arterial and transit routes;
- specific actions and requirements for brining into compliance locally owned facilities and services that do not meet the LOS standards;
- LOS standards for state highways to gauge system performance;
- forecasts of traffic for at least ten years based on the adopted land use plan
- identification of state and local transportation system needs to meet current and future
- travel demand;
- an analysis of funding capability to judge identified system needs against probable funding resources;
- a multi-year finance plan that balances needs against available funding;
- intergovernmental coordination and impact assessment;
- strategies for reducing travel demand;
- if probable funding falls short of meeting identified needs, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that level-of-service standards will be met; and
- pedestrian and bicycle component.

Consistency between the land use and transportation elements of the comprehensive plan is of particular importance. Planned land use must be reflected in the travel forecasts that are prepared to evaluate the impacts of development. The transportation improvements and implementation measures within the transportation element must adequately support planned land use at adopted level-of-service (LOS) standards. In addition, consistency between the county's overall transportation element, the cities' comprehensive plans, the state's highway plan and transit development programs needs to be ensured through intergovernmental coordination.

The transportation part of these planning policies are prepared to specifically address the requirements of RCW 36.70A.210 (3) (d) and apply to countywide transportation facilities and services. The applicable facilities and services are those that serve travel needs and have impacts

beyond the particular jurisdiction(s) within which they are located. The Countywide Planning Policies are to provide procedural guidance to the county and cities to help ensure consistent transportation planning and implementation.

By law, the Transportation Element must implement and be consistent with other elements of the 20-Year Plan and must include the county's plan to finance identified local system improvements. The policies and performance standards contained within this element complement the Land Use Element by providing for transportation needs and infrastructure in urban centers, addressing the needs of neighborhoods and adapting the rural transportation system in support of those policies. This element also integrates the goals and policies of the Housing (Chapter 2) and Economic Development (Chapter 9) Elements as well as minimizing the environmental impact of transportation systems.

Process

The Community Framework Plan provides countywide transportation policies to guide the county and its municipalities with the development of their comprehensive plans and transportation elements. The Transportation Element is based on the Community Framework Plan and was developed from a number of cooperative transportation planning efforts in the county that included monthly city/county planner coordination meetings and participation in monthly Regional Transportation Advisory Committee meetings. The Regional Transportation Plan for Clark County (Dec.2014), prepared by the Southwest Washington Regional Transportation Council (RTC), provides the regional framework consistent with transportation planning in the Portland metropolitan region. RTC conducts transportation modeling for Clark County. The Washington State Highway System Plan is an element of the Washington Transportation Plan (WTP) that addresses current and forecasted state highway needs based on the investment options identified in the WTP. Policies from other planning documents have been incorporated into this element. In addition, the county has worked with each city in a partnership planning process to develop a coordinated transportation and land use plan for each urban area. The process of forming this element was as follows:

- Determine existing deficiencies and their cost.
- Determine the community's vision of the desired transportation system. Set level-of-service standards to implement the vision.
- Use proposed land use patterns to forecast future travel demand.
- Identify future projects needed to maintain adopted levels of service.
- Identify a financial plan to develop future projects.

The Transportation Element consists of the following sections:

- 1. Transportation Facilities: This section contains an overall review of transportation facilities such as roads, transit, bikeway, aviation, etc. The review included the existing condition of the facilities and future expectations.
- **2. Level-of-Service:** Performance standards for arterials set goals for the maximum amount of congestion tolerated on the roadway. Performance standards are used to identify existing and future deficiencies.
- 3. Regional Programs: Development of a balanced Regional Transportation System.
- **4. Concurrency:** This section outlines the process the county will use to ensure sufficient infrastructure is in place within six years of development as required by the GMA.
- **5. Policies and Strategies**: A comprehensive set of policies to guide the implementation of this element is identified in this section.

6. Financial Analysis: A multi-year analysis of funding capability balancing the needs identified in this chapter against likely resources and implementing/financial strategies to accommodate future growth. The final analysis outlines how the transportation element will be implemented once adopted and provide a system for ensuring concurrency.

1. Transportation Facilities

Regional Transportation Facilities

An inventory of Clark County's transportation system establishes baseline conditions to serve as a starting point for the identification of future system needs. State law requires an inventory of air, water and ground transportation facilities. The inventory includes Clark County facilities, C-Tran system and general aviation airport facilities. It also includes state-owned transportation facilities within Clark County's boundaries. The regional transportation system includes all state transportation facilities and services (including highways, state-owned park-and-ride lots, etc.), local freeways, expressways, principal arterials, high-capacity transit systems and other transportation facilities and services like airports, rail facilities and marine facilities.

Functional Classification

Functional classification is the grouping of highways, roads and streets by the character of service they provide and was developed for transportation planning purposes. Basic to this process is the recognition that individual routes do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. Comprehensive transportation planning, an integral part of total economic and social development, uses functional classification to determine how travel can be channelized within the network in a logical and efficient manner. Functional classification defines the part that any particular route should play in serving the flow of trips through a highway network. Table 5.1 shows the Federal Functional Classification inventory for each classified roadway type and its proportional share of the entire roadway system in Clark County.

Table 5.1 | Federal Functional Mileage Classification, Clark County's Classified and Local Roads, 2015

Facility Type	Urban Area	Total Clark County	Percent of Total
MINOR ARTERIALS*	56.74	82.87	3.6%
URBAN COLLECTORS & RURAL MAJOR COLLECTORS	308.10	622.27	27.1%
RURAL MINOR COLLECTORS	0.0	206.20	9.0%
LOCAL ROADS	821.41	1382.53	60.3%
TOTAL	1186.25	2293.87	100.0%

^{*}Includes Principal Arterials Source: Clark County Public Works Road Log 2015

In Clark County, interstate and state highway facilities are I-5, I-205, SR-14, SR-500, SR-502 and SR-503 and a WSDOT park and ride lot at I-5/Ridgefield Junction as shown in Table 5.2.

Table 5.2 | State Route Mileage in Clark County (2014)

Facility	Begins	Ends	Route Mileage
I-5	Oregon State Line, Interstate Bridge	Cowlitz Co. Line	20.47
l-205	Oregon State Line, Glenn Jackson Bridge	I-5 Interchange	10.57
SR-14	Interchange with I-5, Vancouver	Skamania Co. Line	21.52
SR-500	Interchange with I-5	SR-14Intersection, Camas	22.64
SR-501 S. Section	Interchange with I-5	Terminus of south segment	10.99
SR-501 Couplet	Interchange with I-5	Franklin Street, Vancouver	0.55
SR-501 N. Section	City of Ridgefield	Interchange, I-5 at Pioneer	2.97
SR-502	Intersection with I-5, at N.E. 219 th St.	Intersection with SR-503	6.12
SR-503	Intersection with SR-500	Cowlitz Co. line	26.58

Source: WSDOT STATE Highway Log

Highway System Segments: Interstates and State Routes. Interstate highways are designed to provide for the highest degree of mobility serving large volumes of long-distance traffic; they are not designed to provide access to land uses. State Routes (SR) serve large volumes of traffic between counties or regions.

I-5 provides 20.47 miles in Clark County providing for north-south travel from Mexico to Canada. Within Clark County, I-5 has three primary lanes of travel in each direction from the Interstate Bridge north to NE 134th Street. North of the I-5/I-205 interchange there are three travel lanes in each direction.

I-205 is a 10.57 mile stretch of I-205 traverses Clark County until it joins I-5 just north of N.E. 134th Street. I-205 was constructed as an alternative route to I-5, as a by-pass facility through the Portland/Vancouver metropolitan area. I-205 crosses the Columbia River over the Glenn Jackson Bridge opened in 1982. The Glenn Jackson Bridge has four travel lanes in each direction. North of the bridge the facility has three lanes in each direction to a point just north of the interchange with SR-500. I-205 continues north to its terminus as a two lane facility in each direction.

SR-14 provides the main east-west access from the City of Vancouver east to I-82 running along the north bank of the Columbia River. The facility extends through Clark County to the Skamania County line with two lanes in each direction up to milepost 12 and one lane in each direction thereafter.

SR-500 is entirely within Clark County and allows for east-west cross-county travel. It crosses I-205, provides access to the Orchards area, and then traverses rural Clark County until it reaches the Camas urban area. SR-500 intersects with SR-14 in Camas. The facility carries traffic to and from the Clark County regional shopping mall. The segment of SR-500 between I-5 and I-205 was first opened as a limited access facility in 1984. The segment of SR-500 / Fourth Plain Blvd between SR-503 and NE 162nd Avenue was transferred to local jurisdiction in 2006. It was replaced by designating Padden Parkway between SR-503 and NE 162nd Avenue at Ward Rd as the new SR-500 alignment.

SR-501 is comprised of two unconnected segments. The south segment extends from the interchange with I-5 westward with three lanes in each direction along the Mill Plain/15th Street couplet to Columbia Street. West of Columbia the facility is two lanes in each direction. This segment of SR-501 carries traffic to and from the Port of Vancouver. The facility reduces to two lanes, one in each direction and branches into two in the Vancouver Lake lowlands area with

both branches terminating in the lowlands. The northern segment of SR-501 extends as a two-lane facility from I-5 westward to the City of Ridgefield where it terminates. Originally it was intended that the two segments be joined to complete a circumferential route around the west side of the Vancouver urban area and to carry traffic to and from the lowlands industrial area. However, the facility was never completed.

SR-502 extends from the I-5/ N.E. 219th Street Interchange to Battle Ground.

National Highway System (NHS)

In Clark County, the National Highway System includes the Interstate Highway System as well as other roads important to the nation's economy, defense and mobility. It is designated to focus federal investment on a set of high priority routes. Initially, ISTEA required that roads be designated as National Highway System (NHS) facilities and Congress approved the initial NHS System with passage of the National Highway System Designation Act of 1995 (NHS Act). Under Section 1104 of MAP-21 (2012), update and expansion of the NHS was required to additionally include urban and rural principal arterials that were not included in the NHS before October 1, 2012. This resulted in increasing the NHS in Clark County from about 78.5 centerline road miles to about 148.5 centerline road miles. Maps of the 2012 expanded NHS system, a sub-set of the MTP's designated regional transportation system, are available on FHWA's website.

Highways of Statewide Significance (HSS)

In 1999 the state legislature adopted Highways of Statewide Significance, fulfilling a requirement of House Bill 1487 passed in 1998. In Clark County highway facilities defined as "of Statewide Significance" are I-5, I-205, SR-14 and part of SR-501 to access the Port of Vancouver.

The county's arterial functional classification system and the cross-sections for non-local roadways in the county's jurisdiction are provided in the adopted Arterial Atlas. The information provided in that document for the county arterial roadways represents the county's adopted policy with respect to how the individual roadways are classified into the system described in this section of the Comprehensive Plan.

Principal Arterial Parkways such as the Padden Parkway is the highest classification within the county's functional system. Their purpose is to move high volumes of relatively long distance traffic speedily across the county or region. Direct land access is prohibited or minimal and then only to major activity centers of regional impact. The level of fixed route transit service is high; bicycle and pedestrian activity is on a parallel trail facility.

Principal Arterials: Urban principal arterials (such as NE 78th Street or NE Fourth Plain Road) permit traffic flow through the urban area and between major elements of the urban area. Principal arterials connect major traffic generators to other major activity centers and carry a high proportion of the total urban area travel on a minimum of roadway mileage. They move high volumes of traffic speedily across the county or region, but with volumes and speeds below those of the principal arterial parkway classification. Access is generally limited to intersections with other arterials and collectors. Direct land access is minimal and controlled, but less restrictive as compared to principal arterial parkway. Frequently principal arterials carry important intra-urban as well as intercity bus routes.

Minor Arterials: Urban minor arterials (such as Hazel Dell Avenue or NE 99th Street) collect and distribute traffic from principal arterials to streets of lower classifications or allow for traffic to directly access destinations. Access to land use activities is generally permitted. They are

primarily designed to accommodate through-traffic but may provide direct access for more intensely developed properties. Fixed route transit, bicycle and pedestrian activity is moderate.

Collectors: Urban collectors (such as NE 88th Street) provide for land access and traffic circulation within and between residential neighborhoods and commercial and industrial areas. Collectors do not handle long through trips and are not continuous for any great length. Fixed route transit service is low while bicycling and pedestrian activity ranges from moderate to high.

Local Streets: Urban local streets provide direct access to abutting land and access to the higher classification facilities. They offer the lowest level of mobility and usually contain no bus routes. They are not intended to carry through traffic but make up a large percentage of the total street mileage.

Rural Major Collectors: Rural major collectors are usually extensions of urban principal arterials and some urban minor arterials into the rural area. Their primary purpose is to link rural activity centers with larger towns nearby and to connect them to state arterial routes. Mostly, they serve intra-county travel. Land access remains subordinate to traffic movement. The level of fixed route transit, bicycle and pedestrian activity is low.

Rural Minor Collectors: Rural minor collectors (e.g. NE Kelly Road) are rural extensions of urban collectors and some urban minor arterials. They connect rural areas to major collectors and state routes.

Public Transportation Options

Clark County Public Transit Benefit Area Authority (C-TRAN)

C-TRAN is the primary provider of public transit services in Clark County. The agency was formed by a public vote in 1980 and currently serves the municipalities of Vancouver, Camas, Washougal, Battle Ground and Ridgefield, La Center, the town of Yacolt and areas of unincorporated Vancouver. C-TRAN is governed by a nine member board of directors that includes two Clark County Councilors, three Council members from the City of Vancouver and one member each from Camas, Washougal, Battle Ground and one member representing Ridgefield, La Center and Yacolt.

C-TRAN's system includes three transit centers at 1) Fisher's Landing, 2) 99th Street at Stockford Village and 3) Vancouver Mall as well as nine park and ride lots. Some are operated under a site use agreement. The nine C-TRAN park and ride facilities provide more than 2,200 parking spaces at 1) Andresen, 2) BPA Ross complex, 3) Camas/Washougal, 4) Evergreen, 5) Fisher's Landing Transit Center, 6) La Center, 7) 99th Street Transit Center at Stockford Village, 8) Ridgefield and 9) Salmon Creek. In addition to the three transit centers, C-TRAN manages seven park-and-ride lots providing over 1,600 parking spaces with direct access to express commuter services and local routes.

Fixed Route Services - C-TRAN provides fixed route service on 18 local, 7 commuter and 4 limited routes in addition to dial-a-ride based service known as the Connector, in Camas, Ridgefield and La Center. C-TRAN also operates C-VAN to provide ADA complementary paratransit service for persons who are unable to use regular C-TRAN buses. The C-TRAN fleet currently has 171 vehicles to carry out these services.

C-TRAN operates seven days a week and on holidays serving the greater Vancouver area. Operating hours are generally 4:30 a.m. to 9:30 p.m. on weekdays (with key urban routes operating until midnight), 7:00 a.m. to 8:00 p.m. on Saturdays and 8:00 a.m. to 7:00 p.m. on

Sundays/holidays. C-TRAN provided 280,922 total vehicle hours and 254,632 revenue hours of fixed route service in 2013, with ridership totaling 6,193,249 in 2013.

C-TRAN also provides commuter service into TriMet's downtown Portland transit mall and connecting service to the MAX light rail system at the Parkrose/Sumner Transit Center and the Delta Park/Vanport Light Rail Station. These access points allow C-TRAN passengers to reach destinations in the Portland metropolitan area, including Portland International Airport. Over 6.9 million fixed route passenger trips were provided in 2008, with passengers traveling nearly 37 million miles. All C-TRAN routes meet Americans with Disabilities Act (ADA) accessibility requirements.

Connectors – C-TRAN's Connector provides the cities of Camas, La Center and Ridgefield with fully accessible dial-a-ride (reservation based service) and scheduled stop service (no reservation required) at designated stops within the service areas. Rides are provided on a first-come, first-served basis.

Shopping Shuttle - C-TRAN's Shopping Shuttle provides residents of Smith Tower, Lewis & Clark and Columbia House apartments direct access to major shopping destinations, twice monthly. **Paratransit** - C-TRAN's paratransit service, known as C-VAN, meets ADA requirements for complementary paratransit service. C-VAN provides wheelchair accessible, curb-to-curb services for elderly and disabled persons who cannot use fixed route services. C-VAN currently operates within the Vancouver urban growth area (UGA) and within 3/4 mile of fixed routes operating outside the Vancouver UGA.

Human Services Council Transportation Brokerage

The Human Services Council Transportation Brokerage arranges rides for elderly, low income and people with medical needs and disabilities through contracts and arrangements with a variety of transportation providers. This service is highly valued in the community by people that have no access to C-TRAN or C-VAN services or for people for whom regular transit service does not work. Between January 1, 2010 and June 30, 2010 HSC brokered over 35,500 employment transportation trips and served 960 unique individuals. Continuation of the Brokerage services is dependent on grant funding.

Inter-City Bus

Inter-city bus service to cities throughout the northwest and nation-wide, provided by Greyhound Bus Lines, is no longer available from Vancouver. The Greyhound bus service stop in Vancouver, Washington closed on January 1, 2009. Access to Greyhound and Bolt Bus service is now only available in Portland, Oregon. Northwest Trailways which had service in the region in 2007, no longer operates out of Washington or Oregon.

Rail

There are two mainline rail lines, both owned by Burlington Northern Santa Fe (BNSF), that run through Clark County. The mainlines carry both freight and passengers. In addition, the Lewis and Clark Railroad is a 33-mile short line railroad owned by Clark County.

BNSF Seattle/Vancouver line is in excellent condition and has 70 to 80 trains operating in the corridor each day. The BNSF Vancouver/Eastern Washington line is also in excellent condition and handles about 40 trains daily. Union Pacific Railroad operates some freight trains to Tacoma and Seattle on BNSF's lines.

Amtrak has an agreement with BNSF to operate passenger service on the freight carrier's rail lines. Amtrak trains serve Vancouver daily. During the 1990s Washington and Oregon began to invest transportation funds to improve local Amtrak service. In 1993, Amtrak offered a single local daily round-trip connecting Eugene and Seattle with ridership totaling 94,061 trips. By 2011, service has grown to four daily Amtrak Cascades roundtrips operating between Seattle and Portland, with two extending to Eugene and Vancouver BC, Canada. Between 1993 and 2013, ridership increased by 758% from 94,061 annual riders in 1993 to 807,349 riders in 2013. 72,500 passengers boarded or deboarded at the Vancouver Amtrak station in 2013.

The Coast Starlight, with service between Seattle and Los Angeles, via Vancouver and Portland, also provides once a day, daily service. The Empire Builder also provides one train a day, on a daily basis, between Chicago and Spokane from where one part of the train continues to Seattle and the other part continues, via Pasco and Bingen-White Salmon, to Vancouver with service terminating in Portland.

The Pacific Northwest Rail Corridor is one of eleven designated high-speed corridors in the nation. Its designation pre-qualifies the region for federal high speed rail funding. In late 1995, the Washington State Department of Transportation (WSDOT) and project partners published Options for Passenger Rail in the Pacific Northwest Rail Corridor report. An Environmental Impact Statement on corridor improvements was completed and construction of rail corridor improvements began in 1998. Custom-built Talgo trains are now in service on Amtrak's Pacific Northwest Rail Corridor service. The Vancouver Amtrak station facility was upgraded as part of the Eugene to Vancouver B.C. passenger rail service improvements. In the early 2010's, the Vancouver Rail Project improved safety, reduced rail congestion and improved on-time performance of Amtrak's passenger rail service. The project added a new rail bypass track and a grade separated crossing of the rail lines for vehicles using west 39th Street in Vancouver was opened in 2010.

Clark County Railroad is a 33-mile short line located in Clark County, Washington. It is southwest Washington's only operating short line, with connections to the BNSF. The line is owned by Clark County government and operated by the Portland Vancouver Junction Railroad Company, a private operator.

The line diverges from the main BNSF northern line around NW 78th Street and traverses the County via Rye Yard off St Johns Road and Battle Ground to its terminus at Chelatchie Prairie. This short line railroad is also known as the Lewis and Clark Railroad or the Clark County Railroad. The operating and maintenance responsibilities for the line are leased out under long-term operating contracts to two different railroad operators. On the line segment from Heisson to the south, the Portland Vancouver Junction Railroad (PVJR) is responsible for freight operations. At present, this line segment serves the only active freight shippers on the railroad's main freight corridor. On the line north of Heisson, the Battle Ground, Yacolt and Chelatchie Prairie Railroad Association (BYCX), a volunteer group, is operating a passenger excursion program originating in Yacolt. On the lower 14 miles from Rye Junction to Battle Ground, it is anticipated that considerable freight growth will continue through the freight operator to help support the economic development vision for Clark County. The upper 19 miles is anticipated for some possible freight operations and tourism. In 2007, the County was awarded \$1.1 million from the WSDOT Rail Emergent Fund for rehabilitation to the lower 14 miles of track. Clark County will continue to pursue state and federal grants to upgrade the track to Class 1 status for safer operation and increased freight on both the upper and lower lines. A new trans-load facility has been created between 78th and 88th Streets.

Port Districts

Clark County has three port districts: the Port of Vancouver, the Port of Camas-Washougal and the Port of Ridgefield. Only the Port of Vancouver provides commercial waterborne shipping facilities.

Port of Vancouver, USA, is situated at the terminus of the Columbia River's deep draft channel and forms a natural gateway to the river-barge ports of eastern Oregon/Washington and northern Idaho. The Port operates international cargo docks. It is the third-largest port in the state of Washington. It has five marine terminals, provides 13 deep-draft vessel berths and has two 140-metric ton mobile harbor cranes to enable heavy lift cargo.

The Port is located within 2 miles of I-5 and is served by the Burlington Northern Santa Fe and Union Pacific Railroads, the Canadian National and the Canadian Pacific railroads. The Port has 800 acres of developed industrial and marine property with over 50 industrial tenants. Over 2,300 people are directly employed by these businesses and nearly 17,000 jobs are connected to port activities. The Port has over 500 additional acres of land for future development. Work began in 2004 on the National Environmental Policy Act (NEPA) process for this additional land's development as part of the Port's Economic Development & Conservation Plan. The Port's future development includes the Columbia Gateway area. The Port focused attention on rail access improvement with a Simulation and Access Study. The Port is phasing the implementation of the West Vancouver Freight Access Project.

Port of Camas/Washougal provides facilities and services for land, air, water based commerce and to enhance employment and recreational opportunities, contributing to the quality of life in the community. The 430-acre industrial park, located south of SR-14 by Index and 27th to 32nd Streets, was created in 1966 when the U.S. Army Corps of Engineers created a 5.5-mile levee along the Columbia River. It is home to an average of 48 businesses with approximately 1,000 employees and an annual payroll exceeding \$30 million. Steigerwald Commerce Center, the 120+ acres east of the Industrial Park, is the site of future development. The marina has moorage to accommodate 350-plus boats and a 4-lane launch ramp. The Port district also operates Grove Field Airport (described in a later section).

Port of Ridgefield is located about 15 miles north of the City of Vancouver. The Port's taxing district extends over 57 square miles and the district is bisected by the I-5 corridor. The Port adopted the Port of Ridgefield Comprehensive Plan in 2008. Port owned assets include a 41-acre site on Lake River, 3 miles from I-5, with a programmed bridge project over the BNSF rail lines which will enhance access to the site and 3 parcels (18 acres) of land in the 78-acre Ridgefield Industrial Park located at the southwest quadrant of I-5 and Pioneer Street. The Port-developed Ridgefield Industrial Park is now home to over twenty businesses providing some 800 jobs.

Aviation

Airports and air transportation services are provided in the context of a complex set of federal, state and local governmental regulations and each level of government has a certain degree of control over parts of the air transportation system. The Federal Aviation Administration (FAA) deals primarily with issues of safety and air traffic control. The Washington State Department of Transportation's Aeronautics Division currently focuses primarily on general aviation airports and has some direct involvement with major passenger airports. Local jurisdictions (city, county, or port district) influence land use and usually are the airport operating authorities.

There are three publicly-owned and seventeen privately-owned airfields operating in Clark County. The publicly owned fields are Pearson, Grove and Woodland. The privately-owned fields which are available for public use are Cedars North Airpark Airport, Goheen and Fly for Fun.

The National Plan of Integrated Airport Systems (NPIAS) and the State Aeronautics Division in the Washington State Airport System Plan (WSASP) categorize these airports as general aviation airports. Amphibian aircraft are allowed in the Columbia River and several area lakes. The Resource Document contains a description of each of the airfields in Clark County. Portland International Airport (PDX) is located in Portland, Oregon, to the southwest of the I-¬205 Glenn Jackson Bridge. This is a regional airport with domestic and international passenger and freight (cargo) service. Passenger airlines serving PDX include Air Canada, Alaska Airlines, America West, American, Condor, Delta, Frontier, Hawaiian, Icelandair, Jet Blue, Pen Air, Sea Port Airlines, Southwest, Spirit Airlines, United, Virgin America and Volaris. Cargo carriers serving PDX include American Airlines, AmeriFlight, DHL, Empire, Federal Express, Frontier, Hawaiian, United UPS and Western Air Express.

An important example of an economic benefit that can be derived from airports is the ability to attract compatible land use developments (e.g., commercial or industrial) on or near airport property. In many instances, land immediately on or adjacent to an airport is flat, easily developed and relatively inexpensive when compared to more centrally located business district sites.

One of the several requirements of the GMA is that the comprehensive plan of each jurisdiction should include a process for identifying and siting essential public facilities, including airports and state and regional transportation facilities, per RCW 36.70A.200.

The local planning authority and the airport sponsor should work together to ensure that the needs of both the local and aviation communities are met and compatible land uses are planned for the future. It is important for the 20-Year Plan to include the general aviation airports when planning long-term transportation improvements.

Regional Transportation System Performance

Existing Traffic Volumes

Clark County has seen significant growth in traffic volumes in recent years as a result of socio-economic and demographic changes. RTC compiles traffic count data from local jurisdictions and other sources and makes the <u>compiled data available</u> their website. Traffic count data is factored to adjust for seasonal, monthly, weekly and daily fluctuations in volumes. Examples of growth in traffic volumes at selected Clark County locations are listed in Table 5.3, with comparisons between the traffic count in 1985 and the most recent traffic counts available. The economic downturn beginning in 2008 appeared to have had an effect on traffic counts with some count locations reporting slightly lower counts years 2008 and 2009 compared with 2006 and 2007 counts.

Table 5.3 | Traffic Volumes; 1985 to Current Years

Location	1985 Volumes	Current Volumes	Last Counted	% Increase	Annual % Increase
I-5 Bridge	92,301	130,511	2013	41%	1.5%
I-5, South of SR-500	54,400	130,992	2007	141%	6.4%
I-5, South of NE 78th St	52,784	94,982	2007	80%	3.6%
I-5, South of Woodland	33,748	66,906	2013	98%	4.5%
Hwy 99, South of NE 99th St	19,653	17,873	2010	-9%	-0.4%
I-205 Bridge	52,568	149,724	2013	185%	6.6%
I-205, South of SR-500	40,440	122,292	2010	202%	8.1%
78th St, West of Hwy 99	23,646	37,051	2012	57%	2.1%
164th Ave, South of SE 34th St	7,052	36,937	2013	424%	15.1%
Fourth Plain Blvd, West of NE Andresen	16,060	25,536	2012	59%	1.6%
Fourth Plain Blvd., West of 137 th Ave	14,671	27,483	2011	87%	3.4%
Mill Plain, East of NE Andresen Rd	21,021	20,558	2012	-2%	-0.1%
Mill Plain, East of NE Chkalov	18,220	45,916	2011	152%	5.8%
SR-14, West of SE 164th Ave	22,600	80,771	2007	257%	11.7%
SR-14, West of NW 6th Ave	17,600	42,567	2013	142%	5.1%
Padden Parkway, west of NE 94 th Ave.	3,952	25,584	2014	547%	20.3%
SR-500, West of NE Andresen Rd	20,054	55,277	2012	176%	6.5%
SR-503, South of NE 76th St	17,460	35,269	2009	102%	4.2%
SR-503, South of SR-502	7,360	22,211	2012	202%	5.5%
139 th St., West of NE 10 th Ave	11,218	20,816	2010	86%	3.4%

Notes: Volumes are based on the total number of vehicles entering an intersection on an average weekday and are approximate due to the annual variability. Freeway ramp intersections with streets were not considered for this Table. Source: RTC's Regional Traffic Count Program.

Permanent traffic recorders are in place on the I-5 and on the I-205 bridges. RTC compiles the Columbia crossing traffic counts provided by Oregon Department of Transportation from these recorders or from estimates provided by ODOT. In March 1995 RTC published the *Columbia River Bridge Traffic*, 1961 - 1994 report and continues to report on river crossing data online. Figure 5.1 shows the average weekday traffic volumes crossing the Columbia River bridges, 1980 to 2013. In 2013 the estimated average weekday traffic (AWDT) volumes on the I-5 Interstate Bridge were 130,511 and on the I-205 Glenn Jackson Bridge were 148,152. In 2013, the average northbound weekday evening peak hour crossings of the I-5 Interstate Bridge were 4,572 and 7,411 on the I-205 Glenn Jackson Bridge. In the southbound direction, average weekday morning peak hour crossings were 5,646 on the I-5 Interstate Bridge and were 7,424 on the I-205 Glenn Jackson Bridge.

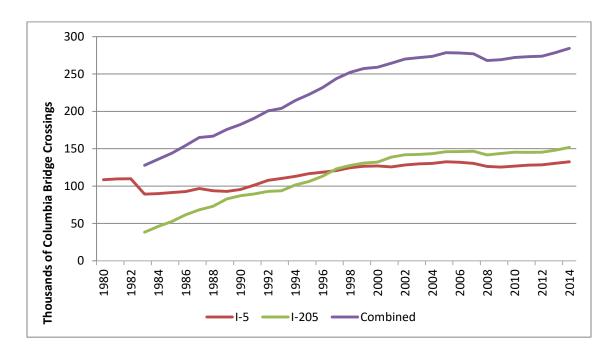


Figure 5.1 | Average Weekday Columbia River Bridge Crossings, 1980-2014

Source: Oregon Department of Transportation

The highest daily traffic ever recorded on the I-5 Interstate Bridge was on Friday July 2, 2004 when 157,301 bridge crossings were made. The highest evening peak hour traffic ever recorded on the I-5 Bridge was on Tuesday, May 28, 1996 when 10,838 bridge crossing were made. For the northbound direction, the highest evening peak hour traffic was recorded on Thursday, June 11, 1998 when 5,987 bridge crossings were made. For the southbound direction, the highest morning peak hour traffic was recorded on Wednesday March 31, 2004 when 6,119 bridge crossings were made.

The I-205 Glenn Jackson Bridge's highest daily number of crossings recorded was on Friday, July 25, 2014 with 172,683 crossings. The highest evening peak hour traffic recorded on the I-205 Glenn Jackson Bridge was on Thursday, August 3, 2006 when 13,284 bridge crossings were made. The highest northbound evening peak hour traffic recorded on the Bridge is the 8,426 crossings made on Friday May 24, 1996. For the southbound direction, the highest morning peak hour traffic was recorded on Tuesday, October 7, 2003 when 8,247 bridge crossings were made. The highest all-day total river crossings were recorded on Friday, July 2, 2004 when 325,095 trips crossed the Columbia river on the I-5 Interstate and I-205 Glenn Jackson bridges.

Regional transportation system intersections with the highest traffic volumes measured in terms of number of vehicles entering an intersection on an average weekday and are approximate due to the variability from year to year, month to month and day to day, are listed in Table 5.4.

Table 5.4 | Highest Volume Intersections in Clark County, 2014

Rank	East-West	North-South	Approx. Volumes	Count Year
1	Mill Plain Blvd.	Chkalov Drive	79,000	2014
2	State Route 500/Fourth Plain	State Route 503	72,000	2012
3	State Route 500	NE 54 th Avenue	62,000	2009
4	Mill Plain Blvd.	136 th Avenue	62,000	2012
5	State Route 500	NE 42 nd Avenue	58,000	2009
6	Padden Parkway	State Route 503	57,000	2012
7	NE 78 th Street	Highway 99	54,000	2012
8	Fourth Plain Blvd.	Andresen Road	53,000	2012
9	Padden Parkway	Andresen Road	53,000	2012
10	Mill Plain Blvd.	NE 120 th Avenue	51,000	2011
11	Mill Plain Blvd.	SE 164 th Ave.	51,000	2013
12	NE 134 th Street	NE 20 th Ave./Hwy. 99	51,000	2014
13	Mill Plain Blvd.	NE 123 rd /124 th Avenue	48,000	2011
14	State Route 502	State Route 503	47,000	2012

Source: RTC's Regional Traffic Count Program

Regional Travel Forecasting Model

Forecasting Future Travel Demand and Transportation Needs

The Regional Travel Forecasting Model for the Clark County region is used as a tool to analyze existing and future transportation system performance. It is specifically used to forecast future traffic volumes on the regional transportation system. The regional travel forecast model uses demographic data as a basis for travel forecasts with the basis for the 2035 travel demand forecast model being the underlying forecast 2035 land uses. The travel model process involves trip generation, trip distribution, mode split and trip assignment to the regional transportation system.

In the modeling process, a base year of 2010 was used with forecasting to the year 2035. As described in Chapter 2, the RTP update must be based on adopted land use plans of local jurisdictions. 2035 land uses are based on the adopted Comprehensive Growth Management Plan for Clark County (Clark County, September 2007) which has a horizon year of 2024, extended out to the RTP's 2035 horizon. Appendix A details the transportation analysis used to determine future transportation projects. That analysis used land uses based on the Preferred Alternative selected by the Board of County Councilors on February 23, 2016. Prior to adoption of the Comprehensive Growth Management Plans, alternative land use scenarios and their effect on regional transportation needs, are tested and measured as part of the Growth Management planning process. The 2035 land use allocation to 665 Clark County Transportation Analysis Zones (TAZ's) was developed by local jurisdictions and RTC's partner agencies using their adopted comprehensive land use plans, as well as current zoning, as the basis for forecasting the future location of population, housing and employment within Clark County. Household and employment data allocated to the TAZs are the input to the regional travel forecast model. After trip generation, trip distribution, mode split and trip assignment onto the assumed regional transportation network, output from the regional travel forecast model is used as a tool to identify specific transportation system needs and future transportation solutions.

From 2010 to 2035 there is forecast to be a 48% increase in all-day person trips from around 1.56 million trips per day in 2010 to over 2.31 million trips in 2035. Trips can be classified according to place of trip production and purpose of trip. The regional travel forecasting model for Clark County categorizes trips into several categories including Home-Based Work, Home-Based Shopping, Home-

Based Other, Home-Based Recreation, Non-Home-Based Work, Non-Home-Based Other and School and College trips. Figure 3-9 summarizes this information to show the proportion of trips in four categories for average weekday Clark County-produced person trips.

Figure 5.2 shows that in the 2010 base year the largest proportion of trips during a 24-hour period are home-based-other trips (50%). This category can include trips from home to the grocery store, home to childcare, home to leisure activities etc. The second highest category is home-based and non-home-based work trips (25%). Non-home-based-other trips make up 14% of the trips. This category can include such trips as shopping mall to restaurant trips. The home-based categories include trips originating at home and going to a destination as well as the return trip to home. School and college trips make up 11% of trips made on a daily basis. The proportions for the year 2035 are forecast to be 47% home-based-other trips, 27% home-based and non-home-based work trips, 16% non-home-based-other trips and 11% school/college trips.

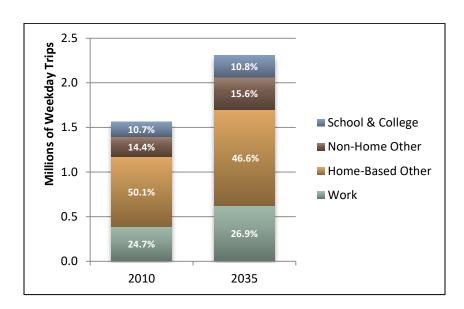


Figure 5.2 | Average Weekday Person Trips by Trip Purpose for Clark County

Source: RTC Regional Travel Forecast Model

Trips can also be categorized according to where the trips begin and end. Figure 5.3 shows the proportions of trips that use the Clark County highway system; trips that remain in Clark County (87% of trips in 2010, 89% in 2035) and trips that cross the Columbia River (13% in 2010, 11% in 2035).

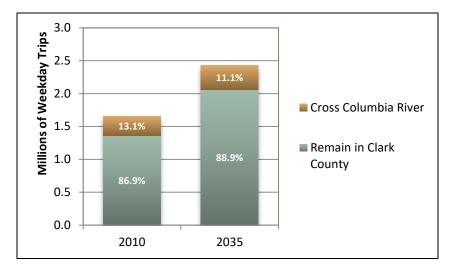


Figure 5.3 | Distribution of Average Weekday Person Trips for Clark County

Source: RTC Regional Travel Forecast Model

Needs analysis was then carried out to determine what impact the forecast growth in travel demand might have on the transportation system. In carrying out analysis of existing and future transportation needs, the regional travel forecasting model was used to run the following three scenarios:

Base - Year

2010 traffic volumes on 2035 highway network.

Committed System

Forecast 2035 traffic volumes on "committed" highway network. The "committed" network has improvement projects for which funds are already committed in the Transportation Improvement Program (TIP).

RTP - Year 2035

Forecast 2035 traffic volumes on 2035 highway network with RTP improvements are listed in Appendix B of the 2014 RTP. RTP improvements are projects for which funds are already programmed and committed in the current Transportation Improvement Program, together with projects for which there is an identified regional need, regional support and a reasonable expectation that funds will be available within the twenty-plus year horizon to construct and/or implement them.

Regional Travel Forecasting Model Analysis

Analysis of the Regional Travel Forecasting Model can yield data for forecast speed on a transportation facility, vehicle miles traveled, lane miles of congestion and vehicle hours of delay. RTC staff uses forecast model data to inform the project identification process. Figure 5.4 shows some of the forecast results.

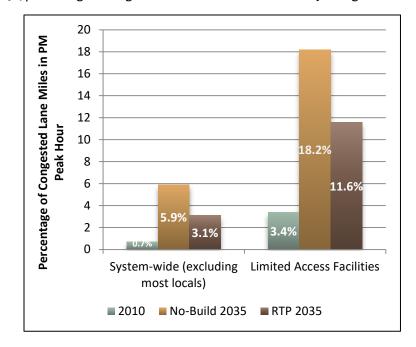


Figure 5.4 | Percentage of Congested Lane Miles within Clark County during the PM Peak Hour

Source: RTC Regional Travel Forecast Model

In summary, between 2013 and 2035, the region's population is forecast to grow by 29% and the region's employment is forecast to grow by 75%. The regional travel forecast model, using a base year of 2010, projects a resulting increase in trips per day of 48% with a 5.5% increase in regional transportation system highway lane miles and an 18% increase in fixed-route transit service hours.

2. Level-of-Service (LOS)

Level-of-Service standards represent the minimum performance level desired for transportation facilities and services within the region. They are used as a gauge for evaluating the quality of service on the transportation system. The GMA states that "level-of-service standards shall be established for all arterials and transit routes to serve as a gauge to judge the performance of the system." The GMA directs that these standards should be established locally and coordinated regionally for local arterials and for highways of regional significance. The standards are used to identify deficient facilities and services in the existing transportation system. Highways of statewide significance (RCW 47.06.140) have a level-of-service set by the state.

LOS Definitions

Level-of-Service standards can be based on performance along a segment of a roadway or at an intersection. The Highway Capacity Manual includes different level-of-service definitions and descriptions of operating characteristics for freeways, highways, urban streets and signalized intersections, because driver expectations and the measures of effective performance are different for each type of facility.

For freeways and highways, LOS is described in terms of the relationship of actual travel speeds to free flow speeds, the freedom to maneuver within the traffic stream and the effects of minor incidents or breakdowns on the traffic stream. The descriptions of each LOS for highways are listed below for illustrative purposes.

Level-of-Service A: describes completely free flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles and operations are constrained only by the geometric features of the highway and by driver preferences. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.

Level-of-Service B: also indicates free flow, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver. Minor disruptions are still easily absorbed, although local deterioration in LOS will be more obvious.

Level-of-Service C: the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. On multilane highways with a free flow speed above 50 miles per hour, the travel speeds reduce somewhat. Minor disruptions can cause serious local deterioration in service and queues will form behind any significant traffic disruption.

Level-of-Service D: the ability to maneuver is severely restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.

Level-of-Service E: represents operations at or near capacity, an unstable level. The densities vary, depending on the free flow speed (FFS). Vehicles are operating with the minimum spacing for maintaining uniform flow. Disruptions cannot be dissipated readily, often causing queues to form and service to deteriorate to LOS F. For the majority of multilane highways with free flow speeds between 45 and 60 miles per hour, passenger-car mean speeds at capacity range from 42 to 55 miles per hour, but are highly variable and unpredictable.

Level-of-Service F: represents forced or breakdown flow. It occurs either when vehicles arrive at a rate greater than the rate at which they are discharged or when the forecast demand exceeds the computed capacity of a planned facility. Although operations at these points – and on sections immediately downstream – appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods followed by stoppages. Travel speeds within queues are generally less than 30 miles per hour.

For reference purposes, Table 5.5 on the following page shows Level-of-Service definitions for urban arterials and signalized intersections as defined by the current Highway Capacity Manual.

Table 5.5 |Level-of-service Definitions (HCM)

Level-of-Service									
Classification	Α	В	C	D	E	F			
Type I Urban Arterials Roadway Segment: Avg. Travel Speed (mph)	>42	>34 - 42	>27 - 34	≥21 - 27	≥16 - 21	< 16			
Type II Urban Arterials Roadway Segment: Avg. Travel Speed (mph)	≥35	≥28 - 35	≥22 - 28	≥17 - 22	≥13 - 17	< 13			
Signalized Intersections Delay per Vehicle (seconds)	≤10	> 10 - 20	> 20 - 35	> 35 - 55	> 55 - 80	> 80			
Unsignalized Intersections Delay per Vehicle (seconds)	0 -10	> 10 - 15	> 15 - 25	> 25 - 35	> 35 - 50	> 50			

Source: Highway Capacity Manual, Transportation Research Board

Clark County Level-of-Service Standards

Clark County LOS standards are applied at both the corridor and intersection level of analysis. The concurrency ordinance identifies level-of-service of a segment or intersection of any county roadway with a comprehensive plan functional classification of arterial or collector or any state highway of regional significance. LOS standards on these corridors are defined in the concurrency ordinance in terms of volume to capacity ratio for each segment during the peak period traffic conditions.

Individual movements at signalized intersections of regional significance in unincorporated county shall not exceed an average of two (2) cycle lengths or two hundred forty (240) seconds of delay (whichever is less). All unsignalized intersections of regional significance in the unincorporated county shall achieve LOS E standards or better (if warrants are not met). If warrants are met, unsignalized intersections of regional significance shall achieve LOS D standards or better. The signalization of unsignalized intersections shall be at the discretion of the Public Works director and the County is not obligated to meet this LOS standard. However, proposed developments shall not be required to mitigate their impacts in order to obtain concurrency unless specified criteria meet requirements of the ordinance.

The level-of-service on highways of statewide significance (HSS) has been set by the Washington State Department of Transportation at LOS C for rural facilities and D for urban facilities in Clark County. Levels-of-service for Highways of Regional Significance have been set by RTC at LOS C for or better on non-HSS rural facilities and LOS E or better for non-HSS urban state facilities in Clark County.

The GMA requires that each jurisdiction demonstrate that it can pay for proposed improvement projects from reasonably available funding sources. Deficient roadways are defined as those links or intersections that exceed the adopted LOS standard. Therefore, the adopted LOS standard will determine the current and future improvements projects in the transportation plan. The roadway LOS standard must reflect a reasonable balance between the amount of improvements the county and its cities can afford and the amount of congestion the public can tolerate. The capital facilities plan is comprised of projects necessary to maintain the defined standards through 20 years of growth. Level-of-service standards for transit are also required as part of the GMA planning process. The recommended LOS indicators for transit service are shown in Table 5.6. These indicators were approved in 2013 as C-TRAN service standards.

Table 5.6 | C-TRAN LOS Indicators

Planning Indicators						Supporting Factors		
SERVICE CLASSIFICATION	PASSENGERS PER REVENUE HOUR TARGET	PEAK/ NON-PEAK HEADWAYS	BUS STOP SPACING	ACCESSIBILITY (within service boundary)	MAXIMUM LOAD FACTOR (of seating capacity)	SERVICE SPAN (hours/day, days/week)	DENSITY	SUPPORTING FACTORS
COMMUTER EXPRESS SERVICE	27	10–15 minutes, peak only	Park & ride locations	Within 5 miles of 80% of population and employment	100%	M–F, peak only	High density employment district as destination	Near full cost recovery, parking mgmt., sufficient park & ride spaces/ transit connections
LOCAL URBAN AND LIMITED SERVICE	22-28	15-30 minutes, peak; 30-60 minutes non-peak	1/8 – 1/4 mile	Within 1/3 mile of 60% of population and 70% of employment within service area	125%	7 days, up to 19-hour span of service	8–15 residential dwelling units per acre, 80 or more employees per acre	Land use/zoning and development that supports transit use; trip generators/ destinations along corridor; pedestrian and bicycle facilities
INNOVATIVE TRANSIT SERVICE	6	Varies by area	Designated locations	Accessible to all households within Connector service area	100%	M-F, limited hour span of service	Lower density areas not supportive of fixed route	Pedestrian and bicycle facilities; connection to fixed route network
PARATRANSIT	3	N/A	N/A	Vancouver UGA and 3/4 mile of fixed route service outside the Vancouver UGA	100%	7 days, up to 19-hour span of service	N/A	Clear eligibility criteria for service; coordination with human services transportation providers; travel training
VANPOOL	5-12	N/A	N/A	Service available for commute trips that begin or end in Clark County	100%	Based on individual needs	N/A	Parking mgmt.; employer subsidies/tax credits; CTR program

Source: C-TRAN

Existing Deficiencies

Southwest Washington Regional Transportation Council (RTC) is the federally designated Metropolitan Planning Organization (MPO) for the Clark County/Vancouver region. One of RTC's duties is conducting a continuing Congestion Management Process (CMP) as defined in federal regulation. The CMP serves as a systematic process that provides for safe and effective integrated management and operation of the multimodal transportation system. RTC's CMP is collaboratively developed and implemented as an integral part of the metropolitan planning process. The CMP provides a wide range of transportation system data to help guide the investment of transportation funds toward addressing congestion.

The monitoring element of the CMP is designed as an informational tool to be used within the decision-making process. It is also intended to provide an understanding of the transportation system's operating conditions and deficiencies and to assess the impacts of improvement strategies.

The annual <u>Congestion Monitoring Report</u> provides a comprehensive set of data for monitoring the performance of the transportation system. The Congestion Monitoring Report provides profiles on

the travel characteristics of the regional transportation corridors. The data is translated into Tables and maps that help identify deficiencies.

Travel Demand Forecasting

RTC uses a computerized model to project future traffic volumes based on the proposed land use patterns. The study year for analysis of future conditions is 2035. Base conditions for the 2024 analysis scenarios consist of funded or committed transportation projects, 2035 population and employment forecasts. Details of the land use assumptions and the allocation of jobs and households are provided in **Appendix A**.

Travel demand has also grown as the number of registered passenger cars in Clark County has increased dramatically over the last three decades. Between 1990 and 2000, there was a 67.2 percent increase in both registered passenger cars and light trucks (which includes SUVs).

Future Deficiencies

Future deficiencies in the transportation system are identified based on the Comprehensive Plan Preferred Alternative urban growth boundary map. The assumed transportation network included the existing network plus improvements identified in the Regional Transportation Plan (RTP). The RTP includes the transportation improvement programs of the various jurisdictions and projects for which there is an identified regional need, strong regional commitment and probable funding available. Clark County's 6-year Transportation Improvement Plan (TIP) identifies needed system improvements and is updated and adopted on an annual basis. Appendix A details transportation issues that are forecasted to exceed the level-of-service standards in the next 20 years. An extensive list of capital improvements has been included in the RTP (Appendix B: RTP Solutions, Projects, Strategies and Programs) to address the wide array of transportation needs for the Clark County region as expressed through the comprehensive planning efforts of its jurisdictions. The projects include roadway improvements, traffic signals, road widenings, overlays, intersection reconstruction, access ramps, bicycle lanes and sidewalks, school crossings, guard rails, culvert replacements and storm drainage improvements. As reported in the December 2014 RTP, the regional transportation infrastructure needed to accommodate growth over the next 20 years will require an investment of over \$1.8 billion (the approximate total cost of projects identified in the 2007 RTP was \$1.4 billion).

Regional Programs and Projects

This section summarizes the range of transportation programs and transportation projects needed to meet the transportation needs of people and freight in the twenty-plus year future.

In developing a balanced regional transportation system it is not only capacity deficiencies that must be addressed but also preservation and maintenance of the existing regional transportation system, plans to make for a safer regional transportation system for mobility of people and freight. All transportation modes are to be addressed with transportation options and choices made available to our diverse community's residents and businesses.

Complete Streets

The Complete Streets concept promotes streets that are safe and convenient for all users. Streets constitute a large portion of the public space and should be designed, constructed, operated, and maintained to be an appropriate and integrated transportation system that will meet the needs of motorists, pedestrians, bicyclists, wheelchair users, transit vehicles and riders, freight haulers, emergency responders, and residents of all ages and abilities.

Transportation facilities that support the concept of complete streets includes, but are not limited to, pavement markings and signs, street and sidewalk lighting, sidewalk and pedestrian safety improvements, Americans with Disabilities Act and Title VI compliance, transit accommodations, bicycle accommodations including appropriate signage and markings, and as appropriate streetscapes that appeal to and promote pedestrian use. The system's design will be consistent with and supportive of local neighborhoods, recognizing that transportation needs vary and must be balanced in a flexible, safe, and cost effective manner.

Those involved in the planning and design of projects within the public right-of-way will give consideration to all users and modes of travel from the start of planning and design work. Transportation improvements shall be viewed as opportunities to create safer, more accessible streets for all users. This shall apply to new construction, reconstruction, and rehabilitation.

Bicycle and Pedestrian System

The continuous development and growth of the non-motorized network in Clark County will reduce impacts to the environment (reduce greenhouse gases and vehicle demand), encourage enhanced community access and promote healthy lifestyles and exercise. A countywide network of bicycle and pedestrian facilities is needed to allow bicycling and walking for people of all ages and incomes as a practical alternative to automobile travel in some cases. It will also make the broader community more accessible, enjoyable and safer.

Integrated within the public highway, street and road system are non-motorized facilities, including bicycle and pedestrian facilities. The Cycling Vancouver & Clark County map includes separated multiuse paths such as the NE Padden Parkway, Burnt Bridge Creek and SR-503 trails; designated on-street bicycle lanes on some state highways and county and city roads; designated routes on widened county road shoulders; and streets and roads with shared roadway use that do not include special markings or signs.

Clark County and other local jurisdictions have included bicycle and pedestrian elements in their comprehensive plans or other plans. In 2010, the Board of County Commissioners adopted the *Bicycle and Pedestrian Master Plan*. The *Bicycle and Pedestrian Master Plan* provides a vision and implementation strategy for how Clark County can improve conditions for bicycling and walking over the next twenty years. The Plan envisions an interconnected bicycle and pedestrian network that provides routes to city centers, schools, transit, parks and recreational facilities. Once achieved, this Plan will improve Clark County residents' health, enhance their quality of life, help improve and protect the County's natural resources and be a source of pride to the community.

Transportation policies are an extremely important component of the bicycle and pedestrian plan. For example, roadway project policies can provide the support and direction to plan and build pedestrian and bicycle facilities because these facilities are more cost effective to incorporate the time of initial roadway construction. The County currently has a Bicycle and Pedestrian Advisory Committee to provide advice on bicycle and pedestrian facilities, mobility and safety issues.

In addition to the *Bicycle and Pedestrian Master Plan*, <u>C-TRAN</u> accommodates bikes on the bus. Bicycling and riding the bus also cuts down on pollution, traffic congestion and driving costs. All C-TRAN buses are equipped with bike racks. You can start your trip with an invigorating ride to a C-TRAN bus stop or park and ride and place your bike on the easy-to-use bike rack on any C-TRAN bus. Bike lockers are also available at transit centers.

Transportation Demand Management (TDM)

TDM is a mandated requirement. It is about reducing auto trips, shortening some, eliminating others and making our transportation system more efficient. Clark County supports TDM as a strategy to maximize the efficiency of the existing transportation system. Transportation demand management strategies to reduce vehicle trips on the regional transportation system can include use of transit, carpooling, vanpooling, working of flexi-hours and/or compressed work week and working from home with use of communications technology, known as telecommuting. There are numerous TDM strategies included in the 2014 RTP that can be put into place to increase transportation system efficiencies. Clark County strategies include Commute Trip Reduction, Parking and Transportation System Management.

Commute Trip Reduction (CTR)

A Commute Trip Reduction (CTR) law was first passed by the state legislature in 1991 followed by an updated law, the CTR Efficiency Act (RCW 70.94.527), in 2006. The CTR Efficiency Act of 2006 modified the scope of the CTR program to ensure that CTR plans and employer goals are coordinated with transportation and growth plans and focus on urban growth areas with the most congested state highways. Under the CTR Efficiency Act, local jurisdictions were allowed to create Growth and Transportation Efficiency Centers (GTECs) to obtain funding and flexibility in implementing programs. The Act also expanded the role of WSDOT and Regional Transportation Planning Organizations (RTPOs) in CTR planning.

The overall statewide goals of the Commute Trip Reduction program are to: 1) improve transportation system efficiency; 2) conserve energy; and, 3) improve air quality. The program requires participation by the state's largest employers; those with over 100 employees arriving at work between 6 a.m. and 9 a.m. year-round and located in areas of Washington State most affected by traffic congestion. In Clark County there are currently four CTR affected jurisdictions:

- Vancouver
- 2. Camas
- 3. Washougal
- 4. Unincorporated Clark County (UGA)

In October 2007, the RTC Board approved CTR Plans for each of these four jurisdictions. Since then, status reports have been submitted to the CTR Board in 2008, 2009, 2010 and 2011 and in 2013 summary CTR Plan updates were submitted to address how the CTR program is being implemented by local jurisdictions and the region. The implementation process requires that local jurisdictions, Regional Transportation Planning Organizations (RTPOs), major employers, transit agencies, WSDOT and the CTR Board work collaboratively. In 2015, local and regional CTR Plans were updated and submitted to the CTR Board with a specific focus on setting the future Plan's CTR goals and targets. In compliance with the Washington State Commute Trip Reduction Law, Clark County offers several elements in our Commute Trip Reduction (CTR) program:

- An on-site Employee Transportation Coordinator (ETC)
- Guaranteed/Emergency Ride Home
- Promotion of the Clark County Commute Trip Reduction website and online ride-matching service
- Promotion of CTR campaign events

The Clark County Commute Trip Reduction Website, www.clarkCommute.org, is loaded with information on travel options for commuting to work. It offers a commute tracker tool that enables you to track your work commute and calculate your savings when you choose an alternative commute to work.

Transportation System Management

The term Transportation System Management (TSM) is applied to a wide range of transportation system improvements that tend to have low or no capital cost but address impediments to efficient operation of the transportation system. TSM measures can be applied on a spot or corridor basis. Clark County currently employs TSM measures to gain additional operational capacity on major arterial corridors. Active TSM measures in place include:

- corridor access management;
- channelization of traffic at intersections;
- traffic signal coordination; and,
- Intelligent Transportation System (ITS).

One of the most effective TSM measures is a program to address inappropriate land use access to arterial roadways. While new development is required to comply with the county transportation standards (CCC Chapter 40.350), existing land use on county arterials may have permitted inappropriate access to those arterial roadways. The most efficacious approach to corridor-level access management is to address access issues when arterial capacity is expanded.

Another TSM approach involves the identification of small capital improvements that can be demonstrated to add significantly to the capacity of an arterial. For example, at an intersection having a shared through and left-turn lane, the traffic signal must be timed to separate that approach from the approach facing it (to allow for free flow of the left-turning traffic). The necessity of splitting that phase of the traffic signal timing creates an inefficiency, which could be removed if a separate left-turn lane is constructed.

A third approach, which is most applicable to high-volume roadways (e.g., Interstates and parkway arterials), is to provide incident management services in a single or series of corridors to address traffic management during incidents (e.g., vehicle collisions, breakdowns) so that such incidents are cleared quickly. Washington State Department of Transportation has a program to provide incident management patrols for the higher-volume state highways (I-5, I-205, SR-14). Clark County uses traffic signal coordination systems to improve the operational efficiency of the regional transportation system in the following corridors:

- NE 134th Street (Salmon Creek Avenue/ NE 134th St to NW 2nd Avenue) NE 139th St from NE 20th Avenue to Tenney Road
- NE 99th Street (NW 21st Avenue to NE 32nd Avenue)
- NE 78th Street (NW 9th Avenue to NE 94th Avenue)
- Padden Parkway (NE Ward Road/NE 162nd intersection to NE 137th Avenue part of WSDOT SR-500)
- NE Ward Road (NE 78th Street to NE 76th Street)
- NE Fourth Plain Road (NE 102nd Avenue to the shopping center entrance signal at approximately NE 114th Avenue)
- NE Highway 99 (several separate systems NE 129th Street to NE 134th Street, NE 117th Street to NE 88th Street, NE 78th Street to NE Ross Road in the City of Vancouver)

- NE 20th Avenue (NE 134th Street to NE 139th Street)
- NE Andresen Road (NR 58th Street to NE 88th Street)

The unsignalized intersection LOS methodology is not used as a criterion to install signals. Underutilized intersections must meet legal signal warrants (volume, safety and operating criteria) before a signal can be installed. Indiscriminate installation of traffic signals can actually increase accidents as well as add unnecessary expense.

Traffic signal coordination is part of a broader regionally coordinated Transportation System Management and Operations (TSMO)/Intelligent Transportation System (ITS) program called Vancouver Area Smart Trek (VAST). The VAST program was initiated in 1999 through a partnership of transportation agencies including the Southwest Washington Regional Transportation Council, Clark County, the cities of Vancouver and Camas, ODOT, WSDOT and C-TRAN to coordinate, plan and fund TSMO/ITS projects. ITS uses real time information to integrate and manage road traffic, transit, ramp meters, traffic signals and to manage incidents for more efficient performance. The components of the VAST Program include communications infrastructure, traveler information, incident management, transportation management, transit priority, transit operation and management. The VAST Implementation Plan is a twenty-year prioritized project list. The short term projects include interconnected and adaptive signal control, freeway cameras and roadway detection, variable message signs, a traveler information system and a traffic management center. A Clark County transportation data warehouse is established to provide the transportation data needed to monitor the TSMO improvements and system performance. As part of the operations program, RTC, Clark County and the VAST agencies have partnered with Portland State University and Portland area transportation agencies to maintain and improve the Portal Data hosted by the ITS Lab at PSU. It contains historical and real-time transportation data from agencies in the Vancouver Portland region in a single location. This transportation information warehouse can be used by researchers, planners, traffic engineers and the public to look at transportation performance.

Congestion Management Process

RTC is the federally designated Metropolitan Planning Organization (MPO) for the Vancouver/Clark County region, it is required by federal law to maintain a Congestion Management Process (<u>CMP</u>), which is a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies to alleviate congestion and enhance the mobility of persons and goods.

Quality of life and economic prosperity in the region depends on efficient mobility for both people and goods. There is recognition that strategic expansion of capacity is needed at key bottlenecks. Capacity expansion should take place after lower cost efforts have been made to improve the operations of existing facilities. The CMP is intended to identify and manage congestion using performance measures to direct funding towards strategies that most effectively address congestion. The CMP is implemented as part of the overall metropolitan planning process.

The Clark County region was designated as a Transportation Management Area under the federal Transportation Act, ISTEA, in 1991. The region is designated as a TMA because it has a population greater than 200,000. In addition to meeting all the specified metropolitan transportation planning process requirements, MPOs representing Transportation Management Areas must meet additional requirements. In TMAs, the MPO must have a Congestion Management Process as described above. The CMP provides for the effective management of new and existing facilities through the use of travel demand reduction and operational management strategies. In addition, in air-quality non-

attainment TMAs, highway capacity expansion projects that result in a significant increase in single occupancy vehicles can only be programmed if consistent with the Congestion Management Process. The CMP serves as the process for identifying deficient regional travel corridors, for evaluating alternatives to address congestion and for managing the performance of the system.

Preservation and Maintenance

Preservation and maintenance of the existing transportation system is a high priority. Preservation can prolong the life of transportation system elements and maintenance addresses the day-to-day activities needed to keep the transportation system in good working order. Clark County Public Works maintains approximately 2,665 lane miles in unincorporated Clark County. As Clark County's population continues to grow, the wear and tear on our roads also increases.

Summer Road Preservation Program

Starting in April of each year, Public Works begins annual road surface treatments. The county uses several different methods to preserve roads and to protect the public's investment in its transportation infrastructure. Road surface preservation treatments may include asphalt overlay, slurry seal, rubberized asphalt cape seal, chip seal, micro seal, full-depth reclamation and/or full-depth reclamation.

Bridges

With the many rivers and streams in the region, bridge crossings are a vital part of the transportation infrastructure. Bridges on the Clark County highway system include: I-5 bridge crossings of the Columbia River, Salmon Creek, NE 129th Street, NE 134th Street, East Fork Lewis River and North Fork of the Lewis River; SR-14 crossings at West Camas Slough and Lawton Creek; SR-501 crossing of the rail lines in Vancouver, SR-503 crossings of Cedar Creek, Salmon Creek, Chelatchie Creek and the Lewis River at Yale; the La Center Bridge and Heisson Bridge. Bridge needs can include deck preservation, steel bridge painting, seismic retrofits, movable bridge repair and scour protection. The I-5 Bridge crossing the East Fork of the Lewis River is currently on the list of structurally-deficient bridges. This bridge has a weight restriction that affects heavy trucks. Clark County maintains a list of bridges with height and weight restrictions in the County and publishes these in the County's Bridge Report.

Transit

Every year, state law requires the 32 public transit agencies statewide to produce six-year Transit Development Plans (TDP). C-TRAN is Clark County's public transit agency. The 2015-2020 TDP reviewed 2014 operating performance and facilities development. It highlights six-year initiatives and activities that include State of Good Repair, Mobility, Safety, Economic Vitality, Environmental Quality and Health and Service Equity. Washington State Transportation Plan 2035 cites C-TRAN preservation and maintenance costs over a 24-year period are expected to total \$2.24 billion.

High Capacity Transit (HCT)

Prior to adoption of C-TRAN 2030 (C-TRAN, June 2010), the RTC Board adopted the Clark County High Capacity Transit System Study in December 2008 following a two-year planning process. The HCT Plan provides a blueprint for C-TRAN and the Clark County region to move High Capacity Transit improvements forward in identified HCT corridors. The HCT System Study is based on the assumption that traffic volumes will increase over time as planned growth and economic development continue in the Clark County region. The constrained ability to expand highway capacity in a number of key regional transportation corridors is expected to cause traffic congestion to worsen thus increasing the need to develop a transportation alternative. The first regional HCT improvement is Bus Rapid

Transit (BRT) beginning operation in 2016 that will create a Fourth Plain Corridor Hybrid BRT between downtown Vancouver and Vancouver Mall.

Washington State Rail Plan 2013-2035 shows two projects completed by 2025 in Clark County; 1) Columbia River Bridge in Clark County. WSDOT's Long Range Plan for Amtrak Cascades from Rail milepost 9.61 to 10.14. The Portland - Spokane route junction at the north end of the Columbia River Bridge has a 10 mph speed restriction. Construction of an additional bridge and modification of the existing bridge would provide better movement of traffic and reduce the effect of bridge openings on rail traffic, and 2) Felida to MP 114 Third Man Track. This project is from rail milepost 130.45 to 112.2 and will include a new eighteen mile-long main line for Amtrak Cascades (traveling at 110 mph) will be build adjacent to the existing double track.

Freight

Clark County's local, regional and state economy is highly dependent upon the efficient transport of goods to and from markets. Without investments to maintain and improve freight mobility in key highway and rail corridors and at intermodal freight connections (rail-road-water-air) the region's economy and its jobs' sustainability is at risk.

Freight Issues

RTC initiated the Clark County Freight Mobility Study in 2009 to provide an understanding of the key elements of freight movement and to explain why freight and goods movement is important to Clark County's economy and employment. The study inventoried existing freight and goods movement and identified current deficiencies and future action items to be addressed as part of ongoing regional and local planning processes. The study began to identify corridor investment needs in order to sustain jobs and economic development for existing and future industrial and employment centers. The study was conducted to supplement the Clark County RTP.

The key issues for truckers are congestion, travel-time reliability and a need for additional capacity. Key issues for rail are congestion, port access and mainline capacity limitations. All three ports in Clark County are expanding their portfolios of commercial/industrial lands. Private developers are also positioning their properties for the economic upturn. Improvements in truck and rail access are required to make these efforts successful, particularly improved freeway access. Barge operators need improvements in the Columbia River navigation channel and will also benefit from road and highway improvements.

State Initiatives

The WSDOT-developed Intermodal Management System (IMS) provides input on regional intermodal needs. The community has noted a concern about the transportation of hazardous materials on the transportation system.

WSDOT first adopted a Statewide Freight and Goods Transportation System (FGTS) in 1995 that categorizes highways and local roads according to the tonnage of freight they carry. The <u>FGTS</u> is updated periodically with the most recent 2015 update published in March 2016. Washington State also created the Freight Mobility Strategic Investment Board (FMSIB) with a mission to create a comprehensive and coordinated state program to facilitate freight movement between and among local, national and international markets in order to enhance trade opportunities. The Board is also charged with finding solutions that lessen the impact of the movement of freight on local communities. The Board proposes policies, projects, corridors and funding to the legislature to promote strategic investments in a statewide freight mobility transportation system.

Truck Routes

Clark County has designated all roadways classified as arterials or above and located within urban areas as truck routes. In rural areas, the county has designated all of its collector facilities and above as truck routes. The county has placed restrictions on selected sections of the county system where pavement conditions require weight limits. The inventory of restricted sections is updated annually and restrictions are removed from the list once the surface has been upgraded.

WSDOT has designated all of its state roadways as truck routes and has few weight or height restrictions on these facilities. Freight mobility on Interstate 5 and Interstate 205 is especially important for through freight movements and are a critical link in north-south freight movements on the entire West Coast between Canada and Mexico. In addition, I-5 provides truck access to the Port of Vancouver and nearby industrial facilities. I-205 provides access for the high tech industries in East County for air shipments from Portland International Airport and SeaTac.

Most of the freight truck activity occurs between 6:00 AM and 4:00 PM with the highest truck traffic volumes found near midday. During the morning peak traffic period (AM peak) trucks account for approximately 5 to 10 percent of the total traffic volume on primary truck routes. During the evening peak traffic period (PM peak) the volume of truck traffic generally decreases and accounts for less than 5 percent of the total traffic.

Future Conditions

An adequate level of mobility should be maintained for freight and goods movement in Clark County and in the Vancouver-Portland metropolitan area as a whole to sustain the economic activity of the metropolitan region and the States of Washington and Oregon. As traffic congestion continues to increase in more locations and for longer periods, the freight industry will experience longer shipping schedules and delays. This will likely increase the cost of transporting the goods. Of particular concern is the I-5 Bridge over the Columbia River, which is already operating at capacity. In addition, the long queues of traffic resulting from congestion on I-5 could block truck access to downtown Vancouver and the Port of Vancouver. The budget constraints at the federal, state and local levels of government will limit the amount of funding for roadway improvements including those for upgrading pavement conditions on restricted truck routes. This will place more of a burden on the remaining truck route system.

There are short and long-term planning measures that can be implemented for preserving an adequate level of freight mobility as identified in the RTC freight transportation study and the I-5 Trade and Transportation Partnership Strategic Plan.

Parking

Parking policy, codes and pricing have the most direct effect on commuting behavior and choice of modes for travel. Parking policy through the 1970s and into the 2000s concentrated on providing abundant off-street parking (both private and public) and closely monitoring available low cost onstreet metered parking to attract business and encourage economic growth. While the parking programs today are much the same as they were 20 years ago in terms of attracting businesses, the means to this end are slightly different. Today, visions of mixed-use centers, higher density housing developments and a pedestrian- friendly environment are being incorporated into the 20-Year Plan elements. Although parking has always been a hotly contested issue, especially for those individuals desiring to drive to their destination, parking policies of the past are at odds with current goals.

Livable neighborhoods and pedestrian friendly environments are critical to the success of alternative transportation opportunities such as transit, carpooling, bicycling, walking and even high capacity

transit. Where walkable and transit-friendly environments exist, the need for parking can actually decrease. The larger (in actual area) the transit friendly and walkable environment, the greater the potential decrease in parking demand. A decrease in parking can be realized only with a supporting and usable transit system, as well as pedestrian amenities. In the absence of such an environment, the demand for available parking will remain.

Transportation Security

In compliance with RTC's Certification checklist, this TE references Appendix F: Transportation Security in the Vancouver/Clark County Region.

3. Concurrency

Concurrency Requirements

The concurrency requirement of the GMA mandates that local jurisdictions adopt and enforce ordinances that prohibit development approval if the development causes the LOS on certain transportation facilities to decline below the standards adopted under the comprehensive plan, unless transportation improvements or strategies to accommodate impacts of the development are made concurrent with the development. Concurrent with development means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years. Clark County will meet these requirements through implementation of the adopted concurrency ordinance.

Concurrency policies are applied to local arterials identified in the capital facilities plan. Highways of statewide significance are exempt from local policies. The concurrency requirements of the GMA closely match the State Environmental Policy Act (SEPA) short-term impact analysis requirements as they both evaluate transportation impacts (namely the roadway, corridor and intersection LOS) at the year of opening of the development or a specified short-term analysis year. A State Environmental Policy Act (SEPA) transportation impact analysis would specify a study area. Concurrency requires an evaluation of area-wide impacts and specific mitigation of those impacts concurrent with the development opening.

Concurrency Management System

The concurrency management system must address concurrency monitoring and concurrency regulation for new development. The county and its cities are responsible for concurrency monitoring and the project applicant is responsible for demonstrating concurrency of the proposed development. The concurrency management system will include all designated corridors along identified arterials and their intersections on the regional system, except for facilities of statewide significance or intersections with facilities of statewide significance. In addition, all intersections of regional significance will also be subject to concurrency testing. Implementation of concurrency monitoring in the county and with local jurisdictions consists of the following strategies:

- LOS is monitored in an established database that includes all intersections within the concurrency management system;
- The regional model and other traffic simulation models are used to estimate LOS for roadway segments. A traffic data collection program has been established for roadway segments;
- A tracking system is in place to monitor development applications for "used capacity;" and reserved capacity for new development is based on approved applications.

4. Policies and Strategies

Transportation policies that seek to provide for the mobility of people and goods must consider increases in travel demand caused by growth in population and employment. The transportation system must be affordable and minimize environmental impacts to maintain the quality of life. A safe, efficient transportation system can work to enhance economic development within a region in conjunction with supportive land use plans.

Community Framework Plan

The Community Framework Plan and the comprehensive plans of the county and its cities envision a shift in emphasis from a transportation system primarily based on private, single-occupant vehicles to one based increasingly on alternative, higher-occupancy travel modes such as ridesharing, public transit and non-polluting alternatives such as walking, bicycling and telecommuting. This shift in emphasis is due funding constraints at the federal and state level as well as consideration of the thirteen GMA planning goals contained in RCW 36.70A.020.

Regional policies are applicable countywide. Urban policies only apply to areas within adopted urban growth areas (UGAs) and are supplemental to any city policies. Rural policies apply to all areas outside adopted UGAs.

Goals and Policies

5.0 Countywide Planning Policies

- 5.0.1 Clark County, Metropolitan Planning Organization (MPO) and the Regional Transportation Planning Organization (RTPO), state, bi-state, municipalities and C-TRAN shall work together to establish a truly regional transportation system which:
 - reduces reliance on single occupancy vehicle transportation through development of a balanced transportation system which emphasizes transit, high capacity transit, bicycle and pedestrian improvements and transportation demand management;
 - encourages energy efficiency;
 - recognizes financial constraints; and,
 - minimizes environmental impacts of the transportation systems development, operation and maintenance.
- 5.0.2 Regional and bi-state transportation facilities shall be planned for within the context of countywide and bi-state air, land and water resources.
- 5.0.3 The state, MPO/RTPO, county and the municipalities shall adequately assess the impacts of regional transportation facilities to maximize the benefits to the region and local communities.
- 5.0.4 The state, MPO/RTPO, county and the municipalities shall strive, through transportation system management strategies, to optimize the use of and maintain existing roads to minimize the construction costs and impact associated with roadway facility expansion.
- 5.0.5 The county, local municipalities and MPO/RTPO shall, to the greatest extent possible, establish consistent roadway standards, level-of-service standards and

- methodologies and functional classification schemes to ensure consistency throughout the region.
- 5.0.6 The county, local municipalities, C-TRAN and MPO/RTPO shall work together with the business community to develop a transportation demand management strategy to meet the goals of state and federal legislation relating to transportation.
- 5.0.7 The state, MPO/RTPO, county, local municipalities and C-TRAN shall work cooperatively to consider the development of transportation corridors for high capacity transit and adjacent land uses that support such facilities.
- 5.0.8 The state, county, MPO/RTPO and local municipalities shall work together to establish a regional transportation system which is planned, balanced and compatible with planned land use densities; these agencies and local municipalities will work together to ensure coordinated transportation and land use planning to achieve adequate mobility and movement of goods and people.
- 5.0.9 The state, county, MPO/RTPO and local municipalities shall work together to establish a regional transportation system which is planned, balanced and compatible with planned land use densities; theses agencies and local municipalities will work together to ensure coordinated transportation and land use planning to achieve adequate mobility of goods and people.
- 5.0.10 State or regional facilities that generate substantial travel demand should be sited along or near major transportation and/or public transit corridors.

County 20-Year Plan Policies

In addition to the policies adopted by all local jurisdictions, the County has adopted transportation goals policies specific to areas within County jurisdiction.

Goal: Develop a regionally-coordinated transportation system that supports and is consistent with the adopted land use plan.

5.1 System Development Policies

- 5.1.1 The capital facilities plans, within each UGA should be jointly undertaken with the city and reviewed for regional consistency by the Southwest Washington Regional Transportation Council.
- 5.1.2 County Road Projects and transportation improvements are proposed through development shall be consistent with the current adopted Clark County Road Standards, Arterial Atlas, 2010 Clark County Bicycle and Pedestrian Master Plan, Concurrency Management System, RTC's Regional Transportation Plan and the Washington Transportation Plan.
- 5.1.3 Performance standards for the regional arterial system and transit routes shall direct growth to urban centers.
- 5.1.4 The county shall provide opportunity for full and fair participation by all communities in the transportation decision-making process.

- Prepare interagency agreements that allow for intergovernmental development review.
- Prepare interagency agreements that provide for the transfer of transportation project management and funding during annexation.
- Coordinate with local municipalities, the Washington State Department of Transportation, adjacent counties and C-TRAN to ensure that minimum roadway and multimodal design standards are consistent and that the design standards provide for all modes and are compatible with adjacent land uses.
- Establish and promote scenic highway corridors.

Goal: Develop a multi-modal transportation system.

5.2 Multi-modal System Policies

- 5.2.1 Roadway improvements which provide for additional capacity for the automobile shall also accommodate alternative travel modes.
- 5.2.2 Transit related options, including high capacity transit, shall be encouraged in order to reduce congestion and to improve and maintain air quality.
- 5.2.3 The regional public transportation system shall serve the needs of those with transportation disadvantages in accordance with adopted service standards. The county, C-TRAN and local agencies shall maintain specialized transportation services and facilities to meet the requirements of the Americans with Disabilities Act.
- 5.2.4 The county shall support new and improved passenger rail transportation services between Clark County and the Portland metropolitan area and along the I-5 corridor from Vancouver, BC to Eugene, Oregon.
- 5.2.5 Regional airport planning shall include all affected jurisdictions to provide compatibility with surrounding land uses and to support adequate ground transportation to move people and goods to and from airports.
- 5.2.6 The 2010 Clark County Bicycle and Pedestrian Master Plan and its policies are included by reference in the Comprehensive Plan.
- 5.2.7 The county supports the development of its bicycle and pedestrian network identified in the 2010 Clark County Bicycle and Pedestrian Master Plan.
- 5.2.8 The county supports coordination among the jurisdictions and agencies in the development of bikeway and pedestrian facilities.
- 5.2.9 Supports efforts to fund construction of bicycle and pedestrian improvements in the Clark County Bicycle and Pedestrian Master Plan without the loss of streets and/or highway vehicular lane capacity.
- 5.2.10 Long range land use and transportation plans shall be coordinated with high capacity transit plans.
- 5.2.11 Promote bicycle and pedestrian safety and increased bicycling and walking through safety and encouragement activities.

- 5.2.12 Endorse the concept of complete streets, which promotes roadways that are safe and convenient for all users.
- 5.2.13 Design and construct complete streets wherever feasible and practicable.

- Integrate the regional public transit system with other modes of transportation including auto, rideshare, bicycle and pedestrian travel.
- Develop infrastructure to interface with inter-city bus, rail and airline facilities.
- Coordinate with C-TRAN to integrate transit facilities such as transfer centers, bus pullouts, bus shelters, transit information centers and pedestrian connections into the design of all types of development.
- Provide rural collector level connections from rural centers to major multimodal transportation corridors and park-and-ride facilities.
- Support public transportation connections to the rural centers and encourage efficient service between rural cities, towns and centers and urban centers.
- Ensure that alternative transportation modes such as pathways, sidewalks, bus stops and bike lanes are provided for in subdivisions and other land developments.
- Incorporate adequate checklists into the development and project review process to ensure that accessibility for the elderly and physically challenged is provided, through the construction of curb cuts and ramps, designation of parking spaces, etc.
- Participate in any new airport site selection process led by the Ports, Washington State Department of Transportation Aviation Division or other governmental entity.
- Implement the 2010 Clark County Bicycle and Pedestrian Master Plan to expand travel opportunities for transportation and recreation.
- Increase bicycle and pedestrian safety through education and enforcement activities.
- Increase the number of people walking and cycling through education and promotional events.
- Coordinate with local jurisdictions to ensure a seamless bicycle and pedestrian transportation system between the unincorporated County and neighboring cities.
- Establish an East Clark County Scenic Bicycle Route.

Goal: Optimize and preserve the investment in the transportation system.

5.3 System Preservation Policies

- 5.3.1 Development projects shall adhere to minimum driveway access spacing standards along arterial and collector streets to preserve the capacity of the transportation system. The county shall also work with Washington State Department of Transportation to ensure that minimum access spacing standards for state highways are maintained.
- The efficiency of the county's transportation system shall be optimized through the use of Transportation System Management & Operations (TSMO) strategies such as signal interconnection coordination and synchronization.
- 5.3.3 The county shall extend the life of existing roadways through a timely maintenance and preservation program.

- 5.3.4 The county shall support and promote a Transportation Demand Management program to reduce the peak hour travel demand from single occupant motor vehicles.
- 5.3.5 The local street system shall be interconnected to eliminate the need to use collector or arterial streets for internal local traffic.
- 5.3.6 The county shall protect the public's investments in existing and planned freeway and separated grade interchanges.
- 5.3.7 The county shall provide seamless arterial corridor operations between agencies and use common TSMO technology for signal coordination along multi-agency arterial corridors.

- Install medians where feasible on arterial roadways that have inappropriate levels of land access as defined in the County Transportation Standards.
- Discourage the construction of cul-de-sacs and other forms of dead-end streets especially
 those without pedestrian and bicycle linkages. Require new development to provide for
 street/pedestrian connectivity where practicable considering environmental and other
 constraints. Existing unconnected streets should be retrofitted to provide bicycle and
 pedestrian linkages.
- Preservation program priorities will be established using the Pavement Management System.
- Truck access shall be restricted where gross weight will adversely impact the structural integrity of streets.
- Incorporate Intelligent Transportation System (ITS) where possible within urban growth areas when it is cost-efficient and will result in achieving county transportation goals.
- Require private developments to access collector and local access streets, versus direct access to the arterials. Encourage consolidation of access in developing commercial and high density residential areas through shared use driveways, interconnected parking lots and local access streets that intersect with arterials.
- Use transportation, land use and other measures to maintain or reduce vehicle miles traveled and peak hour trips by single occupant vehicles.
- Maintain the county railroad right-of-way as an industrial-commercial-tourist-recreational resource.
- Evaluate the impacts of significant land use changes on existing or planned freeway and separated grade interchanges. Coordinate with the state on mitigating impacts.

Goal: Ensure mobility throughout the transportation system.

5.4 System Mobility Policies

- 5.4.1 The county arterial system shall be planned in general conformance with nationally-accepted arterial spacing standards.
- 5.4.2 Congestion performance standards shall be maintained by the appropriate jurisdictions on major freight mobility corridors and in the vicinity of major intermodal facilities to ensure the economic vitality of the region.

- 5.4.3 Transportation System Management strategies should be analyzed and employed before adding a general purpose lane to any regional roadway.
- 5.4.4 County roadways and intersections shall be designed when practical to achieve safety and accessibility for all modes. Arterial streets shall provide facilities for automobile, bike and pedestrian mobility as defined in the Arterial Atlas and shall include landscaping.
- 5.4.5 Improve mobility and access for the movement of goods and services on the short line railroad to enhance and promote economic opportunity throughout the county.

- Complete regional corridors and address corridor bottlenecks.
- Allocate or reserve corridor capacity for land uses likely to produce family wage jobs.
- Reduce corridor speed and intersection delay standards where transit is available at 15 minute headways during peak hours.
- Provide for reduced trip rate calculations for transit supportive development.
- Emphasize transit and ridesharing in the design and construction of all transportation facilities through the implementation of transportation system management techniques (signal timing, signal prioritization) and transit-only and high occupancy vehicle lanes.
- Continually test for changes in concurrency due to major development projects.
- Incorporate a "no-build" analysis into the design process for all transportation projects that would add general purpose lanes.
- Ensure that freight corridors are designed, maintained, and operated to provide efficient movement of truck and rail traffic.
- Use intelligent transportation system technology to alert motorists, bicyclists, and pedestrians to the presence and anticipated length of closures due to train crossings.
- Evaluate the feasibility of grade separation in locations where train crossings result in significant delays and safety issues for other traffic, and improve the safety and operational conditions at rail crossings of streets.
- Work with freight stakeholders and the Port of Vancouver to maintain and improve intermodal freight connections involving Port terminals, rail yards, industrial areas, interchange tracks and regional highways.
- Support efficient and safe movement of goods by rail where appropriate, and promote efficient operation of freight rail lines.
- Identify and minimize impacts that freight movements have on adjacent residential neighborhoods and on resource uses.
- Work with local jurisdictions and railroads to coordinate land use plans and policies to
 preserve and protect rail corridors, and take into account community needs in relation to the
 rail system.

Goal: Provide a safe transportation system

5.5 System Safety Policies

- 5.5.1 Clark County supports the development and design of capital improvements that achieve the vision of the Washington State's Strategic Highway Safety Plan, Target Zero, which establishes a statewide policy of zero fatalities and zero disabling injury collisions by 2030.
- 5.5.2 Pedestrian and bicycle safety shall be given consideration in the design and capital facilities planning process.
- 5.5.3 Interim safety improvements shall be implemented where a significant safety problem has been identified and the funding is not yet available for full improvements in conformance with adopted design standards.
- 5.5.4 Intersections between rail and other transportation modes shall be grade separated where possible, except at intermodal transfer points.
- 5.5.5 Clark County supports strong education and enforcement that helps reduce the number of fatalities and serious injuries due to distracted drivers.

Implementation Strategies

- A street maintenance program shall be developed by the county for non-motorized transportation.
- Develop interagency agreements on sharing services to ensure that all shoulders and/or designated bike lanes are maintained in a safe condition.
- Priority shall be given to sidewalk construction projects in transit corridors, near school facilities and major activity centers.

Goal: Develop a balanced finance program, which ensures that new development pays the costs of its impacts and that adequate public financing is pursued and available.

5.6 System Funding Policies

- 5.6.1 Priorities for programming and financing transportation improvements that reflect adopted transportation policies shall be adopted in coordination with other jurisdictions and agencies.
- 5.6.2 The prioritization process shall be flexible to allow staff to maximize use of outside funding sources.
- 5.6.3 A high priority shall be given to transportation improvements supporting economic development, particularly in high-ranking Focused Public Investment Areas.
- 5.6.4 A portion of available transportation funds shall be dedicated to sidewalk and bicycle facilities consistent with state law.
- 5.6.5 A proportionate share of funding for growth related roadway projects shall be obtained from Traffic Impact Fees.

Implementation Strategies

- Develop and implement a process that ensures efficient management of transportation resources through cooperation in community planning and project development by federal, state, regional and local jurisdictions.
- Consider implementation of a rural traffic impact fee to offset impacts to urban corridors.
- Cooperatively work with local municipalities and the Regional Transportation Council to develop an integrated Transportation Improvement Program process to maximize the resources for the region.
- Establish funding guidelines and priorities for distribution of transportation funding among competing needs (e.g. economic development, Focused Public Investment Areas, maintenance, preservation, pedestrian safety, mobility, etc.).
- Pursue acquiring advance right-of-way for planned transportation improvements.
- Leverage local funding with innovative and aggressive finance strategies including public/private partnerships, grant development, efficient debt and fee-based funding sources including tolls, congestion pricing and other local options.

5. Financial Analysis

A financial analysis was prepared for the Transportation Element to demonstrate the ability of the county to fund planned roadway improvements. The GMA requires that there be a balance between proposed land use, resulting traffic forecasts and transportation improvements directed by the LOS standards and available revenues. The GMA requires that public facilities and infrastructure either be in place or included in a six-year improvement program before new development can be approved. The GMA also enables the imposition of impact fees, which are used to finance the shortfall between revenue and the cost of the transportation plan. Clark County adopted an impact fee ordinance in September 1990 and has amended that program in 1994, 2001 and 2010 to address increasing improvement costs. In 2010, in the wake of the Great Recession and the severe spike in unemployment that followed, the Board of County Commissioners began experimenting with fee waiver programs in an effort to stimulate job growth in unincorporated Clark County. As of April 2016, the fee waiver program remains in effect and the BOCC is continuing to evaluate the program effectiveness. The Corrected Job Creation Program, enacted in June 2013 was the latest iteration in a series of fee waiver programs, whose main purposes were to: Waive certain fees for a temporary period to help reduce business costs and thereby stimulate development in industrial, mixed use, business park, commercial retail and zones within County; and Spur private sector jobs-producing economic development. The Clark County Fee Waiver Programs consist of Resolution No. 2010-10-04, Resolution No. 2012-02-01 and Resolution No. 2013-06-06.

A substantial traffic impact fee program update is expected to be completed in 2016-17. The financial analysis consists of four parts:

- Review existing transportation funding sources and forecast revenues through 2021 (six-year horizon), based on existing trends;
- Review annual expenditures for streets and project expenditures through 2021, based on existing trends;
- Prepare estimated costs for transportation improvement projects; and,
- Compare revenue and expenditure projections, estimated capital improvement costs and identify potential shortfalls in funding the capital improvement program.

Existing Revenue Sources

Revenues available for financing roadway activities in the county and its cities can be highly variable, from year to year depending on the amount of development activity occurring in the county, the number of successful grant applications and other local economic factors. Funds for roadway-related activities come from five general sources:

- County Road Fund revenue from property tax;
- Public Works Trust Fund loans;
- Local improvement district bonds;
- Traffic Impact Fees adopted by the BOCC; and,
- Distribution of funds from state and federal sources (e.g., state gas tax allocations).

Funds allocated from general county and city revenues are distributed through the budgetary process. Though these funds are highly dependent on general economic conditions, the budgetary process can soften the impact of fluctuation in the economy and stabilize the year-to-year variation in funds allocated to roadways.

Revenues derived from roadway-related activities and from outside sources usually do not have the benefit of the budgetary process. Budgetary decisions cannot smooth out fluctuations when these revenues are dedicated solely to public works activities by the nature of the fee or by the state and federal government. Impact fees are contingent upon project and development activity and subject to return to the developer if not spent within 6 years. Clark County's fee waiver program waives permit application and traffic impact fees (TIF) for non-residential construction. Application fees are used to cover the costs associated with permitting. Similarly, TIF fees pay for the infrastructure improvements necessary to support residential and commercial growth. Although TIF fees represent a small portion of funding for these improvements, as private dollars they enhance the County's ability to obtain related federal funding. Approximately \$7.8 million in fee waivers, (\$1.4 million in application fees and \$6.4 million in TIF fees), were awarded to 153 projects from June 2013 through August 2014. For additional information see Clark County Auditor's Office Report #14-02 November 25, 2014.

Funds from state and federal sources are restricted by their own budgetary limitation of those jurisdictions. Funds for individual modes have traditionally been allocated by individual agencies; however federal funding sources now allows some flexibility in funds between roadways, transit and non-motorized modes.

The federal gas tax and other transportation fees and taxes are the major federal revenue sources for transportation funding. On December 4, 2015, the President signed into law the Fixing America's Surface Transportation Act (FAST) officially replacing MAP-21. It is important to note there are no programmatic changes in the FAST act. FAST is a five year surface transportation authorization bill which will provide spending levels for FY2016–FY2020. The former bill, Moving Ahead for Progress in the 21st Century Act (MAP-21) provided funding for fiscal years 2013, 2014 and 2015. MAP-21 incorporated performance measures to provide a more efficient investment of federal transportation funds and restructured core transportation programs.

The variability of the budgetary process, local economic conditions and federal and state funding sources often cause individual revenue sources to fluctuate widely from year to year. This creates difficulty in tracking definable trends in revenue growth from these sources. Total revenue dedicated to road activities rises and falls with the fluctuation of individual sources, though the amplitude is

buffered as some sources fall and others rise, absorbing some of the impact of each. Loans from the Public Works Trust Fund can be used to balance or buffer variations in grant funding.

Projected Expenditures

Long-range capital improvements to the county's transportation system and their estimated costs are included in the Capital Facilities Plan. These projects would likely be funded through a combination of state sources, the Transportation Improvement Board and a local match. Local contributions can raise the likelihood of project funding and typical (although not average) local matches are 20 percent. Note that in order to meet LOS standards and build new roadways consistent with the plan, many of the local streets must be built entirely by developer contributions.

Comparison of Need and Revenues

6-Year Transportation Program

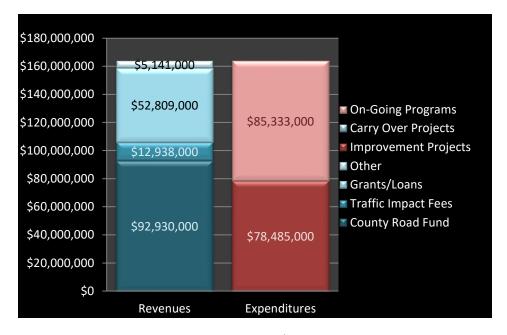
The Growth Management Act (36.70A) requires "a multi-year financing plan based on the needs identified in the comprehensive plan." The 2016-2021 Transportation Improvements Program (TIP) serve as the short term implementation mechanism of this plan. The TIP is financially constrained, balancing revenues with expenditures. The TIP uses objective criteria to evaluate and prioritize road improvement projects and assigns available revenues to projects to achieve those goals. State law requires Clark County to prepare and update annually the six-year comprehensive transportation program. The 2016-2021 TIP was adopted on November 10, 2015 by the Board of County Councilors. Table 5.7 and figure 5.5 summarize the TIP's financial balance.

Table 5.7 | Transportation Improvement Program Financial Comparison

Revenue	\$163,818,000		
Expenditure	\$163,818,000		
Balance*	\$ 0		

Source: Appendix A

Figure 5.5 | Six Year Transportation Needs and Projected Funding Capacities



Source: Appendix A

20-Year Planning Period

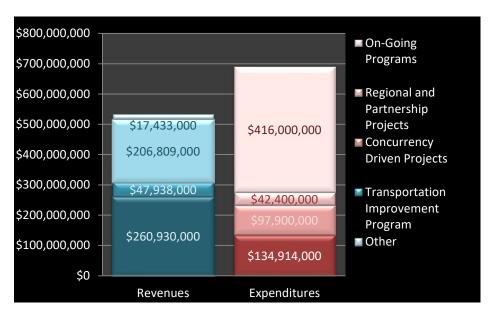
The Growth Management Hearings Boards have consistently read the GMA [RCW 36.70A.070 (3) (e)] to require that estimates for revenues meet the estimated expenses for the 20-year planning period. Improvements to highways of regional significance are addressed in the Regional Transportation Improvement Program reviewed biannually by the Regional Transportation Council and are financially constrained. Improvements to highways of statewide significance are detailed in the Washington State Department of Transportation Highway System Plan which includes a description of both financially constrained and unconstrained planned improvements. Both the regional RTP and the Washington State Highway System Plan are incorporated by reference. The needs identified on the local system are consistent with the financially constrained portions of both the state and regional plans, as identified in the Capital Facilities Plan. Table 5.8 and Figure 5.6 show the estimated funding and expenses projected for Unincorporated Clark County.

Table 5.8 | Capital Revenues and Expenditures 20-Year Projection

Revenue	\$533,110,000
Expenditure	\$691,214,000
Balance	-\$158,104,000

Source: Appendix A

Figure 5.6 | Twenty Year Transportation Needs and Projected Funding Capacities



Source: Appendix A

Strategies to Balance the CFP

The Growth Management Act requires the 6-year transportation improvement plan to be financially constrained and balanced. The 20-year transportation capital facilities plan is more speculative and is not required to be balanced. The projected revenue shortfall of \$158.1 million represents about 23% of the total projected capital cost, which could be considered significant in the absence of any strategies to close the gap.

There are a variety of strategies and policy actions available to the Board of County Commissioners to balance the 20-Year CFP. Options for increasing revenues include updating Traffic Impact Fees, adopting a motor vehicle excise tax of up to \$20 per vehicle and increasing the local option fuel tax to the statutory limit. Based on recent policy decisions and preliminary work on the Traffic Impact Fee update, it is realistic to assume that an additional \$40 to 50 million could be raised from these fees. Grant revenue estimates are also very conservative.

Reductions in the capital projects list are also likely. Several projects on the list would not contribute substantially to mobility on the transportation network in proportion to their estimated cost. Other listed projects are in areas that are likely to be annexed before county financing is available and would then become the responsibility of the annexing city.

The Transportation Capital Facilities Plan will be reviewed on a regular basis, not to exceed every five years, to ensure that the projected gap between costs and revenues is declining. If the potential shortfall increases and becomes critical, the potential courses of action in addition to those identified above would include reduction in the level-of-service standards and reassessment of the land use plan.

The transportation needs identified to serve growth in the next 20 years were evaluated by analyzing high volume corridors in the county. Local streets may experience greater volumes of "cut-through" traffic as a result of congestion on the major corridors. The county may rely on the local streets to serve a greater amount of traffic volume when needed projects cannot be funded.



Chapter 6

Capital Facilities & Utilities Element

Chapter 6 Capital Facilities and Utilities Element

Introduction

Capital facilities and utilities are the basic services which the public sector provides to support land use developments, both as they currently exist and as they are anticipated to develop over the course of the 20-year growth management planning horizon. The Capital Facilities and Utilities Element provide a general summary of how and when these basic services will be provided to support future growth as envisioned by the 20-Year Plan and proposed funding.

The Growth Management Act (GMA) establishes many of the requirements for the Capital Facilities and Utilities Element. The GMA establishes an overall goal to "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" (RCW 36.70A.020). The GMA requires that the capital facilities element include an inventory of existing publicly owned capital facilities, a forecast for the future needs for new or expanded facilities and a six-year financial plan. The GMA defines public facilities to include water, sewer, stormwater, schools, parks and recreational facilities, law enforcement and fire protection. The Capital Facilities and Utilities Element is intended to provide a general assessment of major public services which impact land use issues, rather than a detailed analysis of every service provided by government.

The Capital Facilities and Utilities Element must be consistent with the other elements of the 20-Year Plan, particularly the Land Use Element. Future development should be encouraged to occur in generally more compact patterns where public facilities already exist, because it can be served more efficiently and inexpensively than dispersed or sprawling land use patterns. The GMA dictates that "urban growth should be located first in areas already characterized by urban growth that have existing public facility and service capabilities to serve such development and second in areas already characterized by urban growth that will be served by a combination of both existing public facilities and any additional needed public facilities and services that are provided by public or private sources" (RCW 36.70A.110).

Providing new capital facilities in previously undeveloped and unserved areas may in turn lead to new development in dispersed patterns and should also be avoided. The GMA states that "... cities are the units of local government most appropriate to provide urban governmental services. In general, it is not appropriate that urban governmental services be extended to or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development."

The GMA also emphasizes the concept of concurrency, which requires that needed public facilities and services be in place, or officially planned and scheduled to be put into place, concurrent with new development. This concept requires cities and counties to establish explicit levels of service, or minimum threshold measures, to determine if particular service is adequately provided. New development applications which cause the minimum levels of service to be exceeded will not be

approved unless improvements are made to correct the deficiency or unless corrective measures are scheduled and funded to occur within a locally established time frame, up to a maximum of six years. The GMA requires that at a minimum level-of-service standards be adopted for transportation. Other services should be reviewed for adequacy, but specific threshold standards are not required to be universally applied. This element is organized into two sections:

- inventory and review of existing facilities and services, along with 6-year future plans for water, sewer, storm drainage, schools, law enforcement, fire, solid waste, libraries, general government buildings, electricity, telecommunications and natural gas services. The Inventory and Capital Facilities Plan for Schools, Transportation and Parks can be found in their respective elements; and,
- policies regarding the provision of these services. The policies provide direction in three areas:
 - ensuring the overall provision of needed facilities and services by public or private agencies;
 - providing direction for the establishment of minimum levels of service and concurrency obligations for new developments to assist in the provision of these services; and,
 - ensuring that the provision of services is fully consistent with overall growth management objectives, which is ultimately linked to the ability to efficiently provide the services in the first place.

Emphasis throughout this document is placed on those services provided by Clark County government and, in particular, on transportation, sewage treatment and storm drainage services which are mandated by the GMA for direct concurrency requirements. Capital facilities plans for all services provided within individual cities of the county are included within the individual comprehensive plans of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal and Yacolt, although available information is included in this document for context. The 6-year capital facility and financing summaries are an estimate of future needs and are not official policy or budget documents of the service providers except where indicated.

Services Summaries and Projected Future Needs

- Table 6.1 summarizes who the providers of services are for the various jurisdictions within Clark County. Additional information regarding city services can be found in each jurisdiction's Capital Facilities Element.
- Table 6.2 attempts to isolate the direct capital costs attributable to Clark County over the next six years. In cases where services are provided by outside agencies, Table 6.2 estimates the direct costs of providing service to county residents only. Table 6.2 also attempts to exclude services constructed by developers as part of the development process, such as road, sewer, water, or storm drainage extensions or improvements.

Direct and Indirect Concurrency Services

Direct concurrency will be applied on a project by project basis for public facilities of streets, water and sanitary sewer. While the GMA requires direct concurrency only for transportation facilities, this plan extends the concept of direct concurrency to cover other critical public facilities of water and sanitary sewer. Indirect services include schools, fire protection, law enforcement, parks and open space, solid waste, libraries, electricity, gas and government facilities.

Table 6.1 | Direct and Indirect Concurrency Services in Clark County

Service	Battle Ground	Camas	La Center	Ridgefield	Vancouver	Washougal	Yacolt	County
				DIRECT				
Transportation	City	City	City	City	City	City	City	County
Water Supply System	City	City	CPU	City	City	City	CPU	CPU, Vancouver
Sanitary Sewer Collections Services	City	City	City	City Clark Regional Wastewater District	City	City	NA	CPU, Clark Regional Wastewater District, Vancouver
Sewage Treatment Facilities	County Discovery Cleanwater Alliance	City	City	Clark Regional Wastewater District, Discovery Cleanwater Alliance	City	City	NA	County Discovery Cleanwater Alliance, Vancouver
				INDIRECT				
Public Schools	Battle Ground S.D.	Camas S.D.	La Center S. D.	Ridgefield S.D.	Vancouver, Camas, Evergreen S.D.	Washougal, Camas S.D.	Battle Ground S.D.	NA
Fire Protection	City Fire Marshal City provides facilities; F.D. #3 provides personnel	City Camas- Washougal Fire Department	District 14Clark County Fire and Rescue	District 12 and City Fire Marshal; Clark County Fire and Rescue	City	City Camas- Washougal Fire Department	F.D. #13	All non-municipal fire districts
Law Enforcement	City	City	City	City	City	City	Sheriff's Department	Sheriff's Department
Solid Waste	Private Hauler	City	Private Hauler	Private Hauler	Private Hauler	Private Hauler	Private Hauler	Private Hauler
Libraries	FVRLS	City	FVRLS	FVRLS	FVRLS	FVRLS	FVRLS	FVRLS
Government Buildings	City	City	City	City	City	City	City	County
Electricity	CPU	CPU	CPU	CPU	CPU	CPU	CPU	CPU
Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NA	NW Natural Gas

FVRLS--Fort Vancouver Regional Library System, NA--Not Applicable, CPU--Clark Public Utilities

Table 6.2 | Summary of Estimated 6-Year Capital Facilities Expenditures in Clark County

Service or Utility	Major Capital Projects	Estimated Cost	Funding Sources
Transportation	2016-2021 Transportation Improvement Program	. 3, ,	County Road FundTraffic Impact FeesFederal and State Grants
Water	Well source, storage and distribution	75-1-5-1	Systems chargesContributed capital
Sewer Collection and Treatment	Treatment plant and interceptor system expansions	1 1/ 1 //	Rates and chargesRevenue bond sale
Stormwater Drainage	Develop regional drainage facilities, complete drainage basin studies, Stormwater treatment retrofit and repair	\$9,603,000	 Future Drainage Utility (or similar mechanism) and systems development charges Existing drainage fund
Schools	New Facilities and expansions of existing facilities	\$585,479,377	Impact FeesVoter Approved BondsState Matching Funds
Fire Protection	Land acquisition, construction, remodel of stations and purchase of vehicles	13//1 /	BondsDedicated tax revenue
Law Enforcement/ Corrections	Expansion of detention facilities, construction of new administrative bldg.	\$108,200,000	General Obligation BondsREETGrants
Solid Waste and Recycling	Land acquisition and construction of new compost facility. Central, Transfer Station Site Improvements	\$4,000,000	User feesState grants
Libraries	Two new libraries in Washougal and Ridgefield		Capital reservesCapital bondsPrivate donations
Parks and Recreational Facilities	Acquisitions, park development, improvements and repairs	. , , , , , ,	County General FundImpacts FeesREETBonds
Government Buildings	Completed administrative space and expanded facilities including 78 th Street/WSU Extension Service property	\$167,000,000	Bonds financed through REET

Note 1: Schools, Fire Protection and Libraries costs pertain to the entire county, incorporated and unincorporated areas. Other services pertain only to the unincorporated areas.

Note 2: Electricity and natural gas are not included in the Table as users are assessed direct fees for service.

Transportation

The capital facilities plan for transportation, including a projection of six-year needs and policies regarding concurrency requirements for the county are included in Chapter 5, Transportation. Transportation services include provisions for roads and associated improvements, transit and pedestrian and bicycle systems.

Water

Water service is an essential element of all types of land uses. Water supply development must consider the needs of threatened and endangered species. The majority of water users in the county are served by public water suppliers. The county does not own or operate public water systems. In the urban areas of Clark County, public water is provided by the cities of Battle Ground, Camas, Ridgefield, Vancouver, Washougal and Clark Public Utilities (CPU), a publicly owned utility which

serves unincorporated areas of the county and the City of La Center's and Town of Yacolt water systems.

Extensive water service in the central portion of the county, in portions of the unincorporated Vancouver Urban Growth Area, is provided by CPU. In some of the more remote rural areas of the county where water service is not readily available, CPU manages "satellite water systems" which serve small developments and clusters of homes. The Clark County Coordinated Water System Plan, was last updated in 2011, defined service boundaries and established policies for the provision of water service in the county. For further information on water provisions for the individual water purveyors, refer to their respective Water System Plan.

The water providers' systems consist of three basic components: source, storage and distribution/transmission. The source for virtually all water in Clark County, public or private, is from groundwater aquifers. Although adequate water supplies for individual domestic or small consumption commercial wells can be found in most parts of the county, aquifers capable of yielding large amounts of water for extended periods of time, without environmental impacts, are less common. Identifying and developing adequate water supply to meet future demand is essential in order to ensure the continued growth and economic viability of Clark County. County officials in Clark, Skamania, and Cowlitz counties adopted the Salmon-Washougal & Lewis Watershed Management Plan Water Resource Inventory Areas (WRIAs) 27-28, in July, 2006. The plan recognizes that new groundwater supplies should be developed in the tidally influenced areas of the Columbia River, near large sources, where the tidally influenced rivers and groundwater discharging to the Columbia River have a negligible effect on upper basin river and stream flows. Individual water providers are required under the federal Safe Drinking Water Act to monitor the water quality of their production wells, subject to the review of the State Department of Health.

Although the physical water carrying capacity is determined by the capital facilities constructed for each water system, the source of supply of an individual purveyor is determined by the allocation of water rights issued by the Washington State Department of Ecology. A groundwater permit exemption allows groundwater withdrawal for a single home or group of homes, such as a small subdivision, limited to 5,000 gallons per day and watering a lawn or garden up to ½ acre in size. Water rights are prioritized by seniority, which includes exempt wells for the amount of water that is beneficially used. The Department of Ecology must find that no previously established water rights will be impaired by a proposed junior withdrawal.

Clark Public Utilities, the principal purveyor within the unincorporated area, obtains water from 66 production wells throughout the county, including satellite water systems, with a pumping capacity of approximately 20,800 gallons per minute. To ensure readily available water supplies, CPU also maintains 37 reservoirs comprising a total storage capacity of 20.4 million gallons. CPU currently has 8 emergency interconnections or interties: 3 with the City of Battle Ground, 3 with the City of Ridgefield and 2 with the City of Vancouver. Clark Public Utilities projected future needs and funding sources are summarized in Table 6.3.

Table 6.3 | Summary of Clark Public Utilities

Projects	Estimated Cost	Reason for Need	Funding Source
Project Type : 21 -	\$670,000	Concurrency items; needed to	System charges, rates
General Plan		maintain adequate water service	and bonds
Project Type: 53 - Reservoirs & Boosters	7,970,000	Concurrency items; needed to maintain adequate water service	System charges, rates and bonds
Project Type : 54 - Main /Upgrades	29,500,000	Concurrency items; needed to maintain adequate water service	System charges, rates and bonds
Project Type: 56 - Source of Supply	9,200,000	Concurrency items; needed to maintain adequate water service	System charges, rates and bonds
Project Type: 58 – Meters/Meter Installation	2,750,000	Concurrency items; needed to maintain adequate water service	System charges, rates and bonds
Total	\$50,090,000		

Source: Clark Public Utilities Capital Facilities Plan (2016-2021)

Clark Public Utilities is funded by user fees and system development charges. CPU uses bonds, rates and system development charges to fund their capital facilities plan. Contributed capital consists of developer driven improvements that connect to the water system. Total costs through 2021 are estimated at \$50,090,000. The CPU Plan contains the necessary requirements of RCW 36.70A.070 (3), including inventories, forecasts and analyses of future plans and financing mechanisms. Clark County incorporates the CPU Water System Plan into the County's Capital Facilities Plan. Future changes made to the CPU Plan should be reviewed for consistency with county plans on an annual basis.

Clark Public Utilities has reviewed the adopted county land use designations and the adopted countywide population target of 577,431 and has determined that the CPU Water System Plan is fully consistent with the land use provisions and the additional service demands which they entail, subject to the timely issuance of approvals and permits by Clark County.

Water is also supplied to individual homes through the use of private wells. The number of private wells in the county has been estimated at 17,000 to 25,000. Use of private wells is subject to the review and approval of Clark County Public Health. Private wells continue to be the primary water source in the rural area, but should be aggressively phased out within the urban area as public water becomes fully available. (Readers interested in water service provisions for individual cities within Clark County should refer to each water provider's Water System Plans and each city's 20-Year Capital Facility Plans.)

The collective water provisions of the individual city and outside agency capital facilities plans are consistent with the Land Use Element of the 20-Year Plan. Outside of urban growth areas, there is limited public water provision and future expansions are generally discouraged by policies of the Land Use and Capital Facilities Elements of the 20-Year Plan. Rural water provision is provided by Clark Public Utilities, or by individual or group private wells, subject to the review of Clark County Public Health.

Within unincorporated Urban Growth Areas other than Vancouver UGA, the 20-Year Plan Map has designated very little land for short term urban density development which would require public water service. These UGA lands are affixed with an "Urban Holding" overlay designation, which explicitly precludes urbanization until a site-specific demonstration of service ability is made. Provision for lands within corporate limits is addressed in the city comprehensive plans.

Within the Vancouver UGA there is a substantial amount of land under county jurisdiction which is designated for near term urban development without the Urban Holding Overlay. Clark Public Utilities is the water purveyor for a large portion of the Vancouver UGA north of the Burlington Northern Rail Road tracks. See the water service area map in the 2011 Clark County Coordinated Water System Plan Update for specific service areas. The City of Vancouver formally adopted a Capital Facilities Plan in 2014 specifying how their water service area would be served. The City Department of Public Works reviewed the proposed county land use designations and the 2035 countywide population projection of 577,431 and concluded that projected population in the Vancouver service area can be served by the central facilities listed within the city's adopted Capital Facilities Plan. Additional line extensions needed to serve the higher population would be financed by development proposals.

Sanitary Sewer/Treatment Plant

Clark County no longer provides wastewater collection, having transferred operation of its collection system to the Clark Regional Wastewater District (formally Hazel Dell Sewer District) in 1993 and treatment system to the Discovery Clean Water Alliance (Alliance) in 2015. Sanitary sewer services in Clark County are provided by the Cities of Vancouver, Washougal, Camas, Battle Ground and La Center, as well as Clark Regional Wastewater District (District). In general, the city sewer districts tend to be slightly larger than current city boundaries and Vancouver, Washougal, Camas and La Center have their own sewage treatment facilities. For further information on sewer provisions for the individual cities, refer to the respective city's comprehensive plans.

Within the county's unincorporated urban area, sanitary sewer service is provided by the City of Vancouver and the Clark Regional Wastewater District. The Vancouver service area encompasses over 55 square miles, extending well beyond city limits to Vancouver Lake to the west, 202nd Avenue to the east and NE 99th Street to the north. The Vancouver system includes two treatment plants and an industrial pretreatment lagoon.

The Clark Regional Wastewater District encompasses more than 47 square miles and serves a population of approximately 100,000 within the unincorporated urban area north and northeast of Vancouver, portions of the Orchards area and Hockinson and Meadow Glade and the City of Ridgefield. Effective January 1, 2014 the City of Ridgefield transferred ownership of their collection system to the District. The District completed construction of phase one of the Discovery Corridor Wastewater Transmission System (DCWTS) in 2016. DCWTS provides a way for wastewater generated in Ridgefield to be conveyed south into the District's central service area for treatment at the Salmon Creek Wastewater Treatment Plant. The District's service area within the unincorporated Vancouver Urban growth area is estimated to be developed at 60 percent of full coverage based on 2016 population.

Projected needs and funding sources for the Clark Regional Wastewater District are included in the District's Comprehensive General Sewer Plan (GSP), December 2017. These plans have the necessary contents required by RCW 36.70A.070 (3), including inventories, forecasts and analyses of future plans and financing mechanisms. The District has reviewed the proposed county land use designations and determined that the plans are fully consistent with these provisions and the additional service demands which they entail. Annually the District updates and adopts a six-year capital improvement program. The current adopted six-year program for the period of 2017-2022, is summarized in Table 6.4 below. The program presents figures for both capital projects, new infrastructure and capacity, and restoration and replacement (R&R) projects, which represents reinvestment in existing infrastructure.

Table 6.4 | Clark Regional Wastewater District: 6-yr Capital Program Summary, 2017-2022

	R&R Projects	Capital Projects	Grand Total
6-year CIP (2017-2022)	\$10,340,000	\$36,760,000	\$47,100,000
Salmon Creek Service Area	\$8,190,000	\$36,130,000	\$44,320,000
Vancouver UGA	\$7,730,000	\$22,080,000	\$29,810,000
Ridgefield UGA	\$460,000	\$14,050,000	\$14,510,000
Westside Service Area (WVUGA)	\$2,150,000	\$630,000	\$2,780,000
Reason for need	Aging infrastructure	New capacity	
Funding Source	Rates and	Rates and	
	Charges	Charges	

Source: Clark Regional Wastewater District GSP.

Note: Service area in the table above refers to the treatment plant.

Wastewater collected by the City of Battle Ground and the Clark Regional Wastewater District is delivered to the Discovery Clean Water Alliance (Alliance). The Alliance provides regional transmission and treatment of wastewater in central Clark County. The Alliance assumed full operation on January 1, 2015 (Alliance Operations Date). As currently established, the Alliance serves four Member agencies – the City of Battle Ground, Clark County, Clark Regional Wastewater District and the City of Ridgefield. The Members jointly own and jointly manage the regional wastewater assets through an interlocal framework established under the State of Washington Joint Municipal Utility Services Act (JMUSA) (RCW 39.106). As of the Alliance Operations Date, the Alliance owns, operates and manages nine Regional Assets with an estimated book value (historical cost less depreciation) of approximately \$126 million. These assets include:

- Salmon Creek Interceptor
- Klineline Interceptor
- 36th Avenue Pump Station
- 117th Street Pump Station
- 36th Avenue Pump Station Force Main
- 117th Street Pump Station Force Main
- Salmon Creek Treatment Plant and Outfall
- Ridgefield Treatment Plant and Outfall
- Battle Ground Force Main

The JMUSA statute was passed by the Washington State Legislature and signed by the Governor in 2011. The Discovery Clean Water Alliance was the second agency in the state to form under this statute. While the Alliance is a regional wastewater transmission and treatment utility today, the statue allows for any form of municipal water-related utility service to be provided and supports any combination of municipal partner agencies as Members. This structure ensures the flexibility to accommodate changing needs of the regional service area over time. In 2013 the Members were recipients of the Governor's Smart Communities Award for smart growth planning for their cooperative efforts to create the Alliance.

The Alliance system is adequate to meet existing demands and Table 6.5 lists the projected 6-year capital improvements required for the regional treatment plants and transmission system. This information and related details are included in expanded form in the Discovery Clean Water Alliance Capital Plan (Capital Plan), December 2014. The Capital Plan has the necessary contents required by RCW 36.70A.070 (3), including inventories, forecasts and analyses of future plans and financing

mechanisms. The Alliance has reviewed the proposed county land use designations and determined that the Capital Plan is fully consistent with these provisions and the additional service demands that they entail. Future changes made to the Capital Plan should be reviewed for consistency with county plans on an annual basis. Further sewage treatment plant expansions are planned chiefly to address the needs of new development. The program shown in Table 6.5 assumes that major sewer facility expansions will be financed from revenue received from the county's wholesale wastewater treatment customers. The wholesale customers bear the full cost and responsibility for the expansion costs.

Table 6.5 | Alliance Capital Facilities Plan for Regional Sewage Treatment and Transmission System, 2016-2021

Project	Estimated Cost	Reason for Need	Funding Source
Expansion Of Salmon Creek		Concurrency item; maintain adequate	Revenue Bonds and Public
Treatment Plant	\$1,300,000	treatment capacity for additional	Works Trust Fund Rates
(Phase 4)PLC Replacement		growth	
Outfall Replacement	\$3,400,000	Existing equipment at the end of 20-yr useful life	Rates
Fifth and Division From society	\$13,000,000	Addresses bank stability and long-	Rates
Effluent Pipeline Expansion		term discharge configuration Additional capacity required	
Regional Conveyance System Pump Stations	\$900,000	Existing equipment at the end of 20-yr useful life	Revenue Bonds and Public Works Trust Fund Rates
Force Mains	\$490,000	Existing valves and vaults require repair	Rates
Interceptors	\$1,650,000	Existing interceptors require rehabilitation and new odor protection	Rates
Total	\$20,740,000		

Source: Discovery Clean Water Alliance Capital Plan, December 2014.

Unincorporated rural Clark County is served by individual private septic systems. Since 1974 the installation of on-site septic has been regulated by the Clark County Department of Health. The Health Department estimates that over 50,000 septic systems are in use throughout the county, about half of which are located within urban service areas. Septic systems installed prior to 1974 were subject to virtually no regulation. Recent technological advances and the establishment of mandatory maintenance requirements on some subdivisions have limited septic system failure rates. However, the number of septic systems subject to mandatory maintenance requirements remains quite small, even of those installed after 1974. Septic systems will remain the predominant form of sewage disposal within the rural area, but will be replaced with public sewer as it becomes available in the urban area.

The collective sewer provisions of Clark County and the individual city and outside agency capital facilities plans are consistent with the Land Use Element of the 20-Year Plan. Outside of urban growth areas, there is limited public sewer provision and future expansions are generally discouraged by policies of the Land Use and Capital Facilities Elements of the 20-Year Plan. Rural sewer provision is provided by individual private septic systems, subject to the review of Clark County Public Health.

Given the anticipated growth in the County, several studies have been completed to examine the potential economic and environmental benefits of regionalization of various aspects of sewer service. A Sewer Coalition Planning Study was completed in November 2009 with the participation of all sewer utilities in the County. This Study resulted in the development of a Regional General Sewer Plan (RGSP) outlining a long-term vision for sewer service in the County and the recommendation

that four agencies (Battle Ground, Ridgefield, Clark County and Clark Regional Wastewater District) form a partnership to provide treatment and major conveyance for sewage for each agencies service area. The collective sewer provisions of Clark County and the individual city and outside agency capital facilities plans are consistent with the Land Use Element of the 20-Year Plan. Outside of urban growth areas, there is limited public sewer provision and future expansions are generally discouraged by policies of the Land Use and Capital Facilities Elements of the 20-Year Plan.

Within unincorporated Urban Growth Areas other than the Vancouver UGA the Comprehensive Plan Map has designated relatively little land for short term urban density development which would require public sewer service. These UGA lands are affixed with an "Urban Holding" overlay designation, which explicitly precludes urbanization until a site-specific demonstration of serviceability is made.

Provisions for lands within corporate limits are addressed in the city comprehensive plans. Within the Vancouver UGA there is a substantial amount of land under county jurisdiction which is designated for near term urban development without the Urban Holding overlay. The District serves the City of Vancouver Urban Growth Area consistent with the County's Comprehensive Plan.

Indirect Concurrency Services

Indirect concurrency services include storm drainage, public schools, parks, fire protection, law enforcement, solid waste disposal, county buildings, electricity, natural gas and telecommunications. These services are necessary to support additional growth to varying degrees, but they have not been identified by the GMA as critical facilities to be applied using direct concurrency standards as is the case with roads, sewer and water facilities.

Stormwater Drainage

Unmanaged stormwater runoff can result in flooding, elimination of fishery and wildlife habitat, pollution of the county's drinking water supply and negative impacts to the aesthetics of the county's streams, lakes and wetlands. The regulation and management of storm drainage in Clark County falls under the responsibility of the local municipalities and Clark County. City governments regulate and maintain the drainage systems within their city limits.

Clark County regulates and manages surface water runoff in the unincorporated areas outside of city limits. The Washington State Department of Transportation (WSDOT) is responsible for the management of runoff from State highways and associated properties. The 100-year floodplains are designated by the Federal Emergency Management Agency (FEMA) and are managed by the county or individual cities. The U.S. government and the State of Washington, through legislation or administrative actions, greatly influence how the county and its cities are required to regulate and manage storm drainage.

In 1999 Clark County received a Municipal Storm Sewer System permit through the National Pollutant Discharge Elimination System (NPDES). This permit is issued by the State of Washington Department of Ecology under the authority of the federal Clean Water Act. The stormwater permit requires Clark County to take certain actions to reduce pollutant from discharges from its storm sewer system. These actions include requiring construction of stormwater treatment and flow control facilities for development projects and a program to plan and build capital improvements to reduce pollutants from the county storm drainage system.

It is anticipated that the Stormwater mitigation for private development will continue to be financed by the development community, though opportunities will be sought to achieve private-public partnerships where feasible. Public stormwater facility construction will mitigate its stormwater

impacts as part of the project funding, using sources such as the road fund. The remaining need is for an ongoing retrofit program under the requirements of the county NPDES stormwater permit. (Readers interested in stormwater provisions for individual cities within Clark County should refer to the respective city's comprehensive plan.)

Public Schools

In addition to their primary educational function, public schools serve as a community focal point and provide facilities used for a variety of community, civic and recreational needs. Schools are not required as a mandatory concurrency item under the GMA, but are required by existing state law under RCW 58.17.110 to be adequately provided for before land divisions may be approved. Chapter 10, School Element provides a complete overview of the school districts serving Clark County. Additional information representing the priority capital projects for school districts is presented in each school district's Capital Facility Plans.

Parks

Chapter 7, Parks, Recreation and Open Space provides a complete overview of the Clark County system, based on the 2015 Clark County Parks, Recreation and Open Space Plan.

Fire Protection/Suppression

Fire protection in Clark County is provided by a combination of sources. Urban area service has been historically provided by city fire departments, while various fire protection districts serve the unincorporated areas. The Washington Department of Natural Resources (DNR) provides protection for all state trust lands located in the forested portions in the eastern and northern ends of the county. The USDA Forest Service provides protection for the small portion of the Gifford Pinchot National Forest located in the far eastern area of the county.

In addition to providing fire protection, most districts provide emergency medical services (EMS) and basic life support and/or advanced life support. The City of Vancouver operates the only hazardous materials response team in the county and is the primary service provider for technical rescue services in conjunction with Fire District 6. EMS calls have constituted an increasing portion of the fire agency's activities and responsibilities, at increasing cost. Emergency response ambulance transport is provided by three providers within Clark County: 1) North Country EMS providing service to Fire Districts 10, 13 and part of District 3; 2) Camas/Washougal providing service to the cities of Camas and Washougal and East County Fire and Rescue; and 3) the City of Vancouver providing service to the City of Vancouver, Fire District 5 and EMS District 2. EMS District 2 makes up the bulk of the remaining portions of the unincorporated County and small cities.

Clark County has grown rapidly since 1980, much of it in previously non-urbanized areas of the county. Virtually every fire district has experienced some urban type growth. Annexation by cities can provide a higher level-of-service to these areas to meet the increased urban growth, while reducing the service impacts to districts. Fire districts within or adjacent to urban areas desire to provide an Urban Service delivery to reflect the need to protect a growing community. The impacts of service levels due to annexation by cities are statutorily mitigated by RCW 35.13 and RCW 35.103.050.

There has been a trend towards increased coordination and cooperation among the various fire and emergency service providers in recent years and greater integration will be needed in the future. To date, this has involved the joint use of stations or other facilities and even merging Fire Districts in certain cases. There will likely be increased consistency of standards and levels of services provided among the various districts, with the Clark County Fire Marshal likely playing a larger coordinative and oversight role. Fire protection and suppression services are in the process of becoming more

proactive and preventative, rather than strictly reactive as has often been the case in the past. There will likely be increased incentives or regulatory measures to decrease the likelihood of fires occurring, such as fire restrictive materials in all areas, or land use restrictions in fire-prone areas, as well as on-site sprinklers to suppress those fires that do occur. Estimated capital facility six-year needs are listed in Table 6.6.

Table 6.6 | Fire Protection Estimated Six-year Capital Expenditures by Fire District, 2016-2021

Fire District	Projects	Estimated Cost	Projected financing Funding sources
Clark County Fire & Rescue	1 remodel; 1 land purchase; 2 engines; 2	\$3,120,000	Reserve Fund and general
(Ridgefield/La Center)	rescues; 3 command vehicles; Air Packs		obligation bonds
East County Fire & Rescue	2 new facilities; 2 new vehicles	\$6,800,000	Bonds, general fund, emergency rescue fund
FD #2 (Woodland area)	1 remodel; 1 engine; 1 water tender	\$1,150,000	General obligation bonds
FD #3 (Brush Prairie & Battle Ground area)	3 engines; 1 water tender, 1 new facility; 1 new brush engine	\$6,000,000	Existing reserve fund, bond sale, development and impact fees
FD#5 and Vancouver FD (Vancouver area)	10 fire station maintenance; 2 new facilities; 3 remodels; purchase land	\$18,800,000	General fund, property tax revenue
FD #6 (Hazel Dell area)	4 new vehicles	\$1,550,000	Property tax revenue
FD #10 (Amboy area)	No identified projects	No information provided	No information provided
FD #13 (Yacolt area)	No information provided	No information provided	No information provided
TOTAL		\$37,420,000	

Note: Clark County Fire Districts 11 & 12 merged into Clark County Fire and Rescue. The City of Woodland contracts with Clark County Fire and Rescue to provide service. The City of Battleground contracts with Clark County Fire District #3.

Law Enforcement/Corrections

The Clark County Sheriff's Office provides law enforcement services throughout the unincorporated area and in the Town of Yacolt. The cities of Camas, Washougal, Battle Ground, La Center, Ridgefield and Vancouver are served by municipal police departments. There is extensive cooperation between the cities and the county law enforcement forces involving shared facilities and provisions for mutual back-up in emergency situations. The Washington State Patrol has police jurisdiction on all state routes within the county and is largely responsible for state facilities. The state also provides back-up for the Clark County Sheriff's Department and local jurisdictions' forces. The primary law enforcement facilities used by the county are the Clark County Law enforcement Center (main jail), the Jail Work Center, the Juvenile Detention Center and the West and Central Precincts.

Regional or shared Law enforcement and correction facilities including the main jail, the Jail Work Center, the Juvenile Detention Center, the Clark-Skamania Drug Task Force (Task Force) leased facility, the new 911 Emergency Center (CRESA and a leased facility for the Child Abuse Intervention Center (CAIC). These last three (3) agencies (Task Force, CRESA and CAIC) are inter-jurisdictional. In addition to these regional facilities, Vancouver, Camas, Washougal and Battle Ground each has their own jail/holding facility. Larch Corrections Center, the only state detention facility in Clark County, is an all-male minimum security facility that houses 164 inmates. Table 6.7 provides the Sheriff's summary capital facilities plan.

Table 6.7 | Summary of Sheriff's Capital Facilities Plan

Capital Facility	Description Projects	Cost (millions, 2006 dollars)	Funding Sources
Jail Expansion	600 to 700 maximum security facility with administrative offices, office for Property and Evidence and parking	\$90 to 100 million (est.)	Construction: Bonds Operating: Levy or Sales Tax
Central Precinct Replacement	8,600 sq. ft. building, space for public meetings and parking. Joint project with Public Works	\$2.0 million (est.)	Construction: Bonds Operating: road fund Diversion or General Fund Allocation
Marine Patrol Facilities Replacement	1,300 sq. ft. boathouse and 720 sq. ft. boat storage garage	\$100,000	Construction: General fund
Jail/Records Management Replacement	Building remodel/expansion to house inmate and criminal records, related information	\$2.1 million (est.)	Information Technology Reserve Funds
East Precinct	8,000 to 9,000 sq. ft. Precinct including space for public meetings and parking	\$3 million (est.)	Construction: Bonds Operating: General Fund or Levy
Shooting Range	Replacement, Classrooms, 40 lanes, tactical training facilities (includes EIS for new site and decommissioning of old site)	\$1 million (est.)	Construction: Bonds Operating: General Fund or Levy
Total		\$98.2 to 108.2 million	

The major cost of the Jail Expansion will likely necessitate Bond financing, combined with a dedicated levy or sales tax increase to fund debt service and the additional Jail operating costs that would result. A portion of the additional operating costs may be recovered from other jurisdictions for housing misdemeanants.

Demand for law enforcement services is directly related to the population (number of households) and the amount of developed commercial/industrial acreage for the area. Most of the growth in the county has occurred in the unincorporated, largely rural sections of the county. As a result, the Clark County Sheriff's Office has experienced the greatest increase in demand/need for services.

The traditional measure of levels of law enforcement services is the ratio of officers to population served, which is a personnel and non-capital issue. Using the number of sworn officers as a measure of staffing is also becoming outdated as workload and performance measures have become more sophisticated. The level of law enforcement service for Clark County is increasingly evaluated based upon a demand or workload indicator, like calls for service and performance outcomes like crime clearance rates. Most calls for police assistance are associated with places of residences, but calls from workplaces and commercial areas are becoming more significant.

Solid Waste Disposal

The purpose of solid waste management activities in Clark County is to protect and preserve human health, environmental quality and natural resources through efficient, cost-effective programs and

services. Solid waste collection and recycling operations in the county and its associated cities are conducted almost entirely by private contractors. Within the unincorporated portions of the county these services are conducted by one private company under the regulatory authority of the Washington Utilities and Transportation Commission (WUTC). Clark County has no authority to directly contract for solid waste collection services, other than for the collection of residential recyclable materials. Cities and towns have the option to contract directly for collection services, provide the collection themselves or defer regulation to the WUTC. Currently, Battle Ground, La Center and Yacolt defer collection company regulation to the WUTC. Vancouver, Ridgefield and Washougal contract their services to private haulers, while the City of Camas provides its own garbage collection.

Waste collected by the WUTC certified haulers, city contracted haulers and self-haulers is initially disposed of at the Central Transfer and Recycling Center (CTR), the West Van Materials Recovery Center (West Van), or the Washougal Transfer Station (WTS) in Clark County. Some processing of mixed loads is conducted at the transfer stations to recover recyclable materials. Capital expenditures for site improvements of the Central Transfer Station over the next six years are approximately \$4,000,000. Non-recyclable waste is transported for final disposal to the Finely Buttes and Wasco County Landfills in Eastern Oregon. The transfer facilities, landfill and transportation of materials are operated by the Columbia Resource Company (CRC). The CRC system replaced the incounty Leichner Landfill which closed on December 31, 1991. Currently, curbside collection of a variety of recyclable materials is provided to residents at varying service levels within all of the cities and the urban and non-urban areas of Clark County. Recyclable materials collected through county/city curbside collection programs are delivered and processed at West Van.

Residential curbside collection of yard debris is also provided at varying service levels in the cities of Vancouver, Battle Ground, Camas, Washougal and the urban areas of unincorporated Clark County. Yard debris collected in the county is currently either composted at one of several yard debris composters in the Clark County/Portland Metro area or used as a source of fuel in industrial burners.

Two fixed household hazardous waste collection facilities are located at CTR and West Van and WTS facilities. These facilities are open to the public and accept household hazardous waste from county residents at no charge.

The Clark County Comprehensive Solid Waste Management Plan is used to provide the community with goals and policies for implementing, evaluating and modifying existing and future solid waste management programs. The intent of the plan is to establish the foundation for a viable and functional system for the proper management of solid and moderate risk wastes in Clark County. It identifies source reduction, reuse, recycling and composting and as preferred management tools. The updated Plan includes recommendations to: 1) focus on sustainable materials management; 2) implement three core outreach programs (Green Business, Green Neighbors and Green Schools); 3) master plan the Leichner Landfill and decommissioning the Rufener Landfill site; 4) facilitate business growth within waste related industries; 5) continue to rely on the private sector to fund and finance such capital improvement projects; and 6) prohibit (in-county) landfills.

The existing system of the three transfer stations can be modified or upgraded, as needed and as possible, to maintain or improve existing levels of service. In addition the existing contract with CRC provides the option to determine if a fourth transfer station is needed. If a fourth transfer station is to be developed, the contract provides for CRC to propose a location and design; and, upon County approval, permit, construct and operate the facility. CRC shall be compensated for developing, constructing and operating the Fourth Transfer Station.

Public Safety Communications

The county, through CRESA, researched a public safety communications upgrade countywide for many years. As a part of the FY 1996 budget the Commissioners approved a capital budget program of \$13.5 million, to upgrade the public safety communications system. Over a two-year period, an 800 MHz trunked radio system, purchased from Motorola Communications and Electronics was installed. The system is a Clark County owned proprietary system that is compatible with the Portland, Washington County and future Clackamas County, Oregon systems.

General Government Buildings

Clark County presently owns over 100 buildings and structures comprising 1,805,004 square feet of total floor space, as indicated in Table 6.8. We also rent 5,000 square feet in East County.

Population growth projected through 2035 will require additional space for offices, courtrooms, detention, maintenance and storage uses. The county will continue planning efforts for an expanded law and justice capability. We expect adding this capacity could cost as much as \$150 million. We are also looking at constructing a \$10 million building on Public Works' 149th Street Complex to house a number of county agencies in an effort to improve service delivery to areas of the county further north. Finally, we are investigating a small expansion of county facilities on the Veterans' Administration campus. This expansion would include a maintenance, service, receiving and storage building, additional parking and park space.

Table 6.8 | Existing County Buildings

County Owned - County Occupied	
Building	Square Ft
Fairgrounds	314,883
Center for Community Health	176,404
Public Service Center	159,376
Corrections Justice Center	130,324
PSC Parking Structure	150,159
Jail Work Center	90,000
Courthouse	79,383
Juvenile Center	62,840
Pepsi Warehouse	58,596
Dolle Building	40,000
Lewisville Park	31,490
Social Service Center	30,725
Health Center	27,886
Franklin Center	25,000
CRESA	23,624
1408 Franklin- License/Elections/Print Shop	22,976
800 Mhz Tower Sites	22,320
Public Safety Complex	20,000
Building C - Shops	19,760
Vancouver Lake	18,480
General Services Building	16,000
149th Street Bldg A1 Main WH	16,000
Camp Lewisville	11,060
Whatley Decant Facility	10,800
English Transfer Station	10,000
Death Investigations	9,300
Frenchman's Bar	9,112
Tri Mountain Golf Course	7,114
Hazel Dell	6,864
Klineline (Salmon Creek)	6,753

English Site and Shed	6,000
78th St. Swale Maint F & G	5,270
North County Social Service Center	4,563
Orchards	4,480
149th Street Building B West WH	3,900
Daybreak	3,732
Mabry Complex	3,696
Moulton Falls	3,601
78th Street North Shed Bldg J	3,264
Haapa Park	3,163
149th Street Building A (Sheriff's)	3,000
Washougal Site and Shed	3,000
Lucia Falls	2,956
Modular 78th St Bldg N	2,772
149th Building C Fuel Island	2,625
78th Street Building A	2,400
Daybreak Site and Shed	2,400
Finn Hill Site and Shed	2,400
Maple Site and Shed	2,400
Salmon Creek Site	2,400
78th Street Signals Bldg H	2,210
Amphitheatre Pump Station	2,000
Livingston Radio Site & Shed	2,000
78th Street Building B	1,800
78th Street Rock Storage A	1,800
Drug Task Force	1,800
78th St Conference Ctr Bld B1	1,680
Felida Park	1,500
78th St Special Storage Bldg L	1,496
149th St Bldg D (Sign Shop)	1,496
78th Street Fuel Island	1,496
English Pit Rifle Range (Park)	1,456
78th Street Wash Rack	1,200
Lacamas Lake	1,040
PorTable 78th St Bldg M	1,040
78th Street Building A1	1,008
HB Fuller 134th St. (Park)	1,000
Downtown Fuel Island	880
78th Street West Shed	864
78th Street Central Building E	700
78th Street Building D	650
Lewisville Fuel Island	600
Wolfe Creek Pump Station/99th Str.	25
Mountain View Pump Station	25
88th Street Pump Station	25
Harmony Sports Complex	10
Total	1,805,004

Center for Community Health

Clark County has recently completed construction of the 176,000 square foot Center for Community Health on the Veteran's Administration campus on Fourth Plain Boulevard. The new building consolidates a number of community health organizations in one convenient location. The facility provides new inpatient capabilities which will be a significant benefit to the community.

Clark County Exposition Center

In the early 2000's Clark County completed the "Clark County Exposition Center." This is a state of the art year round multi-purpose facility located on the Fairgrounds. It is suitable for shows and events of almost every type and contributes to the goal of making the Fairgrounds less reliant of the annual County Fair for revenues.

Coordination with Other Plan Elements

In the event that funding is insufficient to meet the capital needs for any of the above described projects, a reassessment of the land use element and other elements of the capital facilities plan will occur. Other funding possibilities and levels of service will also be reassessed. This will be done to make certain appropriate action will be taken to ensure the internal consistency of the land use and capital facilities portions of the plan.

Electricity

Electric service throughout Clark County is provided by Clark Public Utilities (CPU), a customer-owned public utility district. About one-third of the power the utility sells its customers is generated at the River Road Generating Plant, a combined-cycle combustion turbine that uses natural gas to produce electricity. The remaining power supply is purchased, mainly from the Bonneville Power Administration, a federal agency that markets power generated at federal dams in the Pacific Northwest.

The system consists of more than 100 miles of high-voltage transmission lines (69,000 and 115,000 volts), 47 substations, three switching stations and about 6,500 miles of overhead and underground distribution lines. The facilities serve about 192,000 customers. The utility has administrative offices in its Electric Center, 1200 Fort Vancouver Way, Vancouver. Engineering and operations functions are located at the Ed Fischer Operations Center, 8600 N.E. 117th Avenue. These facilities are located primarily in the urban area of the county. Most of the rural area is served with minor facilities.

The utility routinely reviews the county's growth plans and coordinate the construction of new electrical facilities with those plans. Major electrical facilities are in place to serve existing utility customers; however additional substations, transmission lines and distribution facilities will be required to meet the needs of new customers. It should be noted that state law requires utilities to provide electricity to all who request it.

The utility believes it has adequate supplies of electricity to meet anticipated customer demands. Utility officials routinely prepare projections of future demand for electricity and review available supplies. When projections show that demand for electricity will exceed the available supply, the utility will conduct extensive evaluations of the available options. The major options are to build additional electrical generating capacity, purchase additional supplies of electricity, or expand electricity conservation programs to reduce demand for power. Any one or a combination of the options could be selected.

Natural Gas

Granted its service territory by the Washington Utilities and Transportation Commission, Northwest Natural Gas is the sole purveyor of natural gas in Clark County. The company serves about 56,325 residential, 4,715 commercial and 51 industrial gas customers in the county. Its customer base has grown rapidly over the past 10 years, reflecting a strong preference by builders for natural gas heating in new homes as the county's residential population increases.

Northwest Natural Gas receives about 20 percent of its supply from British Columbia, 60% from Alberta and 20% from the Rocky Mountain States. Northwest Pipeline's current and future need is to keep its pipeline corridors accessible for maintenance.

Despite recent fluctuations in energy prices, as the local distribution company of natural gas, Northwest Natural anticipates continued strong growth in customer additions in Clark County and is planning for future infrastructure construction and maintenance to serve the expected need. Additional distribution lines will be constructed on an as-needed basis in accordance with local, state and federal regulations and codes covering land use and safety issues.

Public safety has been the number-one consideration in the siting and construction of new pipelines, as reflected by natural gas' superior safety record in the pipeline industry. The growth of new development and housing subdivisions in the county to be served by natural gas will only increase the need for stringent adherence to safety and maintenance standards for the building and operation of transmission and distribution lines.

Telecommunications

The telecommunications industry is currently in the midst of tremendous advances in technology. Cellular and optical fiber technologies are transforming the way service is delivered. In addition, the physical barriers that separate data, video and voice technologies are rapidly disappearing. With the breakup of AT&T in 1984, new technology and new providers have entered the market at a rapid pace and have fostered a competitive industry. There are several local and national telecommunication companies that provide service to Clark County residents. As detailed in the Transportation Element, Chapter 5, telecommunications will play an increasingly important role in the transportation demand management strategy of Clark County. This will require a substantial commitment to telecommuting and its related communication technology. In general, GTE and Lewis River should be able to meet the growing demand for telecommunications services. However, the county will need to work with providers to assure that employers know the benefits of telecommuting in the work place.

Libraries

The Fort Vancouver Regional Library District (FVRLD) serves an area of approximately 4,200 square miles and nearly 470,000 people in four counties. The district is diverse in its service requirements, ranging from rural bookmobile service to a self-service library in Yacolt to the award-winning 83,000 square foot Vancouver Community Library in downtown Vancouver. Currently FVRLD provides a total of 182,341 square feet of library space in nine branches serving Clark County, with an additional 2,376 square feet in Woodland and a 36,000 square foot headquarters facility in downtown Vancouver.

Currently in the planning stages for libraries in Clark County:

FVRLD is planning the construction of two 12,000 square foot facilities in Washougal and Ridgefield to replace aging and undersized buildings in those locations. Both projects are in the process of locating suitable property for construction. Funding for these projects will come from a combination of capital reserves, privately raised funds through the Fort Vancouver Regional Library Foundation and Friends groups and capital facility bonds, if deemed necessary. Both projects are currently estimated to be in the \$4.5 million range with adjustments for inflation assumed going forward. There is also a new facility being planned for Woodland.

FVRLD is additionally, looking to site a future facility in northeast Vancouver that could potentially house the district's headquarters offices as well as a new library. This area does not currently have library services and is an area of growth for the county that needs to be addressed in the near future. FVRLD worked with Berger ABAM in 2013 to create a <u>Strategic Facilities Plan</u>.

Table 6.9 | Existing Fort Vancouver Regional Library District Buildings

FVRLD Library	Square footage	Own / Lease	Year Built / Remodeled
Battle Ground	14,356	Own	2009
Cascade Park	24,175	Own	2009
La Center	3,380	Lease	1905 / 2004
Ridgefield	2,055	Lease	1994
Three Creeks	13,000	Own	2002
Vancouver	83,000	Own	2011
Vancouver Mall	3,575	Lease	2013
Washougal	2,400	Lease	1981
Yacolt	400	Lease	1908 / 2012
Headquarters	36,000	Lease	1963
Total	182,341		

Source: FVRL Capital Facilities Plan

Goals and Policies

State Goals and Mandates

The statewide planning goals were adopted in 1990 as part of GMA. Included within the 13 goals was the mandate to ensure that public services and facilities necessary to support development shall be adequate to the development (RCW 36.70A.020).

Community Framework Plan

Both the policies within the Countywide Planning Policies and the Community Framework Plan (CFP) frame the issues and needs for the 20-Year Plan with regards to capital facilities. See Section 6.0 of the CFP for these policies.

6.0 Countywide Planning Policies

- 6.0.1 The county, state, municipalities and special districts shall work together to develop realistic levels of service for urban governmental services.
- 6.0.2 Plans for providing public facilities and services shall be coordinated with plans for designation of urban growth areas, rural uses and for the transition of undeveloped land to urban uses.
- 6.0.3 Public facilities and utility services shall be planned so that service provision maximizes efficiency and cost effectiveness and ensures concurrency.
- 6.0.4 The county, municipalities and special districts shall, to the greatest extent possible, agree upon present and future service provision within the urban area.

- 6.0.5 The county, municipalities and special districts shall agree on a full range of services to meet the needs of the urban area, including sewer, water, storm drainage, transportation, police, fire, parks, etc.
- 6.0.6 The county, its municipalities and special districts shall work together to ensure that the provision of public facilities and services are consistent and designed to implement adopted comprehensive plans.
- 6.0.7 Local jurisdictions shall establish a process to re-evaluate the land use element of their comprehensive plans upon its determination that the jurisdiction lacks the financing resources to provide necessary public facilities and services to implement their plan.
- 6.0.8 General and special purpose districts should consider the establishment of impact fees as a method of financing public facilities required to support new development.
- 6.0.9 The county, its municipalities and special districts will work together to develop financial tools and techniques that will enable them to secure funds to achieve concurrency.
- 6.0.10 The Comprehensive Plan of the county and each municipality shall include a process for identifying and siting essential public facilities such as airports, state education facilities and state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities and regional parks.
- 6.0.11 When siting state and regional public facilities, the county and each municipality shall consider land use compatibility, economic and environmental impacts and public need.
- 6.0.12 The county shall work with the state, each municipality and special districts to identify future needs of regional and state wide public facilities. This will ensure countywide consistency and avoid duplications or deficiencies in proposed facilities.
- 6.0.13 The county, municipalities, special districts and Public Health will work cooperatively to develop fair and consistent policies and incentives to: eliminate private water and sewer/septic systems in the urban areas; and to encourage connection to public water and sewer systems.
- 6.0.14 Within Urban Growth Areas, cities and towns should be the providers of urban services. Cities and towns should not extend utilities without annexation or commitments for annexation. Exceptions may be made in cases where human health is threatened. In areas where utilities presently extend beyond city or town limits, but are within Urban Growth Areas, the city or town and the county should jointly plan for the development, with the county adopting development regulations which are consistent with the city or town standards.

- 6.0.15 Plans for providing public utility services shall be coordinated with plans for designation of urban growth areas, rural uses and for the transition of undeveloped land to urban uses.
- 6.0.16 The county, municipalities and special districts shall, to the greatest extent possible, agree upon present and future service provision within the urban area.
- 6.0.17 Establish a stormwater treatment plan for existing and future developments that complies with salmon recovery objectives.

County 20-Year Plan Policies

Goal: Ensure that necessary and adequate capital facilities and services are provided to all development in Clark County in a manner consistent with the 20-Year Plan.

6.1 Policies

- 6.1.1 Continue to plan for and provide capital facilities and services as necessary to support development consistent with the 20-Year Plan and coordinate and facilitate the planning and provision of such facilities and services by other public or private entities.
- 6.1.2 The primary role of Clark County regarding service provisions shall involve the planning and delivery of regional, rather than urban, services. It is the policy of Clark County that, in general, cities or special service districts are the most appropriate units of local government to provide urban governmental services and that, in general, it is not appropriate that urban governmental services be extended or expanded to rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development.
- 6.1.3 Explore and assist other providers to explore a variety of funding sources for capital facilities and services, including a range of federal, state and other grants where possible.
- 6.1.4 Encourage and assist other utilities, service districts and providers to pursue the use of impact fees, special assessment and improvement districts and other local financing techniques to fund new facilities and services.
- 6.1.5 Assist and facilitate the siting of capital facility and service infrastructure in a manner consist with the 20-Year Plan, through appropriate land use planning and development review policies and procedures.
- 6.1.6 Develop a process for identifying and siting essential regional public facilities such as state or regional transportation facilities, state education facilities, airports, corrections facilities, solid waste handling facilities, regional parks and regional stormwater facilities.
- 6.1.7 Clark County incorporates by reference the sewer and water Capital Facilities
 Plans of the Clark Regional Wastewater District, Clark Public Utilities and the City

of Vancouver. The county should review future changes to these Capital Facilities Plans on an ongoing basis to ensure that consistency with county capital facility and land use plans is maintained.

Goal: Provide water service to all households minimizing environmental impacts and, at least, long-term public cost.

6.2 Policies

- 6.2.1 All new development in the urban area shall be served by a connection to a public water system. Existing developments within the urban area using private wells shall be encouraged to convert to public water usage.
- 6.2.2 Private wells may be used in the rural area, subject to the review of the Clark County Public Health.
- 6.2.3 In cases where public water service is needed, it shall be provided by a water purveyor under the following order of preference, articulated within the Coordinated Water System Plan (CWSP):
 - Direct or satellite service by the water utility designated by the CWSP to serve the area.
 - Interim or permanent service by an adjacent water utility. CWSP service area designations shall be adjusted if permanent service is arranged.
 - Satellite service on an interim basis by CPU, if the development to be served is located outside CPUs service territory.
 - Formation of a new utility and construction of a new public water system to serve only the development. CWSP service area shall be adjusted to reflect the change.
- 6.2.4 The CWSP shall be reviewed and updated at a minimum of every five years.

 Design standards included in the CWSP shall be reviewed and amended annually, if necessary.
- 6.2.5 CPU shall continue to be recognized as the satellite water system management agency for Clark County.
- 6.2.6 Clark Public Utilities may construct and manage satellite water systems within the service territory of other water utilities, but only if a prior agreement is reached with the utility designated by the CWSP to serve the area. Such agreements shall address issues of equipment compatibility, asset transfer and other issues deemed necessary by the parties.
- 6.2.7 Major water utilities, including Clark Public Utilities, may construct extensions of existing services in the rural area only if service is provided at a level that will accommodate only the type of land use and development density called for in the 20-Year Plan, recognizing maximum buildout and reasonable allowances in design of facilities to promote overall system efficiency. Extension of water service shall be permitted to public regional park facilities that are outside of but adjacent to an urban growth boundary.

- 6.2.8 Water transmission lines constructed in rural areas for the purpose of connecting water systems shall be limited from use for tributary line tie-ins.
- 6.2.9 The CWSP shall be amended to reflect any water service extensions in the rural area.
- 6.2.10 Developments shall demonstrate a sufficient and sustainable source of water before development approval is issued.
- 6.2.11 Water service plans shall be coordinated with the adopted 20-Year Plan map and policies, including the designation of urban growth areas.
- 6.2.12 Work with other cities and special districts to develop fair and consistent policies/incentives to eliminate private water systems in urban areas and to encourage connection to public water systems. Unused wells should be identified and decommissioned.
- 6.2.13 Practice and encourage water conservation.
- 6.2.14 Work with water service providers to encourage public education and outreach programs on water reuse, conservation, reclamation and other new water efficient technology.
- 6.2.15 Encourage water pricing structures to facilitate conservation to public water systems and to cover the full cost of providing water service.

Goal: Provide sewer service within urban growth areas efficiently and at least public cost.

6.3 Policies

- 6.3.1 All new development in the urban area shall be served by a connection to a public sewer system.
- 6.3.2 Develop strategies for the conversion of on-site septic disposal systems to public sewer use in the urban area.
- 6.3.3 New and existing development in the rural area outside of rural centers shall use individual on-site septic disposal systems, unless public sewer is available. New or existing development within designated rural centers may use community septic systems.
- 6.3.4 Installation of new individual or community septic systems shall be subject to the approval of Clark County Public Health. Installation approvals for new septic systems shall include agreements for mandatory future monitoring unless waived by Public Health.
- 6.3.5 Require regular inspections of existing on-site sewage disposal systems in wellhead protection areas.
- 6.3.6 Work with the Public Health to support efforts to establish mandatory subsurface sewage disposal septic inspection/maintenance programs for existing septic systems, particularly areas needing environmental health guarantees.

- 6.3.7 Expand treatment facilities to meet current and future demand for development within urban areas.
- 6.3.8 Extension of public sewer service shall not be permitted outside urban growth areas, except in response to documented health hazards; or to provide public sewer to regional park facilities, K-12 public schools, in designated rural centers; or where the county has contractually committed to permit public sewer connection.
- 6.3.9 Sewer service plans shall be coordinated with the 20-Year Plan policies and maps, including urban growth area designations.
- 6.3.10 Provide public education about the potential for groundwater contamination from on-site sewage disposal systems.
- 6.3.11 Encourage and work with sewer service providers in the development of a regional sewer system.
- Goal: Provide a long-range stormwater management program to minimize impacts from stormwater discharge from existing and new development. (for additional policies see Chapter 4 Environmental Element)

6.4 Policies

- 6.4.1 Maintain clear development review standards for the control of the quantity and quality of stormwater discharge from development projects which emphasize onsite retention, treatment and infiltration of run-off to minimize impacts on the established wastewater system and local streams, rivers and lakes.
- 6.4.2 Limit the removal of vegetation during development in order to reduce stormwater run-off and erosion.
- 6.4.3 Develop and implement comprehensive stormwater management plans, including funding provisions, for all watersheds in the county.
- 6.4.4 Develop measures countywide to ensure erosion and sediment control for new development, re-development and excavation projects.
- 6.4.5 Explore the possible formation of a regional stormwater facility.
- 6.4.6 Establish a coordinated approach with local jurisdictions to address both surface water and groundwater issue.
- 6.4.7 Clark County shall monitor and update the stormwater control ordinance and related policies and standards to implement and enhance stormwater management.
- Goal: Coordinate with individual school districts to ensure that school sites and facilities are constructed to meet the educational needs of county residents. (See Chapter 10 School Element)

Goal: Provide police, fire and emergency medical services efficiently and cost effectively to residents of Clark County.

6.6 Policies

- 6.6.1 Encourage interjurisdictional cooperation among law enforcement and corrections agencies to continue to further develop, where practicable, shared service and facility use.
- 6.6.2 Encourage continued and further interjurisdictional cooperation among fire districts where practicable, in areas of mutual aid, sharing of equipment and facilities and consolidation of districts.
- 6.6.3 Encourage development of community benchmarks and program performance measures to monitor outcomes from public safety efforts.
- 6.6.4 Mobile services such as police, fire and other services may establish precincts and similar facilities beyond the urban growth area. The level-of-service provided in such cases should remain rural in nature.
- 6.6.5 Provide for regular fire and building inspections and educate about fire safety.
- 6.6.6 Continue to provide for animal control services and educate about animal safety.
- 6.6.7 Encourage resource allocation decisions based on achievement of outcomes rather than simply workload or output measures.
- 6.6.8 Provide for comprehensive origin and arson fire investigation across jurisdictional and regional boundaries.
- 6.6.9 Develop and implement a comprehensive information management system for all fire, law enforcement, emergency responders, general government and the general population with interagency use and compatibility.
- 6.6.10 Provide for regional training of fire, law enforcement and other emergency service providers. Provide educational and training opportunities for identified segments of the population who use emergency services.
- 6.6.11 Identify funding mechanisms with inter-jurisdictional participation and cooperation to support regionally delivered programs.
- 6.6.12 Identify and implement comprehensive emergency management plans for all service providers consistent with the elements of the Comprehensive Plan.

Goal: Provide solid waste services efficiently and cost-effectively to residents of Clark County.

6.7 Policies

6.7.1 Continue implementation of the county's Solid Waste Management Plan in order to achieve a 50 percent reduction in the solid waste stream in the next 20 years and update on a regular basis.

- 6.7.2 Implement mandatory solid waste collection in all or parts of the county and continue development and implementation of curbside collection of recyclable materials in rural county areas.
- 6.7.3 Continue on-going consideration of the needed balance in solid waste disposal between land filling, incineration and recycling and consider further reduction measures, such as deposits and product container and packaging bans.

Goal: Facilitate the provision of electricity, natural gas and other services to the residents of Clark County.

6.8 Policies

- 6.8.1 Encourage location of underground transmission lines within rights-of-way.
- 6.8.2 Maintain policies for the siting of substation facilities.
- 6.8.3 Encourage and coordinate with other agencies in the provision of libraries and social services.
- 6.8.4 Provide for adequate facilities for county government to deliver services to the public.
- 6.8.5 Encourage and coordinate with other utility providers in the provision of electric, gas, telecommunications and cable.
- Goal: Develop specific concurrency management standards for incorporation into the development review process, to determine the precise requirements for the timing, funding and circumstances for the provision of concurrent services and facilities.

6.9 Policies

- 6.9.1 Develop direct concurrency requirements for the provision of transportation, water, sewer and stormwater facilities and services into the normal development process.
- 6.9.2 Develop direct or indirect concurrency requirements for school services consistent with existing requirements of RCW 58.17.110.
- 6.9.3 Develop provisions ensuring parks and recreation facilities are provided for all developments as specified in Chapter 8, Parks and Recreation and Open Space of the 20-Year Plan.
- 6.9.4 Capital Facilities plans for the Clark County Parks, Recreation and Open Space Element shall be adopted by reference through the adoption of the Supporting Documentation associated with the 20-Year Comprehensive Plan.
- 6.9.5 Develop standards or guidelines to determine how the sufficiency of governmental services, including fire protection, law enforcement, solid waste service, telecommunications, electricity, natural gas, government buildings, libraries and other services shall be addressed during the development review process.

- 6.9.6 Services should be provided and direct or indirect level-of-service standards should be established, consistent with general service provision levels outlined in Table 6.13.
- 6.9.7 Establish a public process to re-evaluate the Land Use Element of the Comprehensive Plan upon determination that financing resources are inadequate to provide necessary public facilities and services to implement the plan.
- Goal: Ensure that capital facilities and services are provided in as cost efficient manner as possible and are consistent with the land use objectives of the 20-Year Plan and State Growth Management Act.

6.10 Policies

- 6.10.1 Coordinate land use planning and decisions with capital facilities planning and service provision.
- 6.10.2 Encourage and work with utilities, special districts and other service providers to ensure their functional plans are consistent with county level-of-service standards.
- 6.10.3 Encourage and facilitate inter-jurisdictional cooperation and analysis to assess fiscal and other impacts to service delivery related to annexation.
- 6.10.4 Encourage and facilitate the exploration of shared use of facilities and services between service providers where feasible. Activities to be encouraged range from shared responsibility agreements between police and fire service providers, to development of joint facilities such as schools and parks.
- 6.10.5 Encourage compact development patterns which are more easily and efficiently served, rather than less dense development patterns which are more difficult and costly to serve.
- 6.10.6 Within the urban area, encourage and facilitate new development to occur sooner and at greater intensities in areas where necessary services and facilities are already in place and available to serve such development and to a lesser extent in areas where such facilities are not yet available but can be extended.
- 6.10.7 To encourage maximum use of existing public facilities and services, encourage new and infill development in the urban area to occur at the maximum densities envisioned by the 20-Year Plan.
- 6.10.8 Pursue true cost pricing service policies and encourage other providers to pursue similar policies, which allocate the full and true cost of connection to and use of facility and service systems to new system users and do not allocate costs created by systems additions to existing system users.
- 6.10.9 In evaluating land use requests in the rural area, the availability of public water or sewer shall not be considered as providing sole justification, or providing any additional justification in combination with other factors, for applications for

- development densities beyond those specified by the 20-Year Plan, or for proposed changes to the plan.
- 6.10.10 Changes to the 20-Year Plan shall not be approved which impose inordinate additional net costs on mobile, centralized services such as police, fire, emergency services, school busing or solid waste services.
- 6.10.11 In evaluating requests for an extension of urban services or levels of service beyond the urban growth boundary in a manner consistent with the 20-Year Plan, Clark County shall consider the implications of such an extension for future growth and development patterns. In evaluating requests for changes to the urban growth boundary or other proposals for development beyond the density specified by the 20-Year Plan, Clark County shall consider implications of such actions for service provision and efficiency of provision.
- 6.10.12 Coordinate with and encourage continued participation of other jurisdictions and service entities with the Coordinated Water System Plan, the Solid Waste Management Plan and other service plans, where such plans do not conflict with the 20-Year Plan.
- 6.10.13 Mobile services such as police, fire and other services should locate facilities within the urban area. Precinct or substation facilities may be located in the rural area where necessary to serve rural population, but are encouraged to locate in rural centers or areas of concentrated development. The level-of-service provided must be rural in nature only.
- 6.10.14 The County may invest in urban services or require that urban standards be provided through development review by non-residential developments in the rural area if:
 - it is necessary to remedy threats to public health or safety; or,
 - the lead agency can demonstrate that the service extension or the
 application of urban development standards would yield long-term capital
 cost savings to the jurisdiction as a whole or the investment would complete
 an identified system which serves the entire growth area (such as a trail or
 bicycle network); or,
 - there is a need to permit urban service extension to a non-residential development that conforms to the 20-Year Plan and serves the public health, safety and welfare.

Table 6.10 | General Service Provision Levels

Service	Urban	Urban Reserve	Rural	Rural Centers
Water	Public water for domestic and fire flow.	Coordinate water systems to match future plans, discourage potable wells for individual dwelling units or use of satellite systems.	Private Public water or private wells	Public water
Sewer	Public sewer	Septic systems with mandatory maintenance and hook-up when sewer is available.	Septic systems	Community septic systems
Storm Drainage	Gutters, pipes and regional Runoff treatment and control facilities by development projects.	Runoff treatment and control facilities by development projects. and.	Open conveyance system. On-site treatment and control of runoff.	Runoff treatment and control facilities by development projects
Schools	Full range of school facilities.	Plan for full range of future schools.	Limited	Schools should locate in rural centers.
Police	Police protection and facilities.	Sheriff services	Sheriff services	Sheriff services with potential for neighborhood headquarters.
Fire	Fire flow of 1,000 gpm or better.	Fire protection rating of 3 or better; Urban fire flow of 1,000 gpm or better.	Fire protection rating of 6 or less; rural fire flow of 500 gpm.	Fire protection rating of 6 or better.
Electricity	Electricity	Electricity	Electricity	Electricity
Parks	Neighborhood, community and regional.	Plan for neighborhood, community and regional.	Regional parks	Rural centers may have neighborhood parks.
Library Services	Libraries	Bookmobile	Bookmobile	Bookmobile
Government Buildings	Facilities	Plan for future facilities.	No facilities	Limited facilities
Telecommunication	Phone and fiber optic services fully available	Phone available, plan for fiber optic services	Phone available	Phone available, plan for fiber optic services
Natural Gas	Available throughout	Available throughout	Available throughout	Available throughout
Solid Waste	Weekly collection from customers, mandatory recycling	Centralized collection, mandatory recycling	Centralized collection, voluntary recycling	Centralized collection, mandatory recycling
Gpm = gallons per min	uito S	ource: Clark County Departm	ent of Community De	evelonment

Gpm = gallons per minute

Source: Clark County Department of Community Development.

Strategies

- Implement water conservation techniques at existing county facilities and design new facilities to optimize water conservation.
- Require new large commercial and industrial developments and high water users, such as schools, parks and golf courses, to implement water reuse and reclamation techniques.
- Revise zoning and subdivision ordinances to encourage design of new development that
 is capable of accommodating the long-term construction of sewer systems that
 efficiently accommodate population growth.

- Maintain a project listing of priority watersheds for basin planning and priority capital improvement projects.
- Endorse and encourage community policing and associated decentralization of police operations to move services closer to areas where services are demanded.
- Encourage and invest in programs and services which provide for partnerships with the community or other entities which help to solve local problems in a cross-disciplinary manner.
- Encourage use of a diversity of resources such as volunteers and civilians where appropriate to improve cost effectiveness of public safety operations.
- Conduct resource allocations based on achievement of outcomes rather than simply workload or output measures.
- Encourage the use of installed fire protection or increased fire resistive construction materials or design and increased use of sprinklers and alarm systems by providing incentives or non-penalties for their use.
- Encourage the development of community oriented police, fire and emergency services programs designed to meet community identified needs.
- Provide increased enforcement and control of illegal dumping.
- Continue consideration of an east county transfer station for solid wastes.
- Protect transmission corridors for energy resources from conflicting development.
- Develop and, if necessary, revise policies consistent with current scientific research regarding electrical magnetic field impacts from high voltage electrical lines, or other utility transmission or substation facilities with health potential impacts. Such policies should at a minimum provide for notice of potential impacts to prospective residents adjacent or near such facilities.
- Incentive policies may be developed to allow adjustments of impact fees where such adjustments are necessary to provide or encourage the provision of a demonstrable public benefit, provided that public share budgetary implications of such adjustments have been addressed.
- Remain engaged in the management and operation of the regional sewer utility,
 Discovery Clean Water Alliance.

Current Revenue Sources for Capital Projects

General Fund: This is the basic operating fund for the city or county that comes from general tax and revenue resources of the jurisdictions. General fund moneys are often used to finance capital improvement projects. The county's general fund should decrease dramatically in the future as cities annex incorporated lands within their UGAs.

Additional Voter Approved Financing: Voter approved financing is debt financing through voter approved bonds and levies which are funded with property tax revenues. Bonds require a 60 percent voter approval, levies require a simple majority. Both bond and levy financing are described below.

General Obligation Bonds: The cities or county can raise revenues for major capital projects by selling tax-exempt municipal bonds and incurring debt. Bonds are basically loans from investors who are paid interest in return for their investment. The jurisdiction uses its property tax revenues to make its interest and principal payments on the bonds.

The State of Washington limits the amount of debt that jurisdictions can incur. It does so by limiting the amount of taxable property (measured by the property's assessed value) that can be committed to pay off debt. In the State of Washington, jurisdictions are authorized to incur, with a 60 percent majority of voter approval, 2.5 percent of their assessed valuation in general obligation debt for general purposes, 2.5 percent for utility related capital expenditures and 2.5 percent for parks and open space acquisition.

Of the 2.5 percent allowed for general purposes, a jurisdiction may commit 0.75 percent without a vote of the people. This is known as limited general obligation. An additional 0.75 percent can be incurred to pay for long-term leases.

Property Taxes: The cities and county can raise money for general or specific purposes by increasing property taxes through property tax levies. The State of Washington has an annual 106 percent lid on property taxes. However, with a simple majority of voter approval, cities and counties can increase the lid and levy an additional tax on property for a specified length of time ranging from one to 10 years for a specified purpose.

Intergovernmental Revenues: The county and cities receive grants and matching funds for major capital projects. These revenues come from the state and federal governments for specific projects. Some examples include the Centennial Clean Water Fund, the Water Pollution Control State Revolving Fund and Community Development Block Grants.

Fees and User Charges: The GMA provides cities and counties the authority to implement a variety of taxes for use in mitigating the impacts of growth on capital facilities. User charges and developer fees are designed to recoup the cost of providing public facilities or services by charging all or a portion of the fee to those who benefit from such services. As a tool for affecting the pace and pattern of development such fees may vary for the quantity and location of services provided. Examples include impact fees, utility taxes and special assessment fees.

Lease Purchase: The city and counties can engage in lease purchase agreements for purchasing major equipment like fire trucks or 9-1-1 communications systems. There are a number of reasons, besides current market conditions, which make lease purchase agreements attractive. A primary advantage is leasing a building with an option to buy eliminates the need for the jurisdiction to issue bonds to build a facility. The lease payments are not considered as debt service and thus do detract debt capacity. Since there is no obligation to buy, the jurisdiction can move as growth occurs. A potential disadvantage is that the lease purchase payments can cost more than current rents. A lease purchase agreement does not require voter approval.

Timber Excise Tax: The county and other local taxing districts (excluding cities) can enact a local timber excise on private timber at a rate of 4 percent, which is allowed as a credit against the State tax.

Potential New Revenue Sources for Capital Projects

In addition to current revenue sources, there are a number of other financing options that could potentially be used for capital projects. A brief discussion of some potential sources is conducted below.

Mandatory Dedications or Fees in Lieu of: The city or county may require, as a condition of plat approval, that subdivision developers dedicate a certain portion of the land in the development

or an equivalent fee in lieu of dedication be used for public purposes, such as roads, parks or schools.

Impact Fees: Several cities and counties in the region impose fees on developers to finance parks, schools and roads through the provision of the GMA. These impact fees are assessed on the construction of new homes and other buildings. The fees must reflect the costs of providing capital facilities needed to serve the new development. Some local school districts and jurisdictions in Clark County currently use impact fees to finance their capital facilities.

Special Assessment Districts: Special assessment districts implement financing methods for capital facilities which require partial or complete financing by entities other than the jurisdiction. These financing alternatives include those that require financial participation by the existing property owner or developers. Special assessment bonds are restricted to uses related to the purpose for which the district was created. Most typical types of districts include Local Improvement Districts, Road Improvement Districts and Utility Local Improvement Districts.

Growth Induced Tax Revenues: This revenue raising technique would divert some of the incremental tax revenue generated by new growth into a capital fund so that it could be used to finance infrastructure improvements necessary to support growth. For example, a certain percentage of the increment in property tax revenue generated by new growth could be diverted for a specific number of years into a special capital projects fund. Money in that fund would be restricted to use for growth related capital project.

Regional Tax Base Sharing: Regional tax base sharing is a technique for redistributing local government revenues among jurisdictions in a metropolitan area. It generally involves placing a portion of the growth-related tax revenues collected by each jurisdiction into a pool and then redistributing the pooled revenue among the jurisdictions according to a specified formula. The redistribution formula attempts to address fiscal imbalances or inequities that result from such factors as the inequity in tax generating capacity and public costs among jurisdictions, the unequal distribution among jurisdictions of public facilities that serve the regional population (e.g., the Salmon Creek Wastewater Treatment Plant) and the concentration of both high and low tax generating users in specific jurisdictions. Tax base sharing is not widely used in the United States.

Stormwater Utility: Requires a basin plan to be adopted by Board of County Councilors similar to existing Burnt Bridge Creek Utility as authorized by RCW 36.89 and 36.94.

System Development Charges: May be used for stormwater control and treatment facilities as authorized under RCW 36.94.

Voter Approved Real Estate Excise Transfer Taxes: In addition to the one-half-of-one percent of Real Estate Excise Transfer (REET) tax authorized by the State Legislature, cities and counties authorized to plan under GMA may also ask voters to approve additional REET taxes for planning and for open space acquisition.

Conservation Futures: The Conservation Futures levy is provided for in Chapter 84.34 of the Revised Code of Washington. Boards of County Councilors may impose by resolution a property tax up to six and one-quarter cents per thousand dollars of assessed value for the purpose of acquiring interest in open space, farm and timber lands. The Board of Clark County Councilors adopted the Conservation Futures levy in October 1985. Conservation Futures funds may be used

for acquisition purposes only. Funds may be used to acquire mineral rights and leaseback agreements are permitted. The statute prohibits the use of eminent domain to acquire property.

Real Estate Excise Tax: Chapter 84.46 of the Revised Code of Washington authorizes the governing bodies of counties and cities to impose excise taxes on the sale of real property within limits set by the statute. The authority of counties may be divided into four parts.

- 1. The Board of Councilors may impose a real estate excise tax on the sale of all real property in unincorporated parts of the county at a rate not to exceed 1/4 of 1 percent of the selling price to fund "local capital improvements," including parks, playgrounds, swimming pools, water systems, bridges, sewers, etc. Also, the funds must be used "primarily for financing capital projects specified in a capital facilities plan element of a comprehensive plan . . . " This tax is now in effect in Clark County.
- 2. The Board of Councilors may impose a real estate excise tax on the sale of all real property in the unincorporated parts of the county at a rate not to exceed 1/2 of 1 percent, in lieu of five-tenths of one percent sales tax option authorized under RCW 82.14.040 (2). These funds are not restricted to capital projects. The statute provides for a repeal mechanism. However, this levy is not available to Clark County, because it has implemented a portion of its discretionary sales tax option.
- 3. In counties that are required to prepare comprehensive plans under the Growth Management Act, Boards of Councilors are authorized to impose an additional real estate excise tax on all real property sales in unincorporated parts of the county at a rate not to exceed 1/4 of 1 percent. These funds must be used "solely for financing capital projects specified in a capital facilities plan element of a comprehensive plan."
- 4. With voter approval, Boards of Councilors may also impose a real estate excise tax on each sale of real property in the county at a rate not to exceed 1 percent of the selling price for the specific purpose of acquiring and maintaining "local conservation areas."

Real Estate Excise Tax - Local Conservation Areas: With voter approval, Boards of County Councilors may impose an excise tax on each sale of real property in the county at rate not to exceed one percent of the selling price for the purpose of acquiring and maintaining conservation areas. The authorizing legislation (RCW 82.46) defines conservation areas as "land and water that has environmental, agricultural, aesthetic, cultural, scientific, historic, scenic, or low-intensity recreational value for existing and future generations..." These areas include "open spaces, wetlands, marshes, aquifer recharge areas, shoreline areas, natural areas and other lands and waters that are important to preserve flora and fauna."



Chapter 7

Parks, Recreation & Open Space Element

Chapter 7 Parks, Recreation and Open Space Element

"With the growth of a great metropolis here, the absence of parks will make living conditions less and less attractive, less and less wholesome. Insofar, therefore, as the people fail to show the understanding, courage and organizing ability necessary to grasp the present opportunity, the growth of the region will necessarily tend to choke itself."

Olmsted and Hall, Proposed Park Reservations for East Bay Cities, 1930

Introduction

One of the GMA's 13 primary goals is to "Encourage the retention of open space and development of recreational opportunities, to conserve fish and wildlife habitat, increase access to natural resource lands and water and develop parks." Clark County adopted its first Comprehensive Parks and Recreation Plan in 1965, with updates in 1975, 1981, 1987, 2000, 2002 and 2015. The state Growth Management Act requires local parks plans as a component of county master plans (RCW 36.70A (8) Mandatory elements of the comprehensive plan.

From 1997 to 2013, the county park system was jointly planned and managed with the City of Vancouver via an interlocal agreement or memorandum of understanding (MOU), which was not renewed in 2013. The Clark County Parks Division was created in 2014 under the Department of Public Works and the associated Clark Parks Advisory Board was also established in 2014. Previous comprehensive plan policies were under the old MOU with the City of Vancouver. In addition, the comprehensive plan policies were from the adopted 2002 parks when the county was a joint parks provider with the City of Vancouver.

Clark County Parks Advisory Board

The Parks Advisory Board (PAB), which meets monthly to discuss projects and hear citizens' concerns and ideas, played a key role in developing policies and capital improvement priorities. The Board of County Councilors reviews all major policy issues faced by the Parks Department.

2015 Clark County Parks, Recreation and Open Space Plan

Since Clark County separated from the City of Vancouver Parks Department, the 2002 Park Plan no longer applied; therefore, the County needed to develop its own parks comprehensive plan. The Parks, Recreation and Open Space (PROS) Plan was adopted by the Board of County Councilors on September 22, 2015.

The PROS plan provides direction for the future priorities of the parks system over the next two decades, qualifies the county for eligibility for state and federal grant resources, fulfills the requirements for a parks element within the comprehensive plan as part of the State of Washington Growth Management Act (GMA) and reflects the guidance from the Greater Clark Parks Advisory Board related to recreational needs and priorities of the community. The PAB guided the planning process for this PROS Plan from the development of the vision, mission and goals to the recommendations, capital facilities plan and other implementation tools.



Greater Clark Parks Mission and Vision

Vision: Clark County Parks & Recreation strengthens a high quality of life for the entire community.

Mission: Meeting community needs by providing an interconnected system of parks, trails, recreation facilities and natural areas that support environmental stewardship, diverse recreational opportunities and economic development.

Public Involvement

The extent of community engagement and outreach utilized during the development of the PROS Plan resulted in a broad spectrum of identified park, trail and recreational facility demands and desires for shaping the future of the county park system. The series of open houses, stakeholder group interviews, park advisory board meetings, parks advisory board member interactions, individually-submitted public comments and online survey results helped guide the determination of priorities for the future infrastructure of parks, trails and other outdoor recreation facilities.

Parks and Recreation Online Survey

A park online survey was posted to the county website, as well as links to the survey were sent in an email blast to stakeholders and interested parties. This online survey was conducted from February through the end of April 2015. Approximately 1500 participants completed the survey. The survey was made available at each of the open houses, shared through extensive email blasts and accessible from the Clark County website. The full survey report is located in Appendix C of the 2015 PROS.

Past Planning Efforts

2006 Regional Trails & Bikeway System Plan

The countywide trails and bikeway plan was prepared under the guidance of and with input from a 15-member task force of private and public agencies and interested citizens. Task force membership included representatives from bicycle, walking and equestrian clubs and providers of trails on public lands, including the US Fish and Wildlife Service, US Forest Service and Washington Departments of Fisheries, Wildlife, Transportation and Natural Resources. Additional information was gathered during two series of public workshops. The plan covers incorporated and unincorporated areas and identifies five trail types: regional multi-use trails, local trails, rustic trails, semi-primitive trails and bike lanes/pedestrian walkways. Published in April 2006 and adopted by the Board of County Commissioners, the Clark County Trails & Bikeway System Plan is incorporated by reference.

2003 Conservation Areas Acquisition Plan

The Conservation Areas Acquisition Plan, adopted in 2003, assesses landscape and natural resource protection needs and opportunities within Clark County and identifies priority acquisitions for the expenditure of conservation area funds. The planning process involved a range of public involvement opportunities, including public meetings and surveys, as well as technical assistance provided by various advisory committees and working groups.

Existing park and open space facilities in Clark County

The Greater Clark Parks District owns and manages approximately 4,006 acres of park and open space lands. These lands are divided into two categories: urban and regional facilities. Urban facilities include neighborhood parks, community parks and urban open space. Regional facilities include regional parks, conservation and greenway systems, trails and special facilities. This section provides

a summary of county parks and open space lands and recreational programs. (A complete inventory of county parks facilities is available from the Parks and Recreation Department.)

Urban Facilities

Urban facilities include neighborhood parks, community parks and urban open spaces. The National Recreation and Parks Association (NRPA) suggest that a park system, at minimum, be composed of a core system of 6.25 to 10.5 acres per 1,000 persons of urban park land. Clark County owns and manages the following park system within the urban area as shown in Table 7.1.

Type of Park Facility	Number of Facilities	Acreage Total
Neighborhood	44	204
Community	12	361
Urban Open Space	10	236
Joint School/park	6	26

Table 7.1 | Clark County Urban Park System (Unincorporated area of VUGA only)

Neighborhood Parks

Neighborhood parks provide access to basic recreation opportunities for nearby residents, enhance neighborhood identity and preserve neighborhood open space. These parks are designed primarily for non-organized recreation. Located within walking and bicycling distance of most users, these parks are generally three to five acres in size and primarily serve residents within a half-mile radius. Since access is mostly pedestrian and park sites should be located so that persons living within the service area will not have to cross a major arterial street to get to the site. Neighborhood parks often include amenities such as playgrounds, turf areas, pathways and trails, picnic Tables, sports courts and benches.

Park services at the neighborhood level are provided in several ways. Schools meet an important part of the neighborhood recreational need and some elementary school sites have been included under the neighborhood/school classification if they have neighborhood park elements. Neighborhood parks complement and expand on the services provided by school grounds. In certain areas, neighborhood parks are located adjacent to schools or involve developing and upgrading the school site.

Community Parks

Community parks provide a focal point and gathering place for broad groups of users. Usually 20 to 100 acres in size, community parks are used by all segments of the population and generally serve residents within an one- to three mile radius of the park site. Park services at the community level are provided in several ways. Junior and senior high schools meet an important part of the community recreational need. Community parks complement and expand on the services provided by school grounds. In certain areas, community parks are located adjacent to schools or involve developing and upgrading the school site. Access to community parks may be by car, bicycle or on foot. The range of facilities provided will be greater than in neighborhood parks and will generally appeal to more diverse user groups. Community parks often include recreation facilities for organized activities, such as sports fields, skate parks and play courts. Community parks may also incorporate passive recreation space and community facilities, such as community or senior centers. Because of their large service areas, community parks require more support facilities, such as parking and restrooms. Some middle and high school sites are included in the school/park category, since these facilities can serve some of the community park needs.

Urban Open Space

Urban open spaces are primarily undeveloped spaces, which are managed for both their natural, ecological value and for light-impact recreational use. These areas can provide relief from urban density and may also preserve or protect environmentally sensitive areas, such as endangered animal habitat and native plant communities. Public access to these areas can provide passive recreational opportunities, where compatible with resource protection. Where these greenspaces can be connected along stream corridors they provide valuable wildlife habitat and other ecological benefits. The site may or may not be improved, but can include trails, greenway corridors and an area within a community or neighborhood park which is left in its natural state. Selection of urban green space sites is based on a variety of criteria, including linking to other open spaces, schools or public facilities, the need for open space in an area, existing parks and open space in the area and preservation of natural resources.

Urban Park Standards

The 20-Year Plan identifies a combined acquisition standard for neighborhood and community parks of approximately five-acres per 1,000 population. The reason for a combined neighborhood-community standard is recognition that individual neighborhood and community park standards may not be attainable in certain areas because of existing and proposed development, which may eliminate the availability of parcels large enough to accommodate these parks. Within the combined five-acre standard, the preferred distribution is two-acres for neighborhood parks and three-acres for community parks. Urban open space has a separate standard of one-acre per 1,000 population.

Neighborhood/Community Acquisition Standard

• 5 acres/1,000 population.

Neighborhood/Community Development Standard

• All neighborhood and community parks to Level II development.

Urban Open Space Acquisition Standard

1 acre/1,000 population.

Urban Open Space Development Standard

Not Applicable.

The national standard for neighborhood and community parks is 6.25 to 10.5 acres per 1,000 population. While the county has adopted a level-of-service standard of five-acres, it is the city's and the county's goal to achieve the national standard. These higher standards become more critical as densities within the urban area increase.

Countywide Regional Facilities

NRPA suggests that a park system include 15 to 20 acres of regionally significant "adjunct" park facilities and additional special use and conservancy lands. The size and amount of "adjunct" park lands will vary from community to community, but must be taken into account when considering a total, well rounded system of parks and recreation areas. Clark County owns and manages

approximately 3,096 acres of park and open space land that provide service to all county residents and these parks and open space lands include 18 regional parks totaling 2,603 acres, 8 special facilities totaling 632acres and over 22,941 acres of urban and regional natural areas and the 27-mile Lewis and Clark Railroad right-of-way. In addition, the county owns and manages the 333-acre Clark County Fairgrounds/Recreational campus (Figure 25).

Regional Parks

A regional park is an area with natural or man-made qualities for outdoor recreation, such as picnicking, boating, fishing, swimming, camping and trail uses. The 2015 PROS indicates that Regional Parks serve residents from throughout Clark County and beyond. Play areas may also be included. It will typically serve several communities within one hour driving time, although closeness to population centers is desired. According to the 2015 PROS: "Regional Parks are larger than 50 acres in size, but may vary in size depending upon the unique characteristics, opportunities and land availability. "If possible, the site should be contiguous to or encompass natural resource areas. These parks are typically located in areas with outstanding natural features or qualities. These natural features may define the boundaries of a regional park. Clark County's existing regional parks range in size from 100 to more than 325 acres.

Urban and Regional Natural Areas

The County's 2014 Conservation Areas Acquisition Plan (CAAP) provides the direction and focus for conserving and connecting significant open spaces and natural resources. Clark County possesses a rich variety of landscapes and natural resources that enhance the quality of life for all Clark County residents. Natural resources range from the Columbia River to the Cascade Mountains and include a diversity of streams and lakes, marshes, wetlands, shorelines, meadows and forests. These land and water resources provide critical habitat for fish and wildlife and provide opportunities for hiking, canoeing, picnicking, swimming and other outdoor recreation activities. In 2009, the county created an environmental services department whose responsibilities include overseeing the Legacy Lands program. This department now takes the lead in the planning, acquisition, management and stewardship for the county's conservation open space lands. The inventory of these existing urban and regional natural areas can be found in Appendices A and B of the PROS.

Trails

The county has adopted a comprehensive *Trails and Bikeway System Plan* (April_2006) and a *Bicycle and Pedestrian Master Plan* (2010) that identifies a countywide trail system, including trails for biking, hiking and horseback riding, which is incorporated by reference. The 2015 County PROS defines trails as "any path, route, way, right-of-way, or corridor posted, signed, or designated as open for non-motorized travel or passage by the general public." The PROS plan goes onto define trailheads as, "the place where a begins.. and that... trailheads may include signage on rules and regulations and trails orientation, parking, restroom facilities, water fountains, bike racks and recycling/trash receptacles and necessary specialized unloading features (ADA accessibility equestrian facilities, etc.) where feasible." Trails serve all county residents. Five types of trails are identified in the *Trails and Bikeway System Plan* (April 2006):

- Regional multi-use trails, which provide the major access networks across the county for pedestrian and bicycle use, with equestrian use on the shoulder, where feasible.
- Local trails, whose function is to provide access from neighborhoods to regional multi-use trails or bike lanes.
- Rustic trails, which are smaller in scale than the local trail and are intended to provide access to natural features and to provide loop trail opportunities.

- Semi-primitive trails, which are intended for rural or forest settings, where a more dispersed level of use provides for a more natural experience.
- Bike lanes and pedestrian walkways, which are located on city, county and state road rights-of-way.

Wildlife Habitat

Wildlife habitat is composed of land, water, vegetation and other natural resources necessary to support fish and wildlife populations. Clark County has used several methods to map and/or designate its highest priority habitat and critical/sensitive lands (e.g., high-quality wetlands). These include the Clark County Open Space Commission Report, GMA critical lands designations, Washington State Priority Habitat and Species Program, Washington Conservation Commission Fish Distribution Maps and Limiting Factors Analyses and Lower Columbia Steelhead Conservation Initiative. While these programs utilized different methodologies to identify high-priority wildlife habitat, the results produce similar or complementary findings and lead to consistent preservation priorities.

Regional Special Facilities

Special facilities of regional significance are generally located and developed to serve one or several needs of the community for recreational, historical, cultural, environmental and educational activities. Regional special facilities range from active recreation areas such as sports field complexes and camping facilities to more passive activities such as scenic overlooks and botanical gardens. These facilities may be located within or in proximity to regional conservation and greenway areas, regional parks and/or regional trails and may be provided by either public or private entities. There is no minimum standard or minimum size for a majority of regional special facilities however, the site must be large enough to accommodate the specific use. The Heritage Farm located on NE 78th Street, which the county owns and leases to Washington State University agricultural extension service is an example of a special facility.

Camp Bonneville

Camp Bonneville is located in southeastern Clark County, Washington, about 12 miles east of Vancouver and seven miles north of the Columbia River. It was established in 1909 as a drill field and rifle range for Vancouver Barracks and has been used primarily as a training camp for various branches of the military. The property is largely undeveloped; more than half of its six square miles is forested.

Since the U.S. Army closed Camp Bonneville in 1995, the 3,840-acre property has captured the imagination of hikers, equestrians, parks planners, wildlife enthusiasts, campers, Native American groups and many others. After the Army closed the facility along with several others nationwide, the property was selected for transfer and reuse by the Base Realignment and Closure Commission (BRAC). On October 3, 2006, after ten years of dialog and negotiation with the Army and the state Department of Ecology, the then Board of Clark County Commissioners accepted transfer of property ownership from the Army to the county.

The county and its contractor will now continue the process of cleaning up the site, which includes hazardous waste contamination and unexploded military ordnance, to specifications set by the Washington State Department of Ecology. The Army will provide \$27 million over the next several years to pay for the cleanup and related insurance.

Regional Park Standards

Population-based standards for regional parks and special facilities and resource-based standards for conservation and greenway systems and trails are adopted as part of this Element. There are no national standards for conservation and greenway systems and trails because they are based on the natural resources within a given community. NRPA guidelines state that a standard for these lands "must be part of a regional open space system plan and accompanying policies." Regional open space and trails plans have been prepared by the county and are incorporated into this 20-Year Plan.

Acquisition Goal

• 10 acres/1,000 population

Acquisition Standard

• 5 acres/1,000 population

Development Standard

• 18% of site developed

Desired minimum size

200 acres

Typically, greenways follow rivers, streams, creeks, ravines and other natural corridors; there is no standard or minimum size. Corridors should be of sufficient width to protect the resource. Corridors can be defined by either built or natural features, such as vegetation, bluff lines, water features, roads or other existing development.

Acquisition Standard

Resource-based; see attached map "Regional Park and Open Space Systems"

Development Standard

Not Applicable, but activities should be consistent with adopted management plans

The Plan also calls for trailheads with provisions for auto parking, consistent signage and interpretive markers and educational information. Public need and available funding shall guide acquisition and development (see Table 7.2). Standards for design construction are provided in the Trails and Bikeways System Plan. The county shall develop trails using the Trails and Bikeways System Plan and standards as a guide.

Acquisition Standard

Not Applicable

Development Standard

Guidelines provided in Trails Plan

Table 7.2 | Clark County Regional Park System

Regional Parks	Current Acres	Current Deficit	Relative to Standard
Acquisition	2,603.4	1751.6	5.98_ac/1000
Development	361.1	422.9	7.21% developed

Source: Based on the 2014 park inventory

Other Agency Facilities

Federal, state and other local agencies own and manage park, recreation and open space lands as well. Table 7.3 provides a summary of these lands and ownership. (A more detailed description is provided in the Regional Park, Recreation and Open Space Plan.)

Table 7.3 | Summary of Federal, State and Local Agency Park and Open Space Land within Clark County

Jurisdiction / Agency	Acreage
US Forest Service	1,239
National Park Service	209
US Fish and Wildlife Service	6,243
Washington Dept. of Fish and Wildlife	3,075
Washington Dept. of National Resources	60,000
Washington State Parks and Recreation Commission	884
Port of Camas-Washougal	75
Washington Department of Transportation	16
City of Vancouver Parks & Recreation	1,577
City of Camas	808
City of Washougal	88
City of Battle Ground	140
City of Ridgefield	154
City of La Center	20
Town of Yacolt	5
TOTAL	74,533

School Districts

There are eleven public school districts in Clark County. These schools provide a variety of recreational facilities, including tennis courts, soccer, baseball and football fields, tracks, basketball courts and children's play equipment. Residents frequently use school facilities. Some school properties have developed parks on or adjoining the school site by the county with an agreement between the county and school district concerning the use of the facilities. The school will use the park during the school day, while the community will have access to it at other times. The cooperation saved money for both the city/county and the school district.

Private Facilities

Private recreational facilities exist throughout Clark County. The private facilities provide for a wide range of recreational activities generally on a fee basis. The private recreation industry influences recreation planning by providing much needed facilities, thereby easing the burden on public recreational facilities. Individual special facilities are listed in the inventory of regional special facilities

(see the Regional Park, Recreation and Open Space Plan). Of note, two of the largest private landholders in Clark County are Pacific Power and Light (PP&L) and the Columbia Land Trust.

Future Park and Open Space Facilities in Clark County

Future park need was determined through a systematic examination of community needs for each category of park facility. This section presents the method used to assess the demand and need for each category of park.

Demand and Need

This section provides a general description of the analysis of demand and need for urban and regional parks. The Comprehensive Parks Plan provides the inventory, needs assessment and project lists for the Vancouver urban area park districts and for regional parks. The six-year capital facilities list is in Section VI of this plan.

A multi-step process was used to assess demand and need for each type of park and recreational facility in Clark County. The methodology for determining demands and need varied by facility type and the methodologies are described below. Generally, county park standards were matched against existing inventories of park land and service area populations.

Urban Parks, Recreation and Open Space

Urban park, recreation and open space planning distinguishes between urban park needs in the Vancouver and Three Creeks urban area as well as the needs of the other cities in the county. The county currently owns and manages urban parks in the Vancouver urban unincorporated area and the Three Creeks UGA.

Vancouver Urban Area

For planning purposes, the Vancouver urban area has been divided into seven park districts. For each of these districts, a detailed process was used to assess demand and need and to develop the 20-Year Plan and the 6-year Capital Facilities Plan. First, district maps were prepared that identified zoning, water features, park inventory, drainage inventory, schools, trails, arterials, parcels, environmentally sensitive areas, priority wildlife habitat and vacant lands. Secondly, the existing and projected need for each district was calculated by comparing the existing inventory to park standards. Next, a detailed analysis of each district was conducted to determine potential park sites that could meet existing and projected needs. District acquisition priorities were prepared based on public input and draft maps were prepared showing district priorities. The Urban Parks Plan and Section VI of this plan describe the 20-year and 6-year demand and need for each of these park districts, respectively.

Other Cities and Towns

The county will have a more limited role in planning for the unincorporated areas around Battle Ground, Camas, La Center, Ridgefield, Washougal and Yacolt. Parks districts have not been created in these urban growth areas, but each of the cities is undertaking parks planning efforts to ensure that urban park needs are met. Consistent with the GMA directive that urban parks are provided by cities, Clark County will work with but defer to the cities to ensure that their park needs are met according to their park plans.

Regional Parks, Recreation and Open Space

Regional Parks

A detailed process was used to access the county's regional park needs. First, an inventory of existing regional parks and other agency facilities was conducted. This inventory is shown in the PROS. Using the 10 acre per 1,000 people standard, an existing deficit of approximately acres of regional parks was identified. Next, potential park sites were selected through a public process of evaluating locations that meet NRPA definitions of regional park facilities. These potential locations were then evaluated on the basis of zoning, water features, park inventory, drainage inventory, schools, trails, arterials, parcels, environmentally sensitive areas, priority wildlife habitat and vacant lands. The PROS describes the inventory, needs assessment and project list and Section VI of this plan describes the six year capital facilities needs and funding sources.

Regional Conservation and Greenway Systems

Regional conservation and greenway systems are a resource-based category; as such, there is no population-based standard. The Regional Conservation and Greenway System are based on the county Open Space Commission's detailed evaluation of the need for additional open space. The Open Space Commission examined 5 methods for evaluating the need for additional open space in Clark County: population driven standards; resource driven standards (such as rate of depletion of a particular resource type); expert opinion; legislative and policy guidelines; and public opinion. A detailed description of this evaluation is contained in the Open Space Commission Report.

The commission concluded that, with the exception of urban open space, there are not generally accepted population-based standards for determining open space need in Clark County. In the void of established standards, the commission elected to develop planning objectives that could be applied to Clark County and would, if implemented, create an adequate system of open spaces. A complete list of these planning objectives is found in the Open Space Commission Report.

Regional Trails

As with conservation and greenway systems, trails are resource-based, not population-based. The county conducted a special trails study in 2006, which included an assessment of the need for trails. With input from the County Open Space Commission Report and previous trail planning efforts and with additional work sessions with the Parks & Recreation Advisory Commission, a Citizen Advisory Committee, county and city staff, a network of interconnecting multi-use trails and bikeways was proposed throughout the county.

The trails are planned to utilize, where feasible, natural greenway corridors, open space and road networks, as well as portions of railroad and utility rights-of-way. The Trails Plan identifies goals for the miles of multi-use trails, local trails, bikeways, rustic and semi-primitive trails. The Comprehensive Parks Plan describes the inventory, needs assessment and project list and Section VI of this plan describes the six year capital facilities needs and funding sources.

Goals and Policies

The Growth Management Act makes many references to the importance of parks, recreation and open space. Goal 9 of the Act states that local governments should:

"Encourage the retention of open space and development of recreational opportunities, to conserve fish and wildlife habitat, increase access to natural resource lands and water and develop parks".

The Act calls for provision of greenbelts and open space areas within and between urban areas. Other provisions of the Act, such as those relating to the environment and public facilities and services, contain language that addresses park, recreation and open space issues. This 20-Year Plan contains the goals and policies for parks, recreation and open space, which are compiled from the PROS. These goals and policies are intended to guide the acquisition and development of park facilities and recreational programs and to provide guidance to the county's development review process. The county will continue to plan for urban parks, in cooperation with cities, in unincorporated urban areas. As a provider of countywide regional services, Clark County will focus available resources on regional facilities and services that benefit all county residents regardless of location. The service standards, needs, policies and capital facility plans in this document reflect the county's shift from a provider of both urban and regional services to a provider of regional services only.

7.0 Countywide Planning Policies

7.0.1 The county and each municipality shall identify open space corridors, riparian areas, important isolated open space and recreational areas within and between urban growth areas and should prepare a funding and acquisition program for this open space. Open space shall include lands useful for parks and recreation, fish and wildlife habitat, trails, public access to natural resource lands and water and protection of critical areas.

County 20-Year Planning Policies

Urban Parks

Goal: Forge strong public, private and non-profit partnerships.

7.1 Policies

- 7.1.1 Develop partnerships with public and private organizations to increase parks and recreation opportunities.
- 7.1.2 Initiate the formation of a regional sports council to actively advocate for a regional sports complex to create a tournament level facility and provide valuable recreation and economic benefits.
- 7.1.3 Collaborate with other agencies in developing and operating parks and recreational facilities for the regional population, such as water access, trails and regional parks.
- 7.1.4 Cooperate with other public and private agencies, as well as with private landowners, to acquire and conserve land and other resources to provide quality park and recreation facilities.
- 7.1.5 Facilitate active partnerships with schools, ports and utilities to help implement regional trail connections and safe routes to parks.

Goal: Promote and market the county's parks system.

7.2 Policies

- 7.2.1 Promote Clark County as an outdoor recreation and tourism destination by effectively marketing the county's parks, trails, special facilities, open spaces and natural resources.
- 7.2.2 Establish a brand identity for Clark County Parks, with a consistent look and feel to educational and promoting materials.
- 7.2.3 Produce mapping and "wayfinding" for parks and trails that reflects the county parks identity and adds value to the park and trail user's experience.
- 7.2.4 Enhance the county parks web presence with active engagement of social media.
- 7.2.5 Incorporate park and trail mapping and "wayfinding" into the county park website.
- 7.2.6 Engage CVTV to produce a series of park and trail stories that serve to inform the community about the variety of outdoor recreation resources available in the county.
- 7.2.7 Engage local media more actively to report on county parks activities, events, volunteer work parties, etc.
- 7.2.8 Actively engage in and support Intertwine Alliance activities and events to capture the value of collaboration across organizations and agencies in the metropolitan region.

Goal: Embrace a balanced strategy for achieving a comprehensive parks system.

7.3 Policies

- 7.3.1 Pursue land acquisition to provide geographically accessible regional parks and equitable distribution of urban parks.
- 7.3.2 Preserve the region's scenic beauty through protected open space areas and corridors and provide outdoor recreation, where appropriate.
- 7.3.3 Continue implementing the Regional Trail and Bikeway Systems Plan and coordinate with public and private stakeholders to develop a trails and bikeways network.
- 7.3.4 Open discussions with parks and recreation agencies to identify high priority projects across city jurisdictions to jointly seek funding and otherwise collaborate on their implementation.

Goal: Ensure equity and access to parks and trails and facilities for a healthy community.

7.4 Policies

- 7.4.1 Accessibility: Follow the Americans with Disabilities Act and incorporate ADA Accessibility Guidelines to ensure equal and maximum accessibility for all users.
- 7.4.2 Parks: Offer a range of active and passive recreation experiences for diverse age groups, interests and abilities.
- 7.4.3 Trail System: Promote active lifestyles by providing more trails connections and coordinating with other jurisdictions and providers to create a seamless system.

- 7.4.4 Water Access: Provide safe and appropriate water access for recreation and education and to inspire appreciation and stewardship for aquatic resources and habitat.
- 7.4.5 Urban walkability: Promote safe pedestrian and bicycle routes during development review to encourage connectivity between parks, trails, schools and businesses.

Goal: Provide recreational opportunities for the entire community.

7.5 Policies

- 7.5.1 Offer parks, trails and sports fields and support services to accommodate the needs of various existing users and future users with population growth and demographic changes.
- 7.5.2 Explore new recreational trends and engage in partnerships with user groups to develop, operate and maintain specialized facilities.
- 7.5.3 Prioritize facility development based on demonstrated demand, population served, regional appeal, fiscal opportunity and revenue generating potential.
- 7.5.4 Expand sports fields by acquiring additional sites and providing all-season designs.

Goal: Be responsible, effective stewards of public lands and finances.

- 7.6.1 Prioritize implementation to leverage the highest values benefits ("most bang for the buck") such as short gaps between built trails to create longer more usable connections.
- 7.6.2 Incorporate sustainability and low impact development into design, development and maintenance of the county park system and be a leader in sustainable building practices.
- 7.6.3 Use innovative and cost-effective methods to build, maintain, operate and promote the parks, recreation and open space system.
- 7.6.4 Cooperate with other county departments and neighboring jurisdictions to identify and conserve open space.
- 7.6.5 Integrate user counts and surveys into regular operational practices to improve customer service and provide useful data for securing grants.
- 7.6.6 Initiate a volunteer camp host program to increase parks' presence and hospitality at community and regional parks.
- 7.6.7 Investigate feasibility of incorporating security patrols or park ranger program to ensure safety of park and trail users and protect facility infrastructure.
- 7.6.8 Continually seek new opportunities to increase revenues and control expenses.

Goal: Preserve our historic and cultural heritage.

- 7.7.1 Protect and improve historic and cultural features through design approaches for existing and newly acquired park and trail sites.
- 7.7.2 Partner with historical organizations to enlist volunteer-based interpretation programs in parks and along trails.
- 7.7.3 Develop an ongoing program to preserve, restore and interpret historic and cultural resources.

7.7.4 Collaborate with area historic preservation agencies.

Goal: Maintain and enhance parks and recreation facilities.

- 7.8.1 Use best practices and invest in preventative maintenance.
- 7.8.2 Coordinate with trail groups to develop and maintain trail projects.
- 7.8.3 Promote volunteerism to enhance community ownership and stewardship of parks, trails and natural areas.
- 7.8.4 Seek higher levels of general fund support for operations and maintenance of regional parks.
- 7.8.5 Advocate for allocations of fiscal resources, such as REET, to be designated to parks for capital projects.
- 7.8.6 Collaborate with Transportation's sidewalk program to implement safer routes to parks and better access.

Goal: Serve the community and develop a dynamic, effective organization.

- 7.9.1 Develop capital facilities plans to ensure adequate improvement and expansion of parks, trails, special facilities and natural areas to serve existing and future populations.
- 7.9.2 Involve Clark County residents in planning and programming for the parks system and provide effective community outreach to increase public awareness and support.
- 7.9.3 Support staff training and development to promote the use of best practices and new technologies.
- 7.9.4 Encourage Parks Advisory Board enrichment for fine-tuning the members' leadership and advocacy efforts.
- 7.9.5 Advocate for additional staff resources to enable efforts on collaborating, planning and revenue generation.

Goal: Seek adequate funding to meet community needs.

- 7.10.1 Develop and maintain funding for acquisition, development, operation and maintenance of parks, recreation facilities and trails.
- 7.10.2 Actively seek innovative funding methods and use alternate methods, where feasible, to enhance efficient and effective operations.
- 7.10.3 Consider stabilizing the Greater Clark Parks District's finances by protecting the maximum levy rate of 25 cents per \$1,000 of assessed value.
- 7.10.4 Aggressively pursue state, federal and private grant resources to leverage local funding sources.

Strategies

This section lists the types of funding strategies for parks projects. Summary descriptions of these strategies are included in the PROS.

Local Funding Options

- General Obligation Bond
- Excess Levy
- Sales Tax
- Impact Fees
- Real Estate Excise Tax
- Real Estate Excise Tax-Local Conservation Areas (Clark County)
- Conservation Futures Tax (Clark County)

Federal & State Grants and Conservation Programs

- Rivers, Trails and Conservation Assistance Program (National Parks Service)
- North American Wetlands Conservation Acts Grants Program (US Fish & Wildlife Service)
- Wetlands Reserve Program (National Resources Conservation Service)

Washington State Recreation and Conservation Office Grant Programs

- Aquatic Lands Enhancement Account
- Washington Wildlife and Recreation Program
- Land and Water Conservation Fund
- National Recreational Trails Program
- Youth Athletic Facilities Program
- Salmon Recovery Funding Board

Transportation Enhancements

• U.S. Department of Transportation

Other Methods & Funding Sources

- Metropolitan Park District
- Park and Recreation District
- Business Sponsorships/Donations
- Interagency Agreements
- Private Grants, Donations, & Gifts

Several other strategies should be considered for implementation in addition to the projects and funding sources shown in the Capital Facilities Plan.

Capital Facilities Plan

The Parks Department conducted a public process to identify the overall park, recreation and open space priorities and to identify implementation strategies to accomplish the priority projects over the next six years. Criteria were developed and used to rank the projects by and between park categories.

Potential funding sources were identified from the list of implementation strategies and matched with the priority park projects. The Capital Facilities Plan and Six-year Priorities Projects can be found in Appendix A of the PROS.

Alternative Funding Sources

As the county evaluates and implements the Capital Facilities Plan, it should give consideration to additional funding sources. The following potential additional local assessments could provide funding should there be funding shortfalls.

Real Estate Excise Tax: Local Conservation Area

With voter approval, the Board of County Commissioners may impose an excise tax on each sale of real property in the county at a rate not to exceed one percent of the selling price for the purpose of acquiring and maintaining conservation areas. The authorizing legislation (RCW 82.46) defines conservation areas as "land and water that has environmental, agricultural, aesthetic, cultural, scientific, historic, scenic, or low-intensity recreational value for existing and future generations." These areas include "open spaces, wetlands, marshes, aquifer recharge areas, shoreline areas, natural areas and other lands and waters that are important to preserve flora and fauna."

Sales Tax: 0.2% Additional Assessment

Within existing state statute, the county could collect an additional two-tenths of one percent sales tax. In this case, the statute provides an electoral process for repealing the tax or altering the rate. This tax is now in effect in Clark County at the rate of three-tenths of one percent. Of the three-tenths being collected, two-tenths have been assigned to law enforcement services. In addition, revenues derived from the three-tenths sales tax collected in the City of Vancouver are directed to the county in exchange for certain services; by not collecting the tax the city is also entitled to certain other state-distributed revenues.

Special Levy

Washington law allows counties, along with other specified junior taxing districts, to levy additional property taxes in excess of limitations imposed by statute when authorized by the voters. Levy approval requires 60 percent majority vote at a general or special election.

Cooperative Partnerships

In addition to direct funding of programs, the goals of the Parks, Recreation and Open Space Plans can be reached through cooperative partnerships with other agencies and citizen groups. This section describes several cooperative partnerships that should be pursued by the county.

State and Federal Land Trades

The state and federal governments own nearly 69,000 acres of land in Clark County, with the state Department of Natural Resource (DNR) owning 60,000 acres by itself. To better manage their lands, DNR has sought (and will likely continue to seek) to consolidate their land holdings through land trades or sales. The county should seek to work with DNR and other state and federal agencies to identify cooperative opportunities to meet county park, recreation and open space goals.

Storm and Surface Water Utilities

As provided by state law, Clark County could implement a Storm and Surface Water Utility to better manage water resources. The activities of such a utility could involve protection and restoration of wetlands, ponds or other water-related areas that provide important open space and trail corridors. The county should continue to investigate the feasibility of such a utility that would support the Parks, Recreation and Open Space Plans and the goals of the county's Water Quality Division.

Park and Recreation Districts and Service Areas

Where there is sufficient citizen interest, the county should explore the use of citizen managed Parks and Recreation Districts to meet their urban park needs. These districts, independently operated, could cooperatively help meet the need for urban parks, having the ability to acquire, operate and maintain parks.

Volunteer Programs

The Greater Clark Parks a Department should continue and build on its existing volunteer programs to provide citizen partnerships that improve the quality of county park facilities while reducing the county's financial burden. Adopt-A-Trail and Adopt-A-Greenway programs are examples of volunteer programs that have been successfully implemented elsewhere.



Chapter 8

Historic, Archaelogical & Cultural Preservation Element

Chapter 8 Historic, Archaeological and Cultural Preservation Element

Introduction

Cultural resources in Clark County are rooted in a rich and colorful history that dates back thousands of years. The historical record of the county includes the formation of the region's unique physiography, settlement of the region by Native American groups, exploration by European nations, location as headquarters for the Hudson's Bay Company Columbia District trade networks, destination for thousands who took the Oregon Trail and location as an industrial center (first for pulp and paper, then aluminum and shipbuilding and now high-tech industries).

The Growth Management Act of 1990 (GMA) requires all local jurisdictions to "Identify and encourage the preservation of lands, sites and structures that have historical or archaeological significance." Knowledge of Clark County's history can provide a context in which to understand current growth and development trends and a sense of continuity and community so valuable to county residents.

This element of the 20-Year Plan includes:

- a summary of existing information about settlement patterns, key events and historic and archaeological resources which remain in Clark County;
- existing agencies, groups and programs that are involved in historic, archaeological and cultural preservation and identification issues; and,
- goals and policies related to historic, archaeological and historic preservation in Clark County.

Background and Existing Conditions

History

The beautiful location and rich natural resources of Clark County have influenced its development history and settlement pattern. The history of the county is important because of the impacts historical settlement patterns have on current and proposed land use policies. From Native American settlements, to scattered European farms, to small farming communities, to mill towns, to regional employment centers, the development pattern of Clark County has mirrored that of the United States as a whole.

Historic and cultural resources

Historic buildings and properties are the cornerstone of Clark County heritage and culture. They are the legacy of the spirited settlers and residents who shaped the land and the history of the region. Although Clark County is rich in properties of the past, the future of historic preservation is up to us. Historic Preservation programs rely on citizen involvement to protect and restore historic sites in our community.

Table 8-1 | Registered historic sites

Number of Clark County Registered Historic Sites - 2015	Number of Sites		
Clark County Heritage Register	72		
National Register of Historic Places/	43		
Washington Heritage Register			
Washington Heritage Barn Register	26		

Existing Programs and Policies to Recognize and Protect Historic, Archaeological and Cultural Resources

There are a number of organizations and public agencies in Clark County which are interested in documenting and preserving Clark County's historic, archaeological and cultural resources. National and state legislation and programs help to frame the programs here in Clark County.

National Programs: The National Historic Preservation Act of 1966 authorized the creation of the National Register of Historic Places as a means of recognizing and honoring buildings, sites, structures, objects and districts that are important to our past. Listing of properties in the National Register is an honorary recognition but receive some protection from federal agency actions as a result of the environmental review process known as "Section 106." Placement on the register is strictly voluntary for the landowner and therefore does not provide absolute protection. The National Register is maintained by the National Park Service.

The State Historic Preservation Officer (SHPO) and Department of Archeology and Historic Preservation (DAHP)

The SHPO was established as a result of the National Historic Preservation Act of 1966 and is appointed by the Governor. The SHPO administers federal and state historic preservation laws and programs and directs the DAHP. DAHP maintains records of cultural and historic resources in the Inventory of Cultural Resources and administers the National Register of Historic Places, the Washington Heritage Register and the Washington Heritage Barn Register designated programs. The SHPO and DAHP staff are responsible for reviewing federal, state and local agency projects that may affect cultural and historic resources.

The Clark County Historic Preservation program and the Clark County Historic Preservation Commission

The Clark County Historic Preservation program is a mandated ongoing program. As a Certified Local Government, Clark County is responsible for maintaining a historic preservation commission, surveying local historic properties, enforcing state or local preservation laws, reviewing National Register Nominations and providing for public participation. The Clark County Historic Preservation Commission (HPC) raises community awareness of the county's historic and cultural resources and serves as the county's primary resource on historic preservation. The HPC initiates and maintains the Clark County Heritage Register and reviews proposed design changes to properties listed in the register.

Goals and Policies

The Washington Growth Management Act of 1990 identified the following state goal for historic preservation:

Identify and encourage the preservation of lands, sites and structures that have historical or archaeological significance.

The goals and policies in this plan reflect that overall state direction. The Community Framework Plan contains five policies to ensure that the county and its cities develop a coordinated approach to the identification and preservation of historic, archaeological and cultural resources. The goals in this element are intended to further clarify and direct staff efforts toward implementation of the overall state goal for historic preservation and the policies of the Community Framework Plan.

8.0 Countywide Planning Policy

The county and each municipality should identify cultural resources within urban growth areas and the county.

Goal: Identify, maintain, update and protect archeological and historic sites to guide decision-making in resource planning, environmental review and resource management.

County 20-Year Planning Policies

8.1 Policies

- 8.1.1 Identify and evaluate archaeological and historic sites to determine which should be preserved. Identification and evaluation is a constant, ongoing process.
- 8.1.2 Identify those lands which are most likely to contain unrecorded archeological or historic sites.
- 8.1.3 Nominate cultural resources to the local, state and national Historic Registers. The Cultural Resources Inventory should be used as a reference in the identification of significant structures and places eligible for nomination.
- 8.1.4 Maintain the Clark County Heritage Register to provide a means to recognize and preserve cultural resources of local significance. The Cultural Resources Inventory should be used as a reference in the identification of significant structures and places eligible for nomination.
- 8.1.5 Review of land use actions should be sensitive and give consideration to protection of cultural resources.
- 8.1.6 Promote preservation, restoration, rehabilitation and reuse of historically or architecturally significant older buildings.

Goal: Increase recognition of historic, archaeological and cultural resources.

8.2 Policies

8.2.1 Provide education to county employees about cultural heritage preservation issues, including state and federal penalties for disturbance, destruction or removal of archaeological resources.

- 8.2.2 Provide a program of public education concerning the need to preserve cultural resources and keep the public informed of actions to carry out preservation plans.
- 8.2.3 Promote a wide variety of community involvement in preservation issues by linking the public with preservation groups and resources.
- 8.2.4 Establish and maintain government-to-government relations with Native American tribes for the preservation of archaeological sites and traditional cultural properties.
- 8.2.5 Clark County shall pursue its cultural resource goals through collaboration with residents, property owners, cultural organizations, public agencies, tribes, schools districts, libraries and others.

Goal: Provide stewardship of county-owned cultural resources.

8.3 Policies

- 8.3.1 Maintain county-owned cultural resources in an appropriate manner by following the Secretary of the Interior's Standards for Rehabilitation, in consultation with the Clark County Historic Preservation Commission.
- 8.3.2 Identify, on a regular basis, county-owned properties that may be historically significant. Listing in the Clark County Heritage Register should be considered for county properties when appropriate.

Goal: Devise and implement strategies and incentives that encourage historic preservation.

8.4 Policies

- 8.4.1 Continue to utilize the Clark County Historic Preservation Commission as the authority and advisor to the County Planning Commission, the Board of County Councilors and other county agencies in matters of historic preservation.
- 8.4.2 Expand the variety of incentives available to property owners to encourage historic preservation. Although many cultural resources are in private ownership, public agencies can offer incentives for their preservation and maintenance.
- 8.4.3 Develop methods to link cultural resource preservation with local economic development strategies, such as rehabilitation of commercial buildings, neighborhood revitalization and tourism.

Strategies

- Waive or reduce permit and impact fees for re-use or rehabilitation projects that are consistent with surrounding land uses.
- Public awareness of cultural resources should be increased through educational and interpretive projects that highlight sites included on the county inventory or those eligible for inclusion in local and/or state heritage registers, or National Registers of Historic Places.

- Review the county's and its cities' policies for consistency regarding preservation of cultural and historic resources.
- Provide assistance to developers, landowners and the construction trade regarding appropriate re-use and rehabilitation of identified historic sites and buildings.
- Provide assistance to developers, landowners and others interested in obtaining grants and receiving available tax incentives for re-use and rehabilitation of identified historic sites and buildings.



Chapter 9

Economic Development Element

Chapter 9: Economic Development Element

Introduction

This chapter is devised at a unique moment in national economic history: the recovery point of the most significant business cycle downturn since The Great Depression of the 1930's. The "Great Recession" officially began in the fourth quarter of 2007 and ended the second quarter of 2009¹; however its effects were protracted, including significant lingering high unemployment rates. Clark County's unemployment rate peaked at 15.9 percent in March, 2010², among the highest in Washington State. As of December 2015, the county's unemployment rate had fallen to around 6 percent³. The characteristics of recession in Clark County were typical of development-oriented communities across the state and nation, with high unemployment rates particularly affecting the building trades sector.

Following the onset of the recession, business investment, industrial production and general business activity/output fell to very low levels. Recovery from the recession began in 2009 with very low rates of growth. Productivity increases outstripped the rate of output growth, holding back employment growth until gradually the rate of output growth recovered to higher levels during the 2012 to 2014 period. The first substantive signs of economic recovery locally began to appear in 2013 to 2014. This recovery appears now to be in its initial, tenuous stages.

The economic development element of the comprehensive plan assumes the county, state and nation will continue a slow recovery from the recession. As businesses and sectors of the economy have evidenced signs of recovery, risk aversion has become more prominent with respect to new investment decisions in strong contrast to the period prior to the recession. The county, cities and private partners have unique and important roles to play in restoring the community's economic health and fostering a resilient, prosperous economy and growth environment.

The GMA established the following statewide economic development goal: "Encourage economic development throughout the state that is consistent with adopted comprehensive plans; promote economic opportunity for all residents of the state, especially for unemployed and disadvantaged persons; and encourage growth in areas experiencing insufficient economic growth all within the capacities of the state's natural resources and local public services and facilities."

Defining economic development

Economic development is fundamentally an issue of human development. Economic systems are comprised of transactional relations between elements in society, such as agents (individuals and enterprises) and institutions (governmental and non-governmental). The basis of such transactional relations are rooted in meeting basic human needs, concerns, utility derivation and attainment of ideated states of well-being, variably defined. Measuring economic performance relative to these objectives generally defaults to metrics of materiality, such as income. With respect to complete human well-being however, materiality is a necessary but not a sufficient condition.

¹ National Bureau of Economic Research

² US Bureau of Labor Statistics

³ Washington State Employment Security Department

Measures of personal income are frequently used as metrics of economic performance. Full-time employment at or above median wage levels (with associated health, welfare and pension benefits) is a strong predictor of various measures of human well-being. While measures of income serve as proxy for human well-being, they are inherently limited and their conclusions not broadly generalizable. A set of diverse metrics offers a fuller perspective of human well-being and relative comparability among societies. Such metrics include among other things: income; life expectancy; access to sanitation, clean drinking water and health services; infant mortality; access to education, educational attainment and rates of literacy. Statistical measures of equity in each of these and other areas of topical interest are also available by ethnicity and gender and are important aspects of measuring human well-being.

The county's role

Clark County's role in economic development is to function as an equitable and efficient institutional partner and facilitator, assuring due process in its regulatory role and working with partners in the region in the public and private sectors to promote a robust market environment where economic development may occur. Directly, the county is involved in the provision of public infrastructure, its planning and finance. The county also engages in land use planning, ensuring that context of land use and the capacity of connecting infrastructure are sufficient. Through extensive consultations with jurisdictional partners and the public, the county develops a strong nexus between land and public capital investment necessary for the formation of private capital investment.

The county has significant indirect effects on economic development. This is primarily through partnerships such as with the Columbia River Economic Development Council (CREDC), Southwest Washington Workforce Development Council (SWWDC), Vancouver USA Regional Tourism Office, chambers of commerce, ports and other jurisdictional relationships. As an example, Clark County was a participant in the 2011 CREDC Clark County Employment Land Inventory, which identified a shortage of development-ready large employment sites. This shortage relates primarily to site-specific constraints such as insufficient infrastructure capacity and the presence of environmentally-sensitive areas. Through cultivation of these relationships and extensive ongoing public engagement, the county will develop and maintain an economic development vision and pursue it with strategy, discipline and intentionality.

Objectives

- 1. Economic diversification
 - a. Develop a robust market environment comprised of diverse sectors
 - b. Build resilience to business cycle shocks
 - c. Invest in broad-based public infrastructure which serves a variety of economic sectors avoid institutional selection of "winners and losers" or "calling the market"
- 2. Human well-being and opportunity
 - a. Generate pathways for the creation of middle-skill, middle-income, traded-sector employment
 - b. Attract export and manufacturing related business investment
 - c. Facilitate partnerships generating opportunities for citizens to increase skill levels
 - d. Recognize and respect individual needs for diverse opportunities
 - e. Look for the "path to yes" in interaction between citizens, partners and the economic community

- 3. Holistic, strategic approach
 - a. Develop an economic vision rooted in evidence
 - b. Develop a vision that transcends planning cycles and biennial budgets
 - c. Erase boundaries between communities and topical disciplines
 - d. Wisely use resources through focused strategies geographically prioritize and focus public infrastructure investment to leverage timing and yield of development such as the Focused Public Investment Areas approach (examples: St. Johns/Barberton and Discovery Corridor)

Comparative advantages

Clark County and the cities within it benefit from several strengths and comparative advantages. While each may have associated limitations or constraints, the overall strength is one that can be used to promote economic development and activity.

Table 9.3 | Clark County Comparative Advantages

Part of Portland metropolitan area Within 3 hours drive time of Seattle\Tacoma 10 hours by ground to San Francisco, largest air freight hub on west coast Temperate climate resulting in minimal weather hazards, predictable energy costs and predictable equipment maintenance requirements	COMMUNITY Good quality of life High recreation amenities High environmental quality Rural and urban community character
LABOR	INFRASTRUCTURE
 Labor force educationally competent at high school level and above Strong primary and secondary schools Strong university Strong community college Reasonable labor costs 	 Good road infrastructure maintenance and network Two transcontinental railways International airport Deep water marine terminals Pipeline oil and gas access Adequate ground and surface water Affordable electricity and adequate networks Building materials are competitively priced and available

Guiding principles

Use robust strategies

Robust economic development strategies are those with many positive direct and indirect effects. For example, a strategy of expanding middle income manufacturing jobs in traded sectors generates direct positive income effects. These income effects manifest in the form of a multiplier, generating additional consumer spending related to the increase in disposable income, which has an associated employment generation effect. An additional indirect benefit is the creation of additional pathways to middle skill, middle income employment, benefitting persons working in lower income, lower skill employment. Traded sectors export goods and services from Clark County to markets throughout the world, generating prosperity and opportunity locally. Some examples of robust economic development strategies include:

- Focusing on traded sectors, attracting new investment and creating opportunities to export products and services across the globe
 - Leverage comparative infrastructure advantage to attract traded sector industries
 - Develop the land base necessary for retention, expansion and recruitment of these industries
 - Build our knowledge base in engineering, supply chain and industrial management
- Focus on increasing the property tax base instead of expanding the sales tax base
 - Recognize sales tax as revenue that redistributes across the community based on shifting consumer preference
 - Sales tax is new revenue only when population or income levels grow significantly, or when new retail segments develop
 - Property tax reflects increasing capital stock
- As identified in the 2011 CREDC Clark County Employment Land Inventory, focus on industrial land inventory that meets the needs for retention, expansion and recruitment of twenty-first century industry
 - Support smart urban growth boundary expansion that brings in sites of the character, type,
 size and location desired by industries
 - Protect the most desirable parcels zoned for industrial use from conversion to other use
 - Retire parcels that are less desirable for industrial use because of size, location, or constrained shape or character, from the industrial inventory to other kinds of land uses

These strategies are intended to be refined and added to over time as additional information becomes available through research activities and stakeholder engagement.

Focus on core competencies

Clark County's direct role in economic development is to provide public infrastructure and land use planning and permitting. These activities include transportation and storm water planning and projects, which can significantly affect opportunities for economic growth and development. The County also manages and plans for investments in its short line railroad, which can generate opportunities for additional rail-served industrial land.

Clark County government should focus on initiatives and efforts in these core areas that further develop excellence in providing these services to the community. The county should also continue to develop excellence in its engagement as a partner with other jurisdictions and economic development stakeholders in areas such as business recruitment, expansion and retention, workforce training and education, marketing and tourism, land aggregation and development and so forth. Comprehensive Plan policies should support the efforts of all parties. Comprehensive Plan policies in this chapter focus on and provide guidance to the county related to the land use planning competency area and associated decision making.

Maintain a small, strong and simple economic development program

In consideration of limited resources, it is important to keep programs focused and effective. Important characteristics of the program include:

- Measure and implement ideas that build on our natural capital and "what works here"; use other communities as inspiration and leverage and adapt their ideas;
- Use measurements of success that are fair, look at situations over time, focus on improvement in opportunities for workers and focus on how efficiently resources are used; and
- Prepare sites with infrastructure and predictable permitting processes that encourage private investment.

Goals and Policies

The Community Framework Plan contained a series of policies for economic development. The intent of this Economic Development Element is to build on the policies already in place, provide more specific direction for implementation of economic development goals and coordinate with other elements of the comprehensive plan.

9.0 Clark County Economic Development Vision Statement:

"Clark County will grow as a high-wage economy that creates jobs at a rate in excess of population growth and an increasing percentage of the population will both live and work in Clark County. There will be an emphasis on emerging clusters that have a significant knowledge-based component.

9.1 Countywide Planning Policies

The following policies are countywide and apply to both incorporated and unincorporated areas.

- 9.1.1 The county and cities will demonstrate their commitment to long-term economic growth by promoting a diverse economic base, providing opportunity for all residents, including unemployed and disadvantaged persons. Growth which helps to measurably raise the average annual wage rate of community residents and preserves the environmental quality and livability of our community, is viable growth and will improve the lifestyle of Clark County residents.
- 9.1.2 The county and cities will demonstrate their commitment to the retention of those enterprises, which have created the economic base of the county and promote their continued growth in a predictable environment, which encourages investment and job growth.
- 9.1.3 The county and cities will encourage long-term growth of businesses of all sizes, because economic diversification and stratification are important factors in overall job growth for the county and cities.
- 9.1.4 The county and cities will promote productivity and quality among its businesses to meet world and market standards for their products and services.
- 9.1.5 The county and cities will encourage higher educational levels for residents and improvements in the measurable performance of high school graduates compared with other counties in the state.
- 9.1.6 The county and cities may give priority assistance to employers who will increase the standard of living in the community.
- 9.1.7 The county and cities will plan for long-term economic growth, which enhances the capacity of existing air shed for job-generating activities.
- 9.1.8 The county and cities will provide for orderly long-term commercial and industrial growth and an adequate supply of land suitable for compatible commercial and industrial development.
- 9.1.9 The county and cities will encourage the recruitment of new business employers to absorb the increasing labor force and to supply long-term employment opportunities for county's residents who are currently employed outside of the State.

- 9.1.10 The county and cities will work together to establish specific common benchmarks that will measure the region's overall economic viability. These benchmarks will be included in the county's Comprehensive Plan and are encouraged to be included in each jurisdictions comprehensive plan.
- 9.1.11 Conversion of industrial or employment center lands to non-industrial or non-employment center districts may occur within the following parameters:
 - a. Protect and preserve lands zoned heavy industrial for heavy industrial uses.
 - b. Protect employment center lands from conversion to residential.
 - c. Consider rezoning of employment center lands to non-retail commercial or business park if the proponent can show that (a) the zone change would accommodate unforeseen and rapidly changing commercial development needs and (b) the proposed designation is more suitable than the current designation given the land's site-specific characteristics and (c) the proposed zone change will generate jobs at a higher density than the current comprehensive plan zone allocation.
- 9.1.12 Encourage use of a multi-modal transportation system that facilitates the reduction of travel times and reduces the need for additional road construction within the region.
- 9.1.13 Following consultation with interested cities, the county may, consistent with state requirements, designate Major industrial developments RCW 36.70A.365 and /or Master planned developments Master planned locations RCW 36.70A.367 outside urban growth areas. Appropriate or required Intergovernmental Agreements consistent with the provisions of the state law shall accompany such designation

County 20-Year Planning Policies

Unincorporated County

The following goals and policies are not countywide and apply only to the unincorporated areas.

Goal: Provide commercial and industrial employment opportunities to meet the needs of Clark County citizens.

9.2 Policies

- 9.2.1 Encourage long-term business investments that generate net fiscal benefits to the region, protect environmental quality and are consistent with the objective of higher wage jobs for Clark County residents.
- 9.2.2 Encourage public and not-for-profit partnerships with private business interests in generating economic development projects.
- 9.2.3 Promote a diverse economic base, providing economic opportunity for all residents.
- 9.2.4 Provide priority assistance to employers who pay a family wage.
- 9.2.5 Promote workforce development through collaboration with WSU-Vancouver, Clark College and other organizations to facilitate infrastructure development and other economic development initiatives.

Goal: Assure an adequate supply of industrial sites to meet market demands for industrial development over the planning horizon to create an environment conducive to the startup, growth and expansion of industries.

9.3 Policies

- 9.3.1 In cooperation with local jurisdictions, maintain a minimum 10-year supply of industrial land based on average absorption rates over the last five years.
 - a. Designate the necessary acreage of vacant industrial land for the 20-year planning period.
 - b. Discourage removal of land from the inventory if that results in a less than 10-year supply of industrial sites.
 - c. Encourage industrial land banking of large sites and "future urban reserve areas" to preserve large parcels at key locations for future industrial sites (RCW 36.70A.367).
 - d. New industrial sites that are part of a major industrial land bank shall be consistent with RCW36.70A.365 and RCW 36.70A.367.
- 9.3.2 Designate sites for industrial use at locations that will be accessible from roadways of arterial classification or higher, potentially served with utilities and a developable area with minimal environmental constraints such as unsuitable soils, floodplains, archaeological sites and wetlands.
 - a. Program Focused Public Investment Areas and Capital Facilities Planning expenditures to assure development of these lands.
- 9.3.3 Maintain an adequate inventory of properties designated for industrial use and that are suitable for a mix of business and industrial park, light and heavy industrial uses; include properties developed by both private and public entities; and provide access to multimodal transportation services including motor freight, rail and marine facilities.
- 9.3.4 Conversion of industrial or employment lands to non-industrial or non-employment districts may occur within the following parameters:
 - a. Protect and preserve lands zoned heavy industrial for heavy industrial uses.
 - b. Protect employment lands from conversion to residential.
 - c. Consider rezoning of employment lands to non-retail commercial or business park if the proponent can show that (a) the zone change would accommodate unforeseen and rapidly changing commercial development needs and (b) the proposed designation is more suitable than the current designation given the land's site-specific characteristics and (c) the proposed zone change will generate jobs at a higher density than the current comprehensive plan zone allocation.
- Goal: Provide contextually-appropriate commercial sites adequate to meet a diversity of needs for retail, service and institutional development in Clark County.

9.4 Policies

9.4.1 In cooperation with local jurisdictions, maintain an adequate supply of commercial lands within designated urban growth areas, based on average absorption rates of the last five years plus an appropriate market factor.

- Designate sufficient commercial land for the 20-year planning period, located within designated urban growth areas;
- Discourage removal of commercial land from the inventory that results in a less than 10-year supply of commercial sites;
- Update inventories of commercial lands at least every ten years; and,
- Encourage infill and redevelopment of underutilized commercial sites.
- 9.4.2 Locate convenience-oriented retail and service developments adjacent to residential neighborhoods; encourage small-scale neighborhood commercial uses directly within residential areas.
- 9.4.3 Encourage commercial and mixed-use developments located on current or planned transit corridors; encourage transit-oriented site planning and design.
- 9.4.4 Maintain design guidelines to ensure that commercial projects are developed with minimal impact on surrounding land uses, are consistent with related community appearance/design guidelines and assure pedestrian as well as vehicular access.
- 9.4.5 Permit home occupations that are consistent with the character of adjoining residential properties and neighborhoods.
- 9.4.6 Encourage responsible waterfront development for commercial uses where environmentally and economically feasible.
- Goal: Provide a continuum of educational opportunities responsive to the changing needs of the work place locally and regionally.

9.5 Policies

- 9.5.1 Encourage continuing education, skills upgrading, mentoring and lifelong learning programs suitable for large and small employers.
- Goal: Promote long-term economic development that will improve environmental quality and accommodate job generating activities.

9.6 Policies

- 9.6.1 Encourage sustainable development and programs.
- 9.6.2 Develop compatible land uses that promote the long-term economic viability of the county railroad.
- Goal: Encourage infrastructure development and services necessary to serve new industrial development.

9.7 Policies

9.7.1 Prioritize infrastructure development in advance of need to areas that are suitable for industrial development.

Goal: Maintain and enhance opportunities for resource-based industries located on rural lands in Clark County.

9.8 Policies

- 9.8.1 Encourage resource-based industries, including agricultural, forestry and aggregate materials, which are consistent with rural lands goals and policies.
- 9.8.2 Implement programs to encourage agricultural and forestry management of smaller rural tracts consistent with best available science.
- 9.8.3 Encourage home businesses and, if necessary, revise the Clark County Unified Development Code to minimize impacts to neighboring properties.



Chapter 10

School Element

Chapter 10 School Element

"Our Schools, in partnership with our community, are resolved to provide quality education for all children in Clark County regardless of income, ethnicity or ability." Clark County School Districts

Introduction

Current land use plans and capital facilities funding mechanisms for schools present unique challenges under the Growth Management Act (GMA). Schools are not required as a mandatory concurrency item under the GMA, but are included along with other public services in Capital Facilities Planning and are required to be adequately provided for. Clark County and its school districts have found that there is much synergy between land use planning and quality schools and it is best for all stakeholders to be at the Table when the growth management plan is updated. In order to assure full consideration of school capital facilities and to encourage a sustainable learning community in the development and implementation of city and county comprehensive plans, this chapter dedicated specifically to schools has been added to the updated plan.

School districts in Clark County are as diverse as the communities they serve. District boundary lines do not correspond to city or urban growth boundaries, but have logic all their own. Schools are located in urban, suburban and rural areas. Districts vary in size from serving fewer than 1,000 students to over 25,000 students. For example, Green Mountain School District, the smallest district in the county, is entirely rural. In contrast, Vancouver School District lies almost entirely within the Vancouver urban growth area and is comprised of a mix of urban and suburban development. Several districts contain land in more than one urban growth area and most districts include all three environments.

The county's school districts are facing the challenge of providing a quality education given the rapid growth and development of Clark County. School capacity in the county has not kept pace with enrollment growth. For example, several school districts are serving or will be serving over 30% of their enrolled students in portable classrooms. The dilemma of serving students in portables (or having "unhoused students") is exacerbated by the continued growth projections for our region. Capital facilities demands are increased by aging infrastructure, the need for better instructional technology and facilities to support high quality teaching and learning (such as computers, presentation equipment and science labs), the desire for equity among facilities and the move toward smaller class sizes and special programs. School capacity, siting and funding new facilities are discussed further under the School Capacity and Enrollment Growth section.

School districts are experiencing increased enrollment of students from families that do not speak English at home. Increased enrollment of students from immigrant families (most noticeably from Russian and Spanish speaking countries) requires the development of programs that are aimed at meeting the needs of these students and their families. School districts must plan facility needs to accommodate programs for English language learners.

School districts are also noticing a significant demographic shift of increased poverty and student mobility. The negative impact of poverty and especially, student mobility on quality education is well documented. Growth management and land use policy decisions will play an increasing role in strategies to create sustainable, vital communities that help ensure that all children can succeed. The

distribution of affordable housing, living wage jobs, public transportation and other public services across the county are key to the stability and quality of life of our residents.

School Capacity and Enrollment Growth

The community goal is to provide proper educational facilities for students at the time they enroll. There are several factors involved in the timely provision of these facilities. School facility and student capacity needs are dictated by the types and amounts of space required to accommodate each district's educational program. The educational program components which drive facility space needs include grade configuration, optimum facility size, class size, educational program offerings, classroom utilization and scheduling requirements and use of portable classrooms.

In addition to student population, other factors such as collective bargaining agreements, government mandates, adequacy of state funding and community expectations also affect classroom space requirements. Traditional education programs are often supplemented by programs such as special education; bilingual education; pre-school, full-day kindergarten and childcare; and art and music. These programs can also have a significant impact on the available student capacity of school facilities.

School Siting

A new or remodeled school is an asset to a neighborhood and is often viewed as a community center. Siting a new school requires several considerations. Districts review the buildable lands inventory to identify land use categories where schools are allowed in the areas where residential growth is occurring. Schools typically require a full range of urban services, including public sewer, water, fire and police service. The number of acres needed for a school site varies by type of school and age group. A typical elementary school is sited on approximately 10 acres, a middle school site is about 20 acres and a high school site can take up to 50 acres. These large parcels are hard to find, especially within an urban growth area. Districts must also compete with private developers for the land. Under the current growth conditions, land speculation drives the cost of land above its appraised value, putting the districts at a distinct disadvantage in land negotiations. The cost of land is also higher within the urban growth area and in areas that are predicted to be soon included in the urban growth area. However, districts must balance the potential capital cost savings of purchasing land on the outskirts of the urban growth area with the operational benefits of locating schools proximate to existing residential areas (i.e., maximizing community support and participation and minimizing student transportation costs).

School districts strive to avoid, if possible, the pattern of siting future schools on the outer ring of the urban growth boundary, which may encourage additional residential growth and in turn require additional services. It takes a concerted effort by school districts, local government and the development community to provide affordable sites for schools in more central locations. Innovative school siting can also include co-location with other public and private entities, constructing multistory school buildings with smaller building footprints, partnerships with other public/private entities for education related services, the renovation of existing office buildings and shared park and open space.

School Funding

Depending on district eligibility, districts pay for a portion of the costs of capital facilities with funds provided by the State of Washington through the Common School Construction Fund. The remaining capital expenses must be raised locally, through the passage of bond levies (which raise the property taxes of all residential property owners within a particular district) and/or impact fees (which apply

to new residential construction within the district). School operating funds are secured from state and federal education sources and from local operating levies. Voter approved operating levies raise the property taxes of all residential, commercial and industrial property owners in a district. In a district with a high industrial and commercial tax base, residents carry a lower proportionate share of the educational operating costs.

There is currently a significant gap between the total education infrastructure cost and the funds available. While impact fees are a tool provided under GMA to deal with growth, historically the fees have accounted for less than 10% of the dollars spent on capital improvements and are limited in use. Local bond measures require a 60% super-majority vote. Several districts have a history of failed bond measures, due in part to the super-majority requirement, but also to high residential tax rates for operating levies because of an imbalance between the mix of residential, commercial and industrial lands. The Common School Construction Fund requires that the district pass a local bond measure to match the state funds and the match does not cover all development or site acquisition costs. State funding regulations result in new facilities being constructed after growth has occurred and a need can be demonstrated, due to the concern of overbuilding permanent facilities. The average lifespan of a school is fifty years and growth may significantly increase and decline during that time. For these reasons, "portable" or "temporary" classrooms have become common in fast growing districts.

Schools as Community Centers

In addition to their primary educational function, public schools serve as a community focal point and provide facilities used for a variety of community civic and recreational needs. School day education programs are also supplemented by extended day programs, community education, recreation, early childhood programs and childcare. There is increasing community use of ball fields and gymnasiums, meeting rooms, computer labs, performing arts facilities and media centers. Many school sites also serve as neighborhood parks. New or refurbished schools can also encourage neighborhood stability and revitalization.

In order to make the most efficient use of schools and school sites, policies in this element encourage co-location of schools with other community activities and facilities. Some examples of organizations that could co-locate with schools are parks & recreation, public libraries, community colleges, parking lots, regional transportation, performing arts facilities, health clinics, hospitals, YMCAs, church groups, eldercare facilities (kitchen, classrooms, arts/activities, meals-on-wheels), daycare providers and senior centers. Schools could also be a component of mixed use developments.

Schools and Transportation

Traffic can get congested around schools at the beginning and end of the school day and during large community events. Significantly less students walk and ride bikes to school than in the past. In 2001, less than 15 percent of students between the ages of five and 15 walked to or from school and 1 percent biked. In comparison, in 1969, 48 percent of students walked or biked to school. More parents are driving their children to school, more high school students are driving themselves to school and more students who live within 1 mile of the school must ride the school bus due to an inadequate "safe walking" environment.

Walking and bike riding for transportation are part of an active lifestyle that is associated with increased health benefits. Recent trends in travel to school have raised concerns of increased juvenile obesity and associated diseases. In addition, fewer cars on the road produce less pollution

and congestion. Studies performed by the Environmental Protection Agency indicate that school proximity to students matters, especially at the elementary level. Schools which are located at the center of communities and which are co-located with other community activities are supportive of students walking and biking to school.

The built environment also influences travel choices. Students traveling through higher-quality environments (reduced traffic-related danger such as sidewalks, crossing signals and better enforcement of speed limits, combined with classroom education of pedestrian and bike skills) are more likely to bike and walk to and from school. In response, governments at every level have launched a variety of policy initiatives. The "Safe Routes to Schools Program" is providing funding to improve the education, enforcement and built environment for students.

A robust public transportation system is also necessary to support schools as community centers. Some students don't have another means to get to and from school for before- and after-school activities.

The Transportation Element of this plan contains policies encouraging walking and biking through the built environment and connectivity between school facilities and other community facilities. It also contains a transit section that is supportive of public transportation.

Schools and Housing

As Clark County accommodates additional growth, the quality of the developed landscape becomes more and more critical to providing sustainable, quality education. Education literature suggests that where a child lives largely determines that child's educational opportunities and success. Studies show that providing a variety of housing prices and types within a school attendance area to allow economically disadvantaged children into mainstream middle-class communities improves learning success for all. The land use policies in the GMA and in the Housing Element of this plan are supportive of the provision and equitable distribution of affordable housing.

Schools and the Economy

The role that quality education plays in growing a strong local economy is vital. Our community expects us to prepare students for world competition in an increasingly challenging global economy. In addition, having well-educated, involved citizens is a priority if we are to have high-performance local governments, solve our community's other pressing problems and create and enhance a livable community.

The land use policies in the Economic Development Element of this plan are supportive of schools by focusing on providing an increased number of family wage jobs, which improves family stability and learning success. The Economic Development Element also includes goals for the education community to be supportive of growing our economy. As a major employer within a community, schools contribute to those goals by providing numerous job opportunities.

Schools and Parks

School districts frequently enter into partnerships with the county or cities for the co-location of parks with school recreational facilities. Many schools are co-located with a park and/or share athletic fields and exercise programs.

Prune Hill Elementary School is an example of such a partnership. In this case the Camas School District partnered with the City of Camas in the use of Prune Hill Park, which is adjacent to and being developed concurrently with the school. The school will use the park during the school day, while the community will have access to it at other times. The cooperation saved money for both the city and the school district. The park and school are located in a suburban residential area.

Intergovernmental Coordination

The quality of public schools is crucial to the overall quality of life in Clark County and cities in Clark County. Land use policies and the development regulations that implement the land use policies; have a direct effect on school districts, public school facilities and the provision of quality education. Similarly, school district decisions regarding the location of school facilities, educational programs that are offered and the way in which our children are educated has a direct effect on the county and cities in the county. It is critical to the future of our community that the county, cities in the county and the school districts work in partnership to coordinate facilities and the provision of services. There is great value in integrating public school facility planning with the county's and cities' comprehensive land use plans.

Community Involvement and Public Participation

In August of 2006, the Clark County Quality Schools Task Force began meeting. The task force was established to address the impacts of growth on K-12 capital facilities and make recommendations regarding tools that would improve the provision of quality education countywide. The task force is comprised of representatives from all of the county's school districts (except Green Mountain), the development community, the real estate sales community, Clark County and city governments.

The group has worked together to understand the possibilities and limits of education funding and to understand the sometimes conflicting, sometimes complementary needs of educators, governing bodies and developers. The task force proposed and this chapter contains, a new Countywide Comprehensive Plan policy that formalizes a collaborative approach and the integration of school facility needs with county and city comprehensive plans.

In addition to the focused collaboration of the Quality Schools Task Force, each school district engages in a public process when their capital facilities plans are prepared. School districts often engage the work of a facility advisory committee that is comprised of district patrons and stakeholders. The school district capital facilities plans are adopted by each district's board of directors at public meetings.

Existing Facilities

Public K-12 Facilities

Educational services to elementary, middle and high school students in Clark County are provided by nine different school districts, which are operated and funded independently of county or municipal government. The school districts each prepare enrollment projections and plans for new facilities based on the comprehensive plans of the jurisdictions in which they are located. The school planning horizon required by GMA is 6 years for capital facilities, including the intended funding source, updated at least every 2 years. Many districts also plan at a more conceptual level for the 20 year horizon.

State funding regulations result in new facilities being constructed after growth has occurred and a need can be demonstrated. School districts also are cautious not to overbuild permanent buildings since the average lifespan of a school is fifty years and growth may significantly increase and decline during that time. For these reasons, "portable" or "temporary" classrooms are common in fast growing districts.

A summary of current school district facilities, the number of new school facilities that are projected for the next six years, as well as the number of additional schools that are projected to serve students from housing that is forecast at build-out (or twenty years) is located in Appendix E CFP.

Higher Education Facilities

Higher education facilities within Clark County include Clark College, a 2-year institution and the Washington State University - Vancouver campus (WSUV), a 4-year institution. Clark College and WSUV have arranged co-admissions agreements to streamline the process for students to transfer from Clark to receive a degree from WSUV. In addition, 2006 was the first year that WSUV accepted lower division students. WSUV offers three dozen fields of study and several master's and doctorate degrees and continues to develop the Salmon Creek area campus according to an adopted Master Plan. Clark College offers several programs that provide open access to degree programs at WSUV, Eastern Washington University, Portland State University, Marylhurst University and Concordia University. In early 2006, the Clark Center, which houses its nursing studies program, classrooms and faculty offices, opened on the WSUV campus. Clark has constructed a new classroom building for allied health programs on property just west of Gaiser Hall. In 2009, Clark increased its facilities when it constructed an east Vancouver branch campus in the Columbia Tech Center to capitalize on high-tech industry growth.

Goals and Policies

The Growth Management Act requires the county and cities to plan for the location and provision of public schools. Schools are one of the public facilities that are addressed in the capital facilities element of the county's and cities' comprehensive plans. This 20-year Plan contains the goals and policies for schools. The goals and policies were prepared in cooperation with the school districts that are responsible for the school facilities and provision of public education. The goals and policies are intended to implement a coordinated approach that integrates the provision of quality education into overall planning for the communities that depend on quality schools and education. The goals and policies also are intended to provide guidance to the county, cities, school district and developers regarding the acquisition and development of school facilities. The policies and implementing regulations are intended to assure the provision of proper education facilities at the time the students enroll.

School planning cannot be in isolation. The relationship between school, land-use, economic development, housing and transportation policies must be in concert and directly tied to each other throughout the comprehensive plan.

10.1 Countywide Planning Policies

10.1.1 The county and each city shall give full consideration to the importance of school facilities and encourage development of sustainable learning environments through the adoption and implementation of county and city comprehensive land use plan policies and development regulations.

- 10.1.2 The county and the cities shall jointly establish a school advisory body that is comprised of representatives from the county, cities, school districts and special purpose districts and other interest groups. The advisory body may undertake the following, but shall in no way compromise or complicate an individual district's authority to take actions on its own in its best interest:
 - Uniform data collection. Identify, monitor and report to the community, at least annually, on the key performance indicators related to quality schools, capital facilities plans and community development (Note: one of the points is to be able to relate schools data to other annual planning data provided by the cities and the county);
 - State and federal law issues. Develop issue papers and consensus recommendations regarding provisions of state and federal law which impact the adequacy and/or timely provision of school capital facilities.
 - Policy development and implementation. Actively participate in the development or amendment of city and county comprehensive plans and development regulations relating to or impacting schools including:
 - o Location of Urban Growth Areas;
 - o Location and mix of residential land use designations;
 - o Commercial/industrial tax base within each school district;
 - Potential location of future school sites;
 - Potential co-location of school facilities with other public facilities (i.e. parks);
 - Phasing of residential development;
 - o Private/public partnerships;
 - School facility permitting processes;
 - School impact fees; and
 - o Last resort safety net considerations.
- 10.1.3 The county and each city shall include sufficient vacant land at adequate sizes in the future land use categories to meet projected demand for new schools.
- 10.1.4 Large residential development should confer with school districts on school impacts.
- 10.1.5 Work cooperatively with school districts to facilitate permitting of new facilities and modernization of older facilities through clear regulations, effective on-site and off-site improvements, team approaches and shared information regarding county processes.
- 10.1.6 Encourage jurisdictions to cooperate in planning and permitting school facilities through land use policies and regulations that minimize the financial burden associated with developing school facilities.

County 20-Year Planning Policies

Goal: Encourage the location of new school facilities in areas where they can best serve students and the community.

10.2 Policies

10.2.1 School facilities serving predominantly urban populations should be preferably located in urban growth areas then in rural areas adjacent to the urban growth boundary, subject to Policy 10.2.2.

- 10.2.2 School facilities may be located in the rural areas where necessary to serve population growth within the urban growth area, subject to the following:
 - School facilities shall be located as close to the urban growth boundary as possible, preferably within ¼ mile.
 - Before siting a school facility outside the urban growth area, the school district shall demonstrate that the proposed site is more suitable than alternative sites within the existing urban growth area. Suitability includes factors such as size, topography, zoning, surrounding land uses, transportation, environmental concerns and location within the area to be served.
 - The school district shall demonstrate that the transportation facilities serving the site are adequate to support site generated traffic, including buses.
 - upon locating any school facility in the urban reserve or rural area, the school district shall agree to connect to public water and sewer when they become available within 300 feet or less of the site, provided such a connection does not necessitate special facilities (e.g., pump stations) or capital improvements (e.g., larger pipes) to increase the capacity of the system.
- 10.2.3 School facilities may be located in rural areas where necessary to serve population growth and attendance areas principally lying outside of the UGA or Rural Centers, subject to the following:
 - Before siting school facilities in the rural area, the district shall demonstrate that
 the proposed site is more suitable than alternative sites within a UGA, urban
 reserve area or Rural Center. Suitability includes factors such as size, topography,
 zoning, surrounding land uses, transportation, environmental concerns and
 location within the area to be served.
 - The school district shall demonstrate that the transportation facilities serving the site are adequate to support site generated traffic, including buses.
 - Upon locating any school facility in a rural area, the school district shall agree to connect to public water when it becomes available within 300 feet or less of the site, provided such a connection does not necessitate special facilities or capital improvements to increase the capacity of the system.
 - The school district shall agree to connect to public sewer when it becomes available within 300 feet or less of the site, provided such a connection does not necessitate special facilities or capital improvements to increase the capacity of the system. Such sewer extension shall be tight-lined and have access restrictions precluding service to the Rural Areas.
- To encourage efficient and effective planning and to support neighborhood and community redevelopment, school facilities shall be allowed as either a conditional use or a permitted use in all urban zoning districts. Elementary (K-5) are natural elements of residential neighborhoods. They shall be permitted and not subject to conditional use permits.
- Goal: Support co-locating facilities where co-location is feasible and provides more efficient use of public facilities.

10.3 Policies

- 10.3.1 The county, each city and school districts should explore the possibility of siting new facilities jointly with private, non-profit, or other local government owned facilities on sites that are in locations that best serve the growth projected by the comprehensive plan.
- 10.3.2 Where it is feasible (future school location is reasonably known), coordinate school facility plans with transportation facility plans so that roads, bicycle routes and pedestrian routes are planned to serve future schools.
- 10.3.3 Develop pedestrian and bicycle corridors between schools and housing, within neighborhoods and rural centers.
- 10.3.4 Include school master planning in sub-area planning and/or neighborhood or community redevelopment plans.
- Goal: Adopt policies and implementing regulations that expedite the review and approval of school facilities to reduce costs without compromising the opportunity for public participation.
- Goal: Require new development that places added demands on school facilities to pay a portion of the cost for school facilities through impact fees or other alternative mechanisms authorized by State Law.

10.5 Policies

- 10.5.1 Provide for the use of School Impact Fees as a funding source for school capital facilities.
- 10.5.2 Capital Facilities Plans for the school districts of Vancouver, Evergreen, Battle Ground, Camas, Washougal, Ridgefield, Hockinson, La Center and Green Mountain shall be adopted by reference through the adoption of the 20-Year Comprehensive Plan.
- Goal: Provide a continuum of educational opportunities responsive to the changing needs of the work place locally and regionally.

10.6 Policies

- 10.6.1 Encourage continuing education, skills upgrading, mentoring and lifelong learning programs suitable for large and small employers.
- 10.6.2 Consider incentives to link proposed industrial development projects with job training, education and housing programs.
- 10.6.3 Encourage improvement of the region's educational network, including pre-K-12 and higher education.



Chapter II

Community Design Element

Chapter 11 Community Design Element

Introduction

The design of our communities is an important element in realizing the goals and policies of the Growth Management Act, the Community Framework Plan, the vision of Clark County's citizens and the 20-Year Plan.

The Community Design Element relates urban, suburban and rural development to the natural environment. The understanding of these relationships has been central in drafting the 20-Year Plan.

As in natural systems, communities function best when they follow the principles of diversity and interdependence of uses and buildings and the relationship of the physical environment to the human scale that is walkable and supportive of transportation alternatives.

Background

Through the Perspectives Program which began in October 1991 to develop the Community Framework Plan, citizens in Clark County expressed their opinion about the design of their community. Overriding themes from the comments were:

- preserve open space and natural areas;
- encourage land development that preserves a sense of place and a feeling of community;
- encourage development of a transit system;
- develop a better diversity of employment opportunities and housing;
- avoid sprawling developments; and,
- design criteria are important to the acceptance of higher densities.

These comments lead directly to the development of a Community Design Element. Prior to the 1970's, Clark County was a community with distinct areas of urban development surrounded by agricultural land, forests and open space. The county's rapid growth, increased demands for rural and suburban lifestyles and greater mobility and affordable housing have resulted in encroachment by residential development into agricultural land and forests. The effects of this growth are tremendous: roads and bridges have been filled with cars; Clark County's air shed is in a non-attainment status for some pollutants, neighborhoods have little sense of community, long commutes are becoming normal, water quality has been degraded and farm land, wildlife habitats and open space are being lost.

In 2012, two new plans Growing Healthier Report and Aging Readiness Plan were created by and with the community to assure we are developing and sustaining healthy and age-friendly communities. Something as simple as a sidewalk can improve your health and the health of your neighbors by encouraging walking for recreation or travel. Research shows that there are key features of communities that influence health, such as parks, safe streets, public gathering places and easy access to healthy food. The Growing Healthier Report and the Aging Readiness Plan have contributed policies related to community design.

Growing Healthier Report

Clark County Public Health examined the ways that our neighborhoods and our built environment impact our health. Working with the community, they identified specific policies and strategies for improving the long-term health of our community through the development of the <u>Growing Healthier Report</u>.

Aging Readiness Plan

The Aging Readiness Task Force developed a plan that identifies strategies focusing on healthy communities, housing, transportation and mobility, supportive services and community engagement. The <u>Aging Readiness Plan</u> assesses the county's readiness to serve as a home for a growing number of older residents. The plan includes strategies to improve the community's capacity to support its growing older population and ultimately benefit all ages. The Commission on Aging was established in 2012 to lead and manage the implementation of the plan.

The Community Design Element is an integral part of the entire growth management planning process. Design directly affects land use patterns, transportation planning and neighborhood livability.

The Community Design Element is affected by the **Land Use Element** which develops policy direction for urban form and critical areas and, in turn, affects the Land Use Element by providing guidelines for how the urban form can be achieved and critical areas be integrated into future projects. This similar policy direction for rural and natural resource areas also affects community design.

The Community Design Element is an integral part of the **Transportation Element** as the policies in this element direct the use of alternative modes of transportation to facilitate a pedestrian friendly environment.

The Community Design Element is also affected by policies within the **Housing Element** which provide for a variety of housing types in recognition of the various social and economic segments of the population.

A major component to the Community Design Element is the development of parks and open spaces. Policies within the **Parks, Recreation and Open Space Element** provide guidelines for the acquisition and development of such sites.

The Community Design Element is affected by the policies within the **Historic, Archaeological and Cultural Preservation Element** which recognizes the need to retain and integrate the historical character of the community with new development.

Implementing the goals and policies of the 20-Year Plan can provide predictability in the planning process and development of design standards which encourage a sense of community and make concepts such as "higher density" more acceptable. This can be accomplished by drawing on the best features of our older neighborhoods and looking to the redevelopment of similar areas in the region. A common element of these older neighborhoods is a mixture of uses in compact development that is comfortable for walking, or pedestrian-oriented.

These truly functional neighborhoods contain housing, parks and schools located within walking distance of shops, civic uses, jobs and transit. This still allows for the convenience of the car, but also for the opportunity to walk, bike or use transit. At the regional scale, this means a network of neighborhood centers, transit corridors, urban activity centers, small cities and towns and rural centers. This development is centered on an expanding transit system, urban growth area limits and open space.

This 20-Year Plan directs a change in current development trends, however, part of this change needs to include how to make these changes occur and to understand the need for these changes. For example, as a community we need to modify our thinking that higher density areas equate to more crime or are not owner-occupied.

High density developments have many different forms such as townhouses, garden apartments, infill housing and accessory units (granny flats). Anton Nelessen's Visual Preference Survey conducted for the Vancouver Partnership Planning Area in March 1993 illustrated that well-designed, high density developments were more appealing than typical single-family suburban tract developments. The main ingredients of these developments were human scale and pedestrian orientation. Design elements that contribute to a sense of place include structures which are built nearer to the street, front porches, landscaping, convenient walkways, narrower streets and parking on the street and behind the structures.

Goals and Policies

11.0 Countywide Planning Policies

- 11.0.1 The community design element shall help conserve resources and minimize waste.
- 11.0.2 The county's community design standards shall be appropriate to the region, exhibiting continuity of history and culture and compatibility with the climate and encourage the development of local character and community identity.
- 11.0.3 The goals and policies of this element are intended to:
 - clarify and define design objectives for zoning ordinances;
 - reduce review time during the design phase of proposed projects;
 - improve the visual attractiveness of the community;
 - encourage quality architecture and landscape design;
 - minimize land use conflicts; and,
 - develop clear and consistent analysis of new projects.

County 20-Year Planning Policies

Goal: Natural features of Clark County should be incorporated into design and development.

11.1 Policies

- 11.1.1 Maintain and enhance formal and informal open spaces throughout the urban areas that include parks, trails and green spaces.
- 11.1.2 In the urban area, waterfront development should be environmentally sensitive and allow maximum public access.

- 11.1.3 Natural land features should be recognized and integrated into the placement of buildings and in site planning. Streams, hillsides and unique vegetation should be considered strong design determinants and incorporated into the overall plan.
- 11.1.4 The siting of buildings should take advantage of river, mountain, lake and agricultural/pastoral views.
- 11.1.5 Encourage the retention and inclusion of existing mature vegetation as a design element in the site plan. Every effort should be made to preserve existing trees over 8" in diameter.
- 11.1.6 Where new development adjoins agricultural or rural land or public open space, a soft transitional edge should be provided on-site to create a gradual transition between the open space and new development.
- Goal: Development in urban areas and rural centers should incorporate diverse uses designed in a manner that provides for a sense of community, supports the human scale and allows for multi-modal transportation options.

11.2 Policies

- 11.2.1 Encourage the development of multi-story, mixed uses and other commercial uses that utilize regional architectural styles and are at a human scale.
- 11.2.2 Encourage infill and conversion of existing single uses to mixed use centers in the urban centers and transit corridors.
- 11.2.3 Encourage developments in urban and rural centers that maintain the unique character of the center, e.g., public commons, storefronts, setbacks, landscaping and pedestrian orientation.
- 11.2.4 Develop pedestrian and bicycle corridors between schools, housing, within neighborhoods and rural centers.
- 11.2.5 Promote the development of identifiable residential neighborhoods and shopping districts through the encouragement of more compact development patterns, the use of shared design and landscaping characteristics and development of landmarks.
- Goal: Housing in Clark County should provide for a variety of styles, be oriented to the street and be supportive of pedestrian and transportation alternatives.

11.3 Policies

Incorporate zoning standards that allow housing units to front on and relate to streets by encouraging elements such as balconies, porches, bay windows or decks that promote front yard activity.

- 11.3.2 Create incentives for developments which provide pedestrian access, public commons, maintain existing vegetation and are integrated with existing development.
- 11.3.3 Encourage the design of residential infill developments that reflect or improve the existing neighborhood character.
- 11.3.4 Establish an adequate side yard setback in residential areas for nonresidential uses including buildings, storage and parking.
- Goal: Transportation and parking requirements shall use land efficiently and be oriented to pedestrian and transit uses and minimize dependence on the automobile.

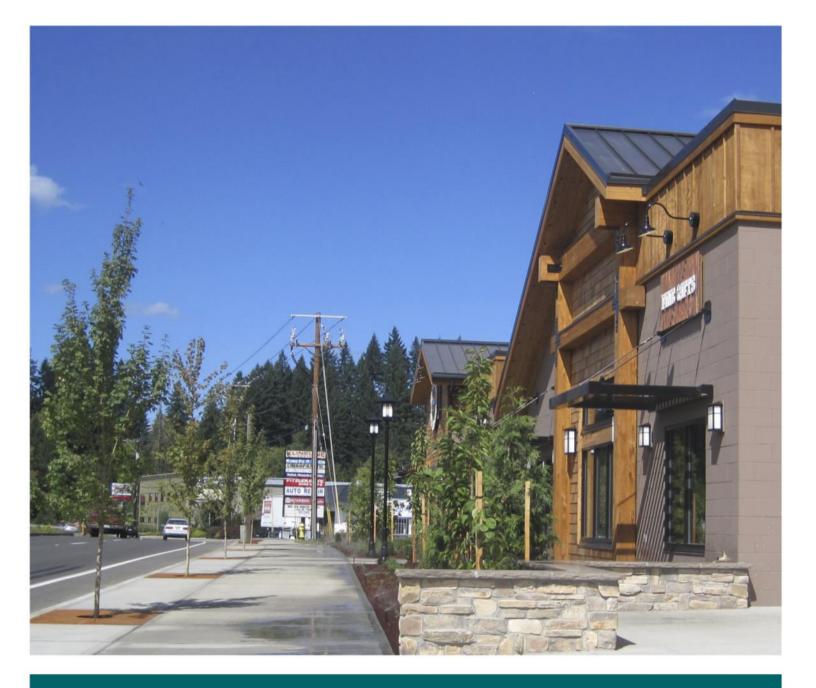
11.4 Policies

- 11.4.1 Develop design standards that create pedestrian friendly streets and public spaces.
- 11.4.2 Study parking supply and demand in the county. Develop parking standards that reflect decreased demand generated by such things as pedestrian facilities, bike paths, improved transit, transit demand management measures and mixed use developments.
- 11.4.3 Revise road standards to respect human scale rather than highway scale by:
 - Reducing road widths wherever feasible.
 - Reducing street lighting with appropriate cut-off to limit glare.
 - Require sidewalk and design elements for pedestrian activity along major arterials including items such as benches, pedestrian-scale street lighting, trash containers, landscaping, paving textures, public art, etc.
- 11.4.4 Coordinate zoning code and road standards to develop pedestrian friendly streets that encourage minimal front yard setbacks, rear yard parking, alleys and mixed uses.
- 11.4.5 Develop street plans beyond the arterial system to include a dense network of interconnecting streets as opposed to low density cul-de-sacs and widely-spaced arterials.
- 11.4.6 Require street connections or, if not feasible due to site conditions, provide pedestrian connections through the use of easements or pedestrian paths in rights-of-way.
- 11.4.7 Develop design standards for transit facilities.
- 11.4.8 Develop commercial zoning and transportation ordinance standards that:
 - require similar uses provide cross-access between properties and joint access to arterials and collectors;
 - provide for separate vehicular and pedestrian circulation in the site development plan of new projects and substantial remodels;
 - provide for pedestrian walkways along roads with landscape buffers as separation between roads and walkways;

- provide for dedicated internal pedestrian circulation within the development;
- provide opportunities for surface parking lots to develop transit-oriented uses;
 and,
- provide standards for adequate buffering between incompatible industrial, commercial and residential uses.

Goal: Development in urban areas and rural centers should incorporate design standards and aesthetically visually attractive developments.





Chapter 12

Annexation Element

Chapter 12 Annexation Element

Introduction

The Growth Management Act may encourage but it does not require annexation of urbanized areas to cities. The act's major focus in on preservation of resource lands, containment of urban sprawl within urban growth boundaries and provision of urban services within those urban growth boundaries.

With most cities in Clark County, the UGA's surrounding them are not typically developed at urban densities. Unlike the smaller cities, Vancouver is surrounded by large unincorporated areas that are highly developed at urban densities.

Until early 2006, annexation proposals were reviewed by the Boundary Review Board for Clark County, which was required to make decisions consistent with its statutory objectives (RCW 36.93.180). Under the provisions of the GMA, the Board of Clark County Commissioners disbanded the Boundary Review Board.

The following Countywide Planning Policies (CWPP), adopted by the Board of Clark County Commissioners, provides a framework for addressing regional issues for both the county and the cities. Additional policies set the framework for discussion of the details that will be included in the 20-Year Growth Management Plans for these jurisdictions.

12.0 Countywide Planning Policies

- 12.0.1 Community Comprehensive Plans shall contain an annexation element. In collaboration with adjacent cities, towns and Clark County, each city and town shall designate areas to be annexed. Each city and town shall adopt criteria for annexation and a plan for providing urban services and facilities within the annexation area. Policies for the transition of services shall be included in each annexation element. All cities and towns shall phase annexations to coincide with their ability to provide a full range of urban services to areas to be annexed.
- 12.0.2 Developing areas within urban growth and identified annexation areas should annex or commit to annex to adjacent cities in order to receive a full range of city-provided urban services. Unincorporated areas that are already urbanized are encouraged to annex to the appropriate city or town that provides the urban services. Incorporation of new cities and towns is a legal option allowed for under Washington law. Incorporation may be appropriate if an adequate financial base is identified or annexation is impractical.
- 12.0.3 The county shall encourage and support annexations to cities and town within Urban Growth Areas if consistent with the policies contained within the annexation element.
- 12.0.4 No city or town may annex territory beyond an urban growth area.
- 12.0.5 An inter-jurisdictional analysis and process which assesses the fiscal and other impacts related to annexation on the county, the city or town and special purpose

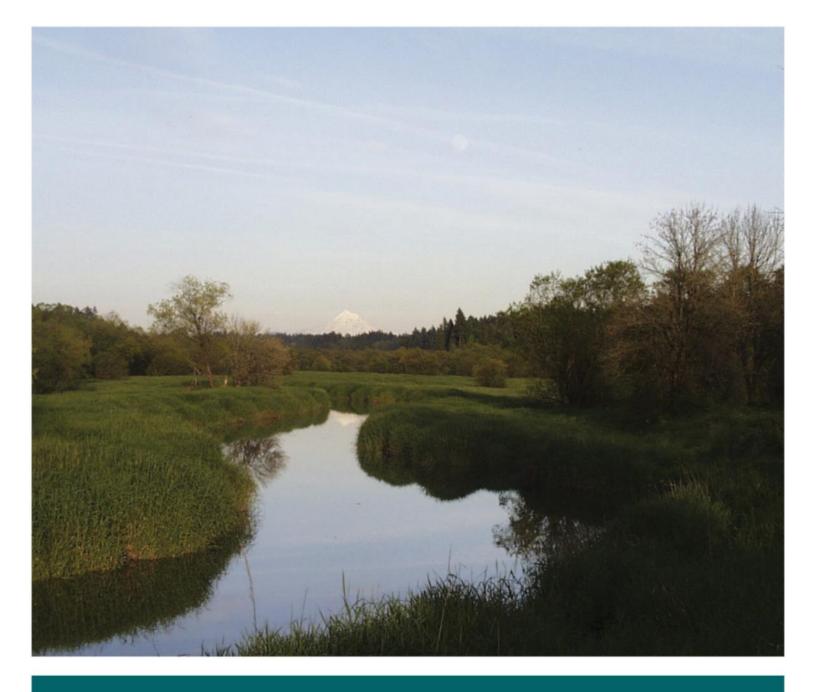
districts shall be developed consistent with RCW 35.13 and RCW 35A.14 and the policies contained in the annexation proposal.

Goals and Policies

Goal: Annexations must be consistent with RCW 35.13, the orderly transition from county jurisdiction to the appropriate municipality, either through annexation or incorporation, if and when either should occur.

12.1 Procedures

- 12.1.1 The county will use a standardized system to assess each proposed annexation. At a minimum, the following issues should be addressed:
 - preservation of natural neighborhoods and communities;
 - use of physical boundaries, including but not limited to bodies of water, highways and land contours;
 - creation and preservation of logical service areas;
 - prevention of abnormally irregular boundaries; and
 - transition of services such as public safety, parks and recreation, transportation and utility services.
- 12.1.2 Each city or town shall provide the county with its plan and timeline for annexations and, if applicable, any triggering mechanisms or thresholds which would initiate annexation.
- 12.1.3 Public information shall be provided jointly or individually by both the county and the annexing jurisdiction so that residents have adequate information.
- Policies: Annexations will be analyzed based on: (1) whether sewer and water services are provided by a city and (2) whether the urban growth area at issue is characterized or adjacent to an area characterized by unincorporated urban growth and (3) compliance with state law.
 - 12.2.1 The Fisher Swale area will be served by the City of Vancouver or the City of Camas by agreement of the two cities until one or both of these areas are annexed.
 - 12.2.2 It is expected that urban growth areas will develop at urban levels-of-service and be annexed to the nearest jurisdiction. For urban growth areas that are not likely to annex, urban services may be provided by special purpose districts.
 - 12.2.3 Properties within or adjacent to areas characterized by significant unincorporated urban growth that are not and are not likely to be provided by a city, may undergo urban development while unincorporated as long as adequate urban services including but not limited to, sewer and water are provided by special purpose districts. Whether or not these areas are ultimately annexed or incorporated is a decision for the property owners and the electorate of such an area. These properties include those located in the Hazel Dell, Salmon Creek and Felida areas.



Chapter 13

Shoreline Master Program

Chapter 13 Shoreline Master Program

Introduction

This chapter contains Clark County's Shoreline Master Program Goals and Policies. These goals and policies are implemented by Chapter 40.460 of the Clark County Code. These goals and policies, along with Chapter 40.460 and the Official Shoreline Map are adopted as the Clark County Shoreline Master Program (Program).

The Shoreline Management Act (SMA) (RCW 90.58) was adopted in 1971. The SMA requires local governments to plan for the use of shorelines within their jurisdictions. The SMA and WAC 173-26 establish a broad policy giving preference to shoreline uses that:

- 1. Depend on proximity to the shoreline ("water-dependent uses");
- 2. Protect biological and ecological resources, water quality and the natural environment; and
- 3. Preserve and enhance public access or increase recreational opportunities for the public along shorelines.

Clark County's first shoreline master program was adopted in 1974. The Program had not been updated since then. Using a grant from the Department of Ecology, the county partnered with its seven cities (the Clark County Shoreline Coalition) to develop a uniform set of goals, policies and shoreline designations for shorelines across the county.

General Shoreline Goals

The general goals of this Program are to:

- Use the full potential of shorelines in accordance with the opportunities presented by their relationship to the surrounding area, their natural resource values and their unique aesthetic qualities offered by water, topography and views; and
- 2. Develop a physical environment that is both ordered and diversified and which integrates water and shoreline uses while achieving a net gain of ecological function.

Shorelines of Shorelines of Statewide Significance

Within the County, the Columbia and Lewis Rivers, portions of the East Fork Lewis and Washougal Rivers, Lakes Merwin, Vancouver and Yale are designated shorelines of statewide significance (SSWS). Shorelines of statewide significance are of value to the entire state. In accordance with RCW 90.58.020, SSWS will be managed as follows:

- 1. Preference shall be given to the uses that are consistent with the statewide interest in such shorelines. These are uses that:
 - Recognize and protect the statewide interest over local interest;
 - Preserve the natural character of the shoreline;
 - Result in long-term over short-term benefit;
 - Protect the resources and ecological function of the shoreline;
 - Increase public access to publicly-owned areas of the shorelines;
 - Increase recreational opportunities for the public in the shoreline; and
 - Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

- 2. Uses that are not consistent with these policies should not be permitted on SSWS.
- 3. Those limited shorelines containing unique, scarce and/or sensitive resources should be protected.
- 4. Development should be focused in already developed shoreline areas to reduce adverse environmental impacts and to preserve undeveloped shoreline areas. In general, SSWS should be preserved for future generations by restricting or prohibiting development that would irretrievably damage shoreline resources and evaluating the short-term economic gain or convenience of developments relative to the long-term and potentially costly impairments to the natural shoreline.

Archaeological, Historic and Cultural Resources

Goal

The goal for archaeological, historic and cultural resources is to preserve and prevent the destruction of or damage to any site having historic, cultural, scientific, or educational value. Such sites include those identified by affected Native American tribes, the Department of Archaeology and Historic Preservation, Clark County Historic Preservation Commission and other appropriate authorities.

Policies

- 1. Identify, protect, preserve and restore important archaeological, historic and cultural sites located in shorelands of the state for educational, scientific and enjoyment of the general public.
- 2. Where appropriate, make access to such sites available to parties of interest, provided that access to such sites be designed and managed in a manner that protects the resource.
- 3. Historical and cultural sites should be acquired so as to ensure their protection and preservation.
- 4. Encourage projects and programs that foster a greater appreciation of shoreline management, local history, maritime activities, environmental conservation and maritime history.
- 5. Continue to contribute to the state and local inventory of archaeological sites enhancing knowledge of local history and understanding of human activities.

Conservation

Goal

The goal of conservation is to protect shoreline resources, vegetation, important shoreline features, shoreline ecological functions and the processes that sustain them to the maximum extent practicable.

Policies

1. Shorelines that support high value habitat or high quality associated wetlands should be considered for the highest level of protection to remain in an unaltered condition.

- 2. Impacts to critical areas should first be avoided and where unavoidable, minimized and mitigated to result in no net loss of watershed processes and shorelines functions.
- Management practices for natural resources (including agriculture, timber and mining) in shoreline areas should be developed and implemented to ensure the preservation of nonrenewable resources, including unique, scenic and ecologically sensitive features, wetlands and wildlife habitat.
- 4. Priority should be given to proposals to create, restore, or enhance habitat for priority species in terms of administrative and regulatory assistance.
- 5. Regulatory, non-regulatory and incentive programs should all be used for the protection and conservation of wildlife habitat areas. Emphasize policies and standards to protect and conserve critical areas as larger blocks, corridors or interconnected areas rather than in isolated parcels.
- 6. Encourage the retention of existing vegetation along shorelines and where removal is unavoidable for physical or visual access to the shoreline, limit alteration such that habitat connectivity is maintained, degraded areas are restored and the health of remaining vegetation is not compromised.

Economic Development

Goal

The goal for economic development is to create and maintain an economic environment that is balanced with the natural and human environment.

- 1. Current economic activity that is consistent with the policies of this Program should continue to be supported.
- 2. Healthy economic growth is allowed and encouraged through those economic activities that will be an asset to the local economy and which will result in the least possible adverse effect on the quality of the shoreline and downstream environments.
- 3. New water-oriented industrial, commercial and resource-based activities that will not harm the quality of the site's environment, adjacent shorelands, or water quality are encouraged along the shoreline.
- 4. As an economic asset, the recreation industry should be encouraged along shorelines in a manner that will enhance the public enjoyment of shorelines, consistent with protection of critical areas and cultural resources.
- 5. Existing non-water-oriented commercial, industrial and resource-based activities located in the shoreline jurisdiction are encouraged to protect watershed processes and shoreline ecological functions.

Flood Prevention and Flood Damage Minimization

Goal

The goal for flood hazards is to promote public health, safety and general welfare by minimizing public and private losses due to flood conditions in specific areas and by maintaining and restoring natural flow patterns.

Policies

- 1. All shoreline development should be located, designed and constructed to prevent flood damage and to the extent possible be located outside of shoreline jurisdiction.
- 2. Flood management works should be located, designed, constructed and maintained to protect:
 - a. the physical integrity and other properties of the shoreline and other properties that may be damaged by alterations of the geo-hydraulic system;
 - b. water quality and natural groundwater movement;
 - c. fish, vegetation and other life forms and their habitat vital to the aquatic food chain; and
 - d. recreation resources and aesthetic values such as point and channel bars, islands and other shoreline features and scenery.
- 3. Non-structural flood hazard reduction measures are preferred to structural measures. Flood hazard reduction measures should be accomplished in a manner that ensures no net loss of shoreline ecological functions and ecosystem-wide processes.
- 4. Flood protection measures that result in channelization and/or reduction in shoreline ecological function should be avoided.
- 5. Proposals for shoreline protection should clearly demonstrate that life, property and natural resource values within the stream system will not be endangered.
- 6. When evaluating alternate flood control measures, consider the removal or relocation of structures in flood-prone areas.
- 7. New development or new uses in shoreline jurisdiction, including the subdivision of land, should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway.

Public Access and Recreation

Goal

The goal of public access and recreation is to increase the ability of the general public to enjoy the water's edge, travel on the waters of the state and to view the water and the shoreline from adjacent locations.

Policies

1. Provide, protect and enhance a public access system that is both physical and visual; utilizes both private and public lands; increases the amount and diversity of public access to the

- State's shorelines and adjacent areas; and is consistent with the shoreline character and functions, private rights and public safety.
- 2. Increase and diversify recreational opportunities by promoting the continued public acquisition of appropriate shoreline areas for public use and develop recreation facilities so that they are distributed throughout the community to foster convenient access.
- 3. Locate public access and recreational facilities in a manner that encourages variety, accessibility and connectivity in a manner that will preserve the natural characteristics and functions of the shoreline.
- 4. Encourage public access provisions consistent with adopted city and county trails plans.
- 5. Encourage public access as part of each development project by a public entity and for all private development (except residential development of less than four parcels), unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.
- 6. Discourage shoreline uses that curtail or reduce public access unless such restriction is in the interest of the environment, public health and safety, or is necessary to a proposed beneficial use.
- 7. Consider private rights, public safety and protection of shoreline ecological functions and processes when providing public access and recreational opportunities.

Restoration

Goal

The goal of restoration is to re-establish, rehabilitate and/or otherwise improve impaired shoreline ecological functions and/or processes through voluntary and incentive-based public and private programs and actions that are consistent with the SMP Restoration Plan and other approved restoration plans.

- 1. Shorelines that are biologically degraded should be reclaimed and restored to the greatest extent feasible.
- 2. Restoration strategies should be developed and implemented such that ecosystem processes are sustainable in the long term.
- 3. Restoration of shoreline ecological functions should be encouraged during redevelopment.
- 4. Restoration efforts should include retrofitting existing stormwater control facilities to improve water quality.
- 5. Restoration efforts should consider a focus on floodplain and channel migration zone reconnection where rivers are confined by levees.
- 6. Restoration projects should have adaptive management techniques including adjusting the project design, correcting problems (barriers to success) and implementing contingency measures.

- 7. Eradication of invasive species, including noxious weeds and non-native species, should be undertaken as needed.
- 8. Planting of vegetation that enhances shoreline ecological function should be encouraged.
- 9. Education programs should be developed for:
 - a. Property owners about proper vegetation/landscape maintenance and the impacts of shore armoring and over-water structures; and
 - b. Boaters about proper waste disposal methods, anchoring techniques, best boating practices and the State's invasive species inspection program pursuant to RCW 77.15.290.
- 10. Cooperative restoration actions involving local, state and federal agencies, Native American tribes, non-government organizations and landowners should be encouraged.

Shoreline Modification and Stabilization

Goal

The goal for shoreline modification and stabilization is to avoid or minimize the need for shoreline armoring along shorelines of the state and when it is necessary, achieve it in a way that best protects ecosystem processes, shoreline ecological functions and downstream properties.

- 1. New developments should be located in such a manner as to not require shoreline stabilization measures.
- 2. When necessary, natural, non-structural shoreline stabilization measures are preferred over structural stabilization measures. Alternatives for shoreline stabilization should be based on the following hierarchy of preference:
 - a. No action;
 - b. Flexible stabilization works constructed of natural materials, including soft shore protection, bioengineering, beach nourishment, protective berms, or vegetative stabilization;
 - c. Rigid works constructed of structural materials such as riprap or concrete.
- 3. Allow new or expanded structural shore stabilization, including bulkheads, only where it is demonstrated to be necessary to protect an existing primary structure that is in danger of loss or substantial damage and where such structures and structural stabilization would not cause a net loss of shoreline ecological functions and processes.
- 4. Shoreline stabilization should be located and designed to accommodate the physical character and hydraulic energy potential of a specific shoreline reach, which may differ substantially from adjacent reaches.
- 5. Provisions for multiple use, restoration and/or public shore access should be incorporated into the location, design and maintenance of shore stabilization for public or quasi-public developments whenever safely compatible with the primary purpose. Shoreline stabilization on publicly owned shorelines should not be allowed to decrease long-term public use of the shoreline.

- 6. Shoreline stabilization projects should be developed in a coordinated manner among affected property owners and public agencies within a reach where feasible, particularly those that cross-jurisdictional boundaries, to address ecological and geo-hydraulic processes and sediment conveyance.
- 7. Failing, harmful, unnecessary, or ineffective shoreline stabilization structures should be removed or replaced to restore shoreline ecological functions and processes.
- 8. Larger works such as jetties, breakwaters, weirs, or groin systems should be permitted only for water-dependent uses and where mitigated to provide no net loss of shoreline ecological functions and processes.
- 9. Lower impact structures, including floating, portable or submerged breakwater structures, or several smaller discontinuous structures, are preferred over higher impact structures.
- 10. Encourage and facilitate levee setback (including but not limited to, pulling back an existing levee to allow for a larger floodplain area contiguous to a water body), levee removal and other shoreline enhancement projects.
- 11. Materials used for construction of shoreline stabilization should be selected for durability, ease of maintenance and compatibility with local shoreline features.
- 12. Development and shoreline modifications that would result in interference with the process of channel migration that may cause significant adverse impacts to property or public improvements and/or result in a net loss of shoreline ecological functions within the rivers and streams should be limited.

Shoreline Use and Development

Goal

The goal for shoreline use and development is to balance the preservation and development of shorelines in a manner that allows for mutually compatible uses. Resulting land use patterns will be compatible with shoreline designations and sensitive to and compatible with ecological systems and other shoreline resources. To help with this balance, shoreline and water areas with unique attributes for specific long-term uses such as commercial, residential, industrial, water, wildlife, fisheries, recreational and open space shall be identified and reserved.

- 1. Uses in shorelines and water areas shall be allowed in the following priority order:
 - a. water-dependent uses;
 - b. water-related uses; and
 - c. water-enjoyment uses.
- 2. Uses, activities and facilities should be located on shorelines in such a manner as to:
 - a. Retain or improve the quality of shoreline ecological function;
 - b. Respect the property rights of others;
 - c. Ensure that proposed shoreline uses do not create risk or harm to neighboring or downstream properties; and
 - d. Preserve and/or restore, to the maximum reasonable extent, the shoreline's natural features and functions in conjunction with any redevelopment or revitalization project.

- 3. The following are encouraged in shoreline areas:
 - a. Uses that enhance their specific areas or employ innovative features for purposes consistent with this program;
 - b. The redevelopment of any area not suitable for preservation of natural features, based on its shoreline designation, with an emphasis on public access;
 - c. Master planning for large sites or projects;
 - d. Shared uses and joint use facilities in shoreline developments; and
 - e. Uses that allow for or incorporate restoration of shoreline areas that are degraded as a result of past activities or events.
- 4. Uses proposed on lands adjacent to but outside of immediate shoreline jurisdiction should be consistent with the intent of this Program and should not adversely impact shoreline ecological functions.

Transportation, Utilities and Institutional Facilities

Goal

The goal for transportation, utilities and institutional facilities is to provide for these facilities in shoreline areas without adverse effects on existing shoreline use and development or shoreline ecological functions and/or processes.

- Locate institutional facilities, utilities and circulation systems that are not shorelinedependent outside of the shoreline jurisdiction to the maximum extent possible to reduce interference with either natural shoreline ecological functions or other appropriate shoreline uses.
- 2. Provide safe, reasonable and adequate circulation systems to shorelines where routes will have the least possible adverse effect on shoreline ecological function and existing ecological systems, while contributing to the visual enhancement of the shoreline.
- 3. Protect, manage and enhance those characteristics of shoreline transportation corridors that are unique or have historic significance or aesthetic quality for the benefit and enjoyment of the public.
- 4. Devote roads within the shoreline jurisdiction to low volume local access routes and shoreline public access.
- 5. Encourage alternate modes of travel and provide multiple-use transportation corridors where compatible if shoreline transportation development is necessary.
- 6. Locate utility and transportation corridors to avoid creating barriers between adjacent uplands and the shoreline and to harmonize with the topography and other natural characteristics of the shoreline.
- 7. When new utility and transportation facilities are developed in the shoreline jurisdiction, protect, enhance and encourage development of physical and visual shoreline public access.

- 8. Where feasible, relocate existing utility and transportation facilities, such as transmission lines, rail lines, or freeways that limit public shoreline access or other shoreline uses and convert such rights-of-way to new public access routes.
- Utilities and transportation facilities should be installed and facilities designed and located in a coordinated manner that protects the shorelands and water from contamination and degradation.

Views and Aesthetics

Goal

The goal for views and aesthetics is to assure that the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the state, including views of the water, is protected to the greatest extent feasible.

Policies

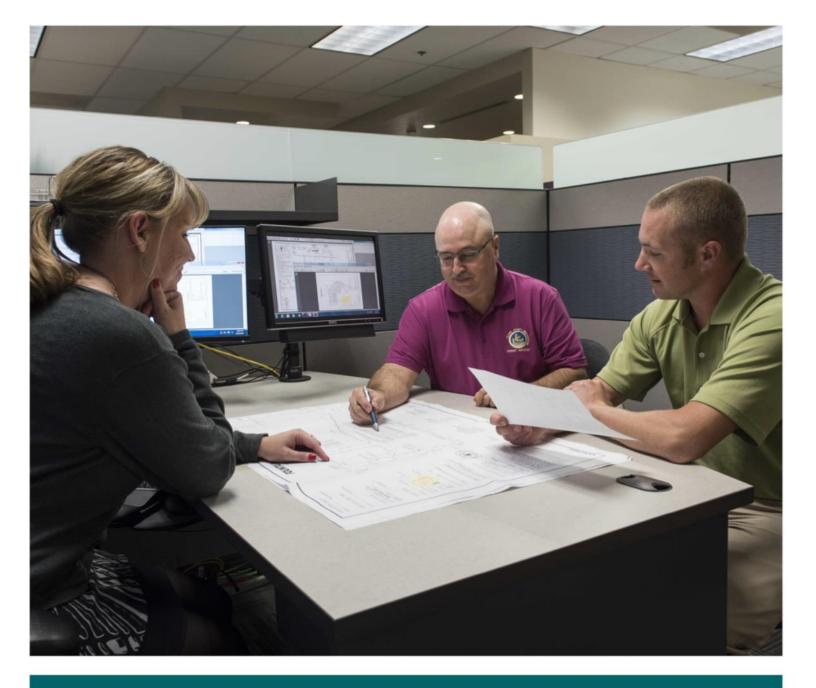
- 1. Identify and encourage the protection of scenic vistas and areas where the shoreline has high aesthetic value.
- 2. Encourage development within the shoreline area that provides visual and physical linkage to the shoreline and enhances the waterfront.
- 3. Encourage development design that minimizes adverse impacts on views enjoyed by a substantial number of residences.
- 4. Maintaining vegetated riparian areas to protect shoreline stability and shoreline ecological functions takes precedence over vegetation clearing to preserve or create views.

Water Quality and Quantity

Goal

The goal for water quality and quantity is to protect and enhance the quality and quantity of the region's water resources to ensure there is safe, clean water for the public's needs and enjoyment.

- 1. Encourage the location, construction, operation and maintenance of shoreline uses, developments and activities to be focused on maintaining or improving the quality and quantity of surface and ground water over the long term.
- 2. Minimize, through effective education, site planning and best management practices, the inadvertent release of chemicals, activities that cause erosion, stormwater runoff and faulty on-site sewage systems that could contaminate or cause adverse effects on water quality.
- 3. Encourage the maintenance and restoration of appropriate vegetative buffers along surface waters to improve water temperature and reduces the adverse effects of erosion and runoff.



Chapter 14

Procedural Guidelines

Chapter 14 Procedural Guidelines

Introduction

Adoption of the 20-Year Plan does not complete the land use planning process. This chapter differs in format from other chapters because it establishes procedures and criteria which shall be followed for the ongoing implementation and updating of the 20-Year Plan as established in Washington Administrative Code 365-195.

Plan Interpretation

The 20-Year Plan provides a guide and regulatory framework for development in Clark County that reflects the community vision of a desirable community. Plan policies are identified by number at the end of each chapter. Because of the general nature of the 20-Year Plan policies, conflict between and among these policies is possible. The following general rules of construction are intended to be used in interpreting the 20-Year Plan:

- Policies are intended to be read as mutually supportive and all are intended to be read together so that each has meaning.
- When conflicts arise between policies, the policy which is more specific shall prevail.
- The 20-Year Plan Map, or future proposals to amend the 20-Year Plan Map, should reflect and be based upon the 20-Year Plan policies in the text.
- When conflicts arise between the 20-Year Plan policies and the 20-Year Plan Map, the Map shall prevail.
- The 20-Year Plan is consistent with the statewide goals and carries out in more detail the Community Framework Plan. The 20-Year Plan also contains strategies which, in contrast to policies, are not intended to be directive but are suggested as a means to carry out the Plan. Other strategies to carry out the plan may also be available and in some cases preferred.

Amendments to 20-Year Plan

Amendments to the 20-Year Plan fall into several major categories or types and different review application and review criteria are applied. The kinds of amendments identified in this chapter are: urban growth boundary changes (both major and minor), 20-Year Plan policy or text change, 20-Year Plan Map change, changes to supporting material (such as capital facilities) emergency amendments, regional facilities and technical errors or omissions. Each of these types of amendments are described, criteria are identified as appropriate, the persons or parties responsible or authorized to initiate amendments are identified and procedural steps are identified as appropriate. This chapter also contains policies for removal of the Urban Holding overlay zone through Type IV county initiated rezone proceedings.

Urban Growth Boundary Changes

A comprehensive plan map changes including urban growth area (UGA) boundary changes considered by the county may schedule major area-wide or general review relating to boundary movement, rural land uses on a rotational basis. Amendments to the plan shall not be considered more frequently than once every year, except in cases of emergency. All proposed amendments in any year shall be considered concurrently so that the cumulative effect of the various proposals can be ascertained.

The county shall review consistent with RCW 36.70A.130, its designated urban growth areas and the densities permitted within both the incorporated and unincorporated portions of each urban growth area. The county shall use the following criteria to determine where and how much land should be added to the urban area:

- The amendment shall be consistent with the following adopted plans: Community Framework Plan, county 20-Year Plan, local comprehensive plans, applicable capital facilities plans and official population growth forecasts.
- The amendment shall consider urban reserve areas first.
- The amendment demonstrates that the full range of urban public facilities and services can be adequately provided in an efficient and timely manner. Such services include water, sewage, storm drainage, transportation, fire protection and schools.
- The amendment would be compatible with contiguous development within the urban growth area and proposed development shall occur at urban intensity.
- The amendment is reviewed by the Planning Commission and Board of Commissioners as described in the review and notification section below.
- Unless otherwise required by the county, boundary line amendments shall be made with parallel changes to the Comprehensive Plan Map and Zoning map for the affected properties.

Frequency of UGA Review and Expansions

RCW 36.70A.130 requires review of urban growth areas at least every eight years to accommodate the urban growth projected to occur for the succeeding twenty-year period and review of the comprehensive plans every eight years to ensure continued GMA compliance.

This plan does not contemplate a rolling 20-year supply of urban land. UGA boundary reviews and expansions based on a new planning horizon shall occur no more frequently than every five years. With the following exceptions, UGA boundary reviews and expansions not based on a new planning horizon shall occur no more frequently than every three years:

- 1. Expansions of 100 acres or less, limited to employment:
- 2. Expansions necessary to implement an agricultural TDR program;
- 3. Expansions necessary to complete road frontage or utility improvements on arterial roadways which straddle existing UGA boundary lines;
- 4. A UGA boundary following a public road shall be construed to encompass the entire right-of-way.

Plan Policy or Text Change

The Comprehensive Plan Policies and Text shall be considered for update by the county a minimum of once every eight years. The Comprehensive Plan Policies and Text may be considered through the annual review process, once a year. The Comprehensive plan update shall be initiated by the county. Annual review requests will be initiated by interested person(s). Policy and text amendments may be approved only when it is shown by the proponent (county is the proponent for comprehensive plan update; county, city or interested person(s) as proponent for annual review applications) that the amendment shall be consistent with the state Growth Management Act and the following adopted plans: Community Framework Plan, 20-year Plan, each city's comprehensive plan as applicable, applicable capital facilities plans and official population growth forecasts. All Comprehensive Policy and Text changes shall be reviewed by the Planning Commission and the Board of Commissioners as described in the review and notification section below.

20-Year Plan Map Amendment

Map amendments will be considered by application through the annual review process, once a year. The Comprehensive Plan update shall be initiated by the county. Annual review requests shall be initiated by property owner or interested person(s). Map amendments may be approved only when it is shown by the proponent (county is the proponent for the Comprehensive Plan update; city is proponent for city initiated amendments; property owner or interested person(s) is proponent for annual plan map change applications) that the supply of available land in the requested plan designation may be insufficient to accommodate anticipated growth. Criteria used to determine where, when and how much land in a specific land use category should be added are:

- 1. The amendment shall be consistent with the state Growth Management Act and the following adopted plans: Community Framework Plan, 20-Year Plan, each city comprehensive plan as applicable, applicable capital facilities plans and official population growth forecasts.
- 2. The amendment shall meet the location criteria for the requested designation.
- 3. The proponent demonstrates that the full range of urban public facilities and services can be adequately provided in an efficient and timely manner. Such services include water, sewage, storm drainage, transportation, fire protection and schools.
- 4. The requested change will not impact the character of the area to the extent that further plan map amendments will be warranted in future annual reviews unless the scope of the amendment is expanded. The county may expand the scope of any annual review.
- 5. Unless otherwise required by the county, applications for map amendments shall be accompanied by parallel rezone applications.
- 6. Reviewed by the Planning Commission and Clark County Board of Councilors as described in the review and notification.

Other Planning Documents

Capital Facilities Plans

Capital Facilities Plan Updates are reviewed in public hearings by the Clark County Planning Commission and Clark County Board of Councilors for those facilities subject to county jurisdiction.

Arterial Atlas

The Arterial Atlas is a supporting document to the comprehensive plan, which defines the future roadway system in terms of role, function and cross-section. Amendments to the Arterial Atlas are considered as part of the annual review process. Arterial Atlas amendments are considered as plan map amendments and judged using the following criteria:

- 1. Is there a need for a change and state the reason;
- 2. Is the proposed change compliant with the Growth Management Act (e.g. level-of-service standards);
- 3. Is the change consistent with the adopted comprehensive plan;
- 4. Is the change consistent with applicable interlocal agreements; and
- 5. Is the change consistent with the adopted Metropolitan Transportation Plan

County Road Improvement Plans

County Road Improvement Plans updates are reviewed annually in public hearings by the Clark County Planning Commission and Clark County Board of Councilors.

Parks, Recreation and Open Space Plan

Park, Recreation and Open Space Plan updates are reviewed by the Clark County Parks Advisory Board, Planning Commission and the Clark County Board of Councilors, except amendments to the park impact fee ordinance, which are reviewed in public hearings by the Planning Commission and Board of County Councilors.

Emergency Amendments

The 1990 Growth Management Act (GMA) precludes considering amendments to the 20-Year Plan more than once a year. However, emergency amendments may be considered at any time if the following situations arise:

- To provide a regional facility/service that is needed to protect the public health, safety or welfare including waste disposal transfer sites, sewer treatment plants, port or airport facilities or significant state or local government facilities that cannot be reviewed through another process.
- 2. In the development of a countywide plan and implementing zoning map, it is possible that technical errors in mapping or obvious errors in applying plan map or zoning map designations may occur. These mistakes can be corrected by making an application at any time during the first year following adoption of the 20-Year Plan Map or zoning map. The applicant needs to demonstrate that an obvious error occurred. The application can be initiated by the county, property owner or interested person(s). After the first year, these applications shall be:
 - Considered once a year.
 - Limited to correcting an error.

Special Implementation Procedures

The comprehensive plan map contemplates one land use method to assure the adequacy of public facilities needed to support urban development within urban growth areas. That method is to apply an Urban Holding District combined with urban zoning.

Urban Holding

When development polices require a legislative action prior to urban development occurring, the county applies the Urban Holding Plan Map and Zoning Overlay with a specific underlying urban zone. In these cases, identified criteria are established that must be met in order to remove the urban holding zoning and authorize the underlying urban zone. Under certain circumstances a Master Plan or Sub-Area Plan which includes how and when an area develops and with what uses, may be required. In most cases, city plan policies may require annexation prior to development.

Battle Ground, Camas, La Center, Ridgefield, Washougal, Yacolt and Woodland Urban Growth Areas

These areas may only undergo urban development following annexation, or consistent with an Intergovernmental Agreement which responds to a significant opportunity for a major employer if immediate annexation is not geographically feasible.

Vancouver Urban Growth Area

The Vancouver Urban Growth Area is divided into larger sub-areas. Each of these areas has unique circumstances as described below that shall be met in order to remove the Urban Holding Overlay and authorize an urban zone which is consistent with the Comprehensive Plan. The county will remove the UH overlay to appropriate areas sufficient in size that the county can collect transportation related

data, analyze the cumulative transportation impacts and address mitigation to these impacts. The urban holding overlay designation may be removed pursuant to Clark County Code 40.560.010 upon satisfaction of the following:

- 1. **Mill Creek:** The area is bordered by NE 179th Street to the north, NE 50 Avenue to the east, NE 163rd Street to the south, and NE 34th Avenue to the west. Determination that the completion of localized critical links and intersection improvements are reasonably funded as shown on the county 6 Year Transportation Improvement Plan or through a development agreement.
- 2. West Fairgrounds and East Fairgrounds: Determination that the completion of localized critical links and intersection improvements are reasonably funded as shown on the county 6 year Transportation Improvement Plan or through a development agreement.

Zone To Zone Consistency

To address the Zone to Zone Consistency between the zoning categories within certain urban growth areas and the county's zoning categories the following Table was developed. Those urban growth areas not identified in this Table have developed zoning categories consistent with those found in the county zoning code.

ZONE R1-5/6 R1-7.5 R1-10 R1-20 R-12 R-18 R-22 R-22 R-30 R-43 **BATTLE GROUND** R1-15 Ρ R-1-10 R-1-7.5 Ρ Ρ R-1-6 R-22 R-16 R-10 **CAMAS** R1-12.5 Ρ R1-10 P WASHOUGAL Р R1-15 R1-10 Ρ Ρ R1-7.5 Р R1-5 R-16 Р R-22 **RIDGEFIELD** Р R1-7.5 Р R1-8.5 R-16

Table 14.1 City Zone to County Zone Consistency Chart

Areas indicated with a "P" is allowed zones in each designation

Governmental Coordination

Clark County, with each city and town, will provide for annual review processes. These update periods shall be established to occur within each jurisdiction not to exceed once a year. These annual reviews shall meet the following criteria:

- Each urban area annual review shall assess the cumulative impacts of all potential or requested changes to the 20-Year Plan Map and policies throughout the urban area and, further, on the countywide plan.
- 2. Proposals that would result in urban development outside of an adopted urban boundary shall not be permitted.
- 3. Cities, special districts and Clark County shall cooperate to preserve and protect natural resources, agricultural lands, open space and recreational lands within and near the urban areas.

In addition to plan amendments or updates initiated by the county or applicable city, individual annual review applications may be submitted once a year to the applicable jurisdiction based on a schedule adopted by that jurisdiction. To the extent possible, the same schedule should be adopted by the county and each city/town for each urban area to facilitate mutual review and assessment of the criteria in Governmental Coordination above. Where no agreement exists between the applicable city and the county or the amendment request is in the rural area, annual review applications and plan update requests shall be submitted in December of each year and processed by the county during the following year.

Plan Amendment, Public Notification and Public Hearing Processes

All private applicants (except for those alleging an error in drafting or judgment) requesting amendment to the 20-Year Plan text, policies or map must file for a pre-application conference prior to or in conjunction with submittal of a formal application as described in CCC40.560.

Dispute Resolution

Traditional approaches to conflict are not set up to help parties resolve their differences; rather they are designed to decide an issue. The dispute mediation process allows for consensus building and can be used in disputes at the neighbor level, disputes between jurisdictions or disputes at the policy setting level.

The Washington State Dispute Resolution Act, (RCW 7.75) allows the county to place a surcharge on Civil and Small Claims filing fees for funding a dispute resolution center. Assisted mediation services may be available through a county operated Dispute Resolution Center or through the selection of a private facilitation/mediation service provider.

It is therefore the policy of Clark County to encourage the use of alternative dispute resolution techniques, recognizing the cost, complexity and adversarial nature of_resolving neighborhood and community disputes through the traditional hearing process.

Cooperative Agreements and Interjurisdictional Guidelines

A significant degree of cooperation and coordination between the county, cities and other service providers is required to manage land use in the urban and rural areas. Policies covering interagency cooperation, land use planning and development review, urban service provisions and boundary amendments are needed to set the countywide framework for interjurisdictional agreements.

Establish interagency planning teams to develop ongoing coordinating program within the rural area and each urban area to include the county, all cities and towns, all special districts (including school

districts, Clark Public Utilities, Clark County Public Health, Clark Regional Wastewater District, port districts and fire districts). These teams shall develop:

- 1. Specific procedures for affected agencies, jurisdictions and special districts to participate, review and comment on the proposed plans and implementation measures of the others to assure consistency with the 20-Year Plan.
- 2. Specific coordination procedures for affected agencies, jurisdictions and special districts to periodically review, at a minimum of every eight years, the capital improvement plans, to enhance, improve and focus concurrency management plans and to assure consistency with all other elements of the 20-Year Plan. Such procedures shall include an inventory of the location and capacities of the public facilities to include, at a minimum, public roads, public water and sewer systems, storm water facilities, schools, parks and recreational facilities and police and fire protection services. Where inconsistencies are identified between the Capital Facilities and Utilities element, including financing assumptions and actual financing and the other plan elements, the procedures shall ensure that appropriate plan amendments are made to eliminate those inconsistencies.
- 3. Specific procedures to improve joint efforts or the combining of operations (e.g., roads, sheriff/police departments, fire departments) to achieve greater efficiency and effectiveness in service provision.

Land Use Planning Implementation Measures and Annexation

- 1. City/town and county adopted implementation measures shall be, to the extent possible, consistent within all urban areas.
- 2. Cities/towns shall not annex territory beyond the adopted urban growth boundaries. Clark County shall not permit urban growth to occur outside of adopted urban boundaries.



Glossary

Glossary

Affordable Housing - housing is considered affordable to a household if it costs no more than 30 percent (30%) of the total household gross monthly income for rent or mortgage payments, or up to 2.5 times annual income for purchasing a home. This is the standard used by the federal and state government and the majority of lending institutions.

Arterial - a major street carrying the traffic of local and collector streets to and from freeways and other major streets. Arterials generally have traffic signals at intersections and may have limits on driveway spacing and street intersection spacing.

Average Daily Traffic (ADT) - the average number of vehicle trips per weekday (Monday through Friday) to and from a site.

Build Out - having no remaining land; fully developed to the maximum permitted by adopted plans and zoning.

Capital Facilities Plan (CFP) - a required component of the comprehensive plan that deals with the costs and funding of governmental services.

Clark County Code (CCC) - laws adopted by the Board of Commissioners for Clark County.

Cohousing – is a residential model in which a cluster of attached and/or single-family houses are built around a common building for share use such as meals, childcare, guest rooms, laundry and recreational uses.

Collector - a street for moving traffic between major or arterial streets and local streets. Collector streets generally provide direct access to properties, although they may have limitations on driveway spacing.

Community Framework Plan - a document that identifies broad land use categories and policies that are to be used as a guide to the development of comprehensive plans as mandated by the Growth Management Act. The time frame is for a 50-plus-year period and because of this time frame the Framework Plan is necessarily general and not a final specific plan. The Framework Plan was adopted by the Board of County Commissioners in May of 1992 to provide guidance to future policy decisions in the Comprehensive Plans. The Community Framework Plan is the result of the recognition that growth will not stop in 20 years and many items such as water, sewer and roads have planning time frames beyond this time period.

Commute Trip Reduction Act (CTR) - requires large employers to reduce the percentage of their employees who commute to work in single occupancy vehicles.

Comprehensive Plans - a document consisting of maps, charts and text which contains the adopting city or county's policies regarding long-term (20-year) development. A comprehensive plan is a legal document required of each local government by the State of Washington. The required content of the comprehensive plan is described in RCW 36.70A which directs that at a minimum the plan shall contain the following elements:

- * Land use;
- * Housing;

- * Transportation;
- * Capital Facilities;
- * Utilities; and,
- * Rural lands (counties only).

Clark County has chosen to include the following optional elements:

- * Natural resource lands;
- * Economic development;
- * Community design;
- * Annexation and incorporation;
- * Parks, recreation and open space;
- * Critical areas; and,
- * Historic, archaeological and cultural preservation.

Consolidated Metropolitan Statistical Area (CMSA) - refers to the Portland PMSA, which includes Clackamas, Multnomah, Washington and Yamhill counties and the Vancouver PMSA, which is composed of Clark County, together.

Covered Employment - includes jobs where the employee provides insurance as part of a basic benefits package.

Critical Areas - include wetlands, sensitive fish and wildlife habitat areas, critical recharge areas for groundwater aquifers, flood prone areas and geological hazardous areas (such as landslide areas, earthquake fault zones and steep slopes).

Density - for residential development, density means the number of housing units per acre. For population, density means the number of people per acre or square mile.

Density, Gross - density calculations based on the overall acreage of an area, including streets, roads, easements, rights-of-way, parks, open space and, sometimes, other land uses.

Density, Net - density calculations based on the actual area of land used, exclusive of streets, roads, rights-of-way, easements, parks and open space.

Developable Land - land that is suitable as a location for structures because it is free of hazards (flood, fire, geological, wetlands, etc.), has access to services, (water, sewer, storm drainage and transportation) and will not disrupt or adversely affect natural resource areas.

Draft Environmental Impact Statement (DEIS) - See: State Environmental Policy Act.

Element - a component or chapter of the comprehensive plan. State law requires that each city's comprehensive plan include at least six elements. In addition to the six elements required for cities, counties must also include a rural element. Other elements may be included as a local option. See Comprehensive Plan.

Environmental Impact Statement (EIS) - a document that analyses the environment impacts of a project or policy and suggests mitigation measures. See also: State Environmental Policy Act.

Flood Hazard Area - a lowland or relatively flat area adjoining inland waters that is subject to a one percent or greater chance of flooding in any given year. Also known as the 100-year flood plain. Clark County has a flood plain protection ordinance that regulates any development within this area.

Fully Contained Communities - are developments within urban growth areas that have been planned 1) to have a complete array of land uses such as commercial, residential and/or offices; and, 2) to potentially be self-sufficient. Large scale residential developments are not fully contained communities. If allowed to occur outside urban areas a portion of the OFM assigned population for Clark County has to be set aside for these communities.

Growth Management - the use by a community of a wide range of techniques in combination to determine the amount, type and rate of development desired by the community and to channel that growth into designated areas.

Growth Management Act - House Bill 2929 adopted in 1990 and amended by House Bill 1025 in 1991. This Law requires the fastest growing counties in the state to construct comprehensive plans. See the introduction for a more complete description and RCW 36.70A.

High Occupancy Vehicle (HOV) - a vehicle carrying more than two people. Carpools, vanpools and buses are examples.

Household - all persons living in a dwelling unit, whether or not they are related. Both a single person living in an apartment and a family in a house are considered a "household".

Household Income - the total of all the incomes of all the people living in a household. Households are usually described as very low income, low income, moderate income, or upper income. The federal government defines these categories as follows:

- * **Very low income** = households earning less than 50 percent of the countywide median income.
- * Low income = households earning between 51 and 80 percent of the countywide median income.
- * Moderate income = households earning between 81 and 95 percent of the countywide median income.
- * Middle income = households earning between 96 and 120 percent of the countywide median income.
- * **Upper income** = households earning over 120 percent of the countywide median income.

Human Scale - buildings, landscapes, streetscapes and other built features which do not overwhelm pedestrians.

Impact Fee - a fee levied on the developer of a project by a city, county or special district as compensation for the expected effects of the development. The Growth Management Act authorizes imposition of impact fees on new development and sets the conditions under which they may be imposed.

Implementation Measure - an action, procedure, program or technique that carries out comprehensive plan policy.

Infill Development - development on vacant parcels in urban or urbanizing areas that were passed over by previous developments.

Infrastructure - the physical systems and services which support development and people, such as streets and highways, transit service, water and sewer systems, storm drainage systems and airports.

Jobs/Housing Balance - a concept to increase the job and housing opportunities in an area where the work force primarily commutes out of the area or into the area. Concepts such as mixed use developments, telecommuting and attracting industries to the area are ways in which this may be accomplished.

Level-of-Service (LOS) - a method of measuring and defining the type and quality of a particular public service such as transportation, fire protection, police protection, schools/education, storm drainage and sewer and water systems. The county and its cities must cooperatively develop standards for level-of-service for public services and infrastructure as a part of the policies governing growth management.

Master Planned Resorts - are developments outside of urban areas that provide a range of recreational amenities and focus primarily on short-term visitor accommodations but not including vacation homes.

Metro - the regional government that serves the urban populations of Clackamas, Multnomah and Washington counties in Oregon. It is responsible for transportation and land use planning, regional parks and greenspaces and other regional functions.

Metropolitan Greenspaces - a program administered by Metro, in which Clark County is a participating partner, that has defined and inventoried natural areas to preserve as open space in the Vancouver/ Portland metropolitan area. These areas have been targeted for purchase when funds become available.

Mixed Use Development - developments designed to be pedestrian friendly that locate housing, commercial and/or offices in the same structure(s) or within close proximity of each other. These developments are intended to reduce the dependency on the automobile and create a sense of place.

Natural Resource Lands - lands which may be used for commercial forest, agriculture, or mineral extraction industries. Cities and counties must classify and designate these lands and develop policies to protect them as a part of growth management planning. See Chapter 4, Rural and Resource Lands for a detailed discussion.

Washington State Office of Financial Management (OFM) - state office that officially provides the County with population projections that as a minimum must be used in growth management planning.

Open Space - any parcel or area of land or water that is essentially unimproved and devoted to an open space use such as preservation of natural resources, outdoor recreation not requiring development of play fields or structures, or public health and safety (flood control).

Pedestrian Friendly - developments that are designed first for pedestrians then for the movement of vehicles. These developments are often mixed use (two and three story buildings with storefront retail) in nature with wide sidewalks, landscaping and buildings that are in scale with pedestrians.

Planning Commission - a group of people appointed by a city council or county commission to administer planning and land use regulations for the jurisdiction. State regulations governing the powers and activities of a planning commission are contained in RCW 36.70.

Primary Metropolitan Statistical Area (PMSA) - refers to major urban regions which are used to compile statistical and census data.

Revised Code of Washington (RCW) - the most recent edition, in a consolidated and codified form, of all the laws of the state of a general and permanent nature.

Senior Housing – is housing designed for seniors age 55 and older.

Shared Housing – is an arrangement in which two or more unrelated people share a house or an apartment. Usually private sleeping quarters are available; the rest of the house or apartment is shared.

State Environmental Policy Act (SEPA) - the Washington State Environmental Policy Act requires that each city or county consider the environmental impacts of a proposed development before approval and incorporate measures to mitigate any expected negative impacts as conditions of approval. The process is to prepare a draft environmental impact statement (DEIS) for public review and then a final environmental impact statement (FEIS). The FEIS is not adopted as part of the plan but is used as a tool to help in making decisions concerning the plan.

Transfer of Development Rights (TDR) - a program that allows designated properties where proposed land use or environmental impacts are considered undesirable to relocate development potential to another site which can accommodate increased development beyond that for which it was zoned.

Transportation Demand Management (TDM) - a concept to reduce the demand on roadways through changes in individuals travel behavior.

Urban Growth Area (UGA) - areas established as part of the growth management process to allow for the efficient provision of urban levels of governmental services and where urban growth will be encouraged. Urban growth areas should contain enough vacant land to accommodate the 20-year growth projections by OFM. Counties and cities should cooperatively establish the urban growth areas and cities must be located inside urban growth areas. Once established, cities cannot annex land outside the urban growth area. Growth outside of urban growth areas must be rural in character.

Urban Growth Boundary (UGB) - the line designating the extent of the urban growth area.

Urban Reserve Areas - land adjacent to urban growth areas that are reserved for future urbanization which allows for the orderly conversion of land to urban densities when it can be demonstrated that the supply of developable land within the urban growth area is depleted.

Vehicle Miles Traveled (VMT) - the average number of miles traveled by a vehicle in a given area. This is both a measure of trip length and of dependency on private vehicles.

Vision, Visioning - a collective and collaborative statement by citizens, elected and appointed officials and interested parties of their preference for what their community can and should be.

Washington Administrative Code (WAC) - laws adopted by state agencies to implement state legislation.

Zoning - a map and ordinance text which divides a city or county into land use districts and specifies the types of land uses, setbacks, lot size and size restrictions for buildings within each district.



Abbreviations & Acronyms

Abbreviations and Acronyms

ADT Average Daily Traffic

CCC Clark County Code

CFP Capital Facilities Plan

CMSA Consolidated Metropolitan Statistical Area

CTR Commute Trip Reduction

DEIS Draft Environmental Impact Statement

EIS Environmental Impact Statement

FEIS Final Environmental Impact Statement

GMA Growth Management Act

HOV High Occupancy Vehicle

LOS Level-of-Service

OFM Office of Financial Management

PMSA Portland Metropolitan Statistical Area

RCW Revised Code of Washington

SEPA State Environment Policy Act

TDM Transportation Demand Management

TDR Transfer of Development Rights

UGA Urban Growth Areas

UGB Urban Growth Boundaries

VMT Vehicle Miles Traveled

WAC Washington Administrative Code



Appendix