

CITY OF COVINGTON COMPREHENSIVE PLAN UPDATE 2015

EXISTING CONDITIONS REPORT: NOVEMBER 2015

1.0	INTRODUCTION	1-1
1.1	Planning Process and Report Purpose	1-1
	Planning Mandate and Coordination	1-1
	Required and Optional Plan Elements	1-1
	Inventory and Purpose of Existing Conditions Report	1-2
1.2	Study Area	1-2
2.0	LAND USE	2-3
2.1	Overview	2-3
2.2	Regulatory Context and Planning Framework	2-3
	Washington State Growth Management Act	2-3
	VISION 2040	2-4
	Countywide Planning Policies	2-4
2.3	History	2-4
2.4	Existing Land Uses	2-5
2.5	Existing Land Use Designations	2-7
	City Limits and Potential Annexation Areas	2-7
	Downtown and Town Center	2-9
	Lakepointe Urban Village	2-10
2.6	Existing Zoning	2-12
2.7	Current and Future Population, Housing, and Jobs	2-13
2.8	Surrounding Land Uses	2-15
2.9	Summary of Conditions and Trends	2-15
3.0	HOUSING	3-17
3.1	Overview	3-17
	Data Sources	3-17
3.2	Regulatory Context and Planning Framework	3-17
	Washington State Growth Management Act	3-17

King County Countywide Planning Policies	3-18
3.3 Population and Household Characteristics	3-19
Population and Age	3-19
Household Size	3-20
Household Composition	3-21
Special Needs Population	3-22
3.4 Housing Supply and Condition	3-25
Housing Units	3-25
Housing Size	3-27
Housing Tenure	3-28
Vacancy Rates	3-28
Housing Units by Year Built	3-28
Foreclosures	3-32
Subsidized Housing	3-33
Amount of Housing Units at Different Price Levels	3-33
Overcrowding	3-34
3.5 Housing Affordability	3-35
Household Income	3-35
Estimating Households by Percent of Median Income	3-35
Housing Cost Burden	3-37
Affordability of Renter Occupied Housing	3-38
Affordability of Owner Occupied Housing	3-39
Housing Growth Targets and Land Capacity	3-41
3.6 Housing Trends	3-41
Continued Housing Demand and Greater Housing Variety	3-41
Improving Housing and Jobs Balance	3-43
3.7 Summary of Conditions and Trends	3-44
4.0 TRANSPORTATION	4-1
4.1 Overview	4-1
4.2 Regulatory Context and Planning Framework	4-1
Washington State Growth Management Act	4-1
Transportation 2040	4-2
Countywide Planning Policies	4-2
4.3 Existing Travel Characteristics	4-3
4.4 Existing Transportation System	4-4
Street Network	4-4

Freight Mobility.....	4-14
Non-Motorized Transportation.....	4-14
Transit	4-19
4.5 Summary of Issues and Trends	4-1
5.0 ECONOMIC DEVELOPMENT	5-1
5.1 Overview.....	5-1
5.2 Regulatory Context and Planning Framework	5-1
Washington State Growth Management Act.....	5-1
King County Countywide Planning Policies	5-1
5.3 Existing Conditions	5-2
Population.....	5-2
Educational Attainment	5-2
Household Income	5-3
Employment.....	5-3
Commercial and Industrial Development.....	5-4
Employment Income	5-5
Travel to Work	5-5
Taxable Retail Sales.....	5-6
Retail Sales Leakage	5-6
Summary of Existing Conditions and Trends	5-7
Implications of Existing Conditions and Trends	5-8
5.4 Financial Tools for Economic Development.....	5-9
Key Issues for the Economic Development Element	5-10
6.0 NATURAL ENVIRONMENT	6-1
6.1 Overview.....	6-1
6.2 Regulatory Context and Planning Framework	6-1
Growth Management Act Goals	6-1
Best Available Science Review	6-1
Shoreline Management Act	6-1
Water Quality.....	6-2
Air Quality and Greenhouse Gas Emissions	6-2
6.3 Existing Conditions	6-3
Vegetation.....	6-3
Critical Aquifer Recharge Areas (CARAs).....	6-3
Fish and Wildlife Habitat Conservation Areas	6-5

Frequently Flooded Areas	6-7
Wetlands	6-10
Geologically Hazardous Areas	6-10
6.4 Water and Air Quality	6-12
Water Quality	6-12
Air Quality	6-13
6.5 Summary of Conditions and Key Issues	6-14
7.0 CAPITAL FACILITIES AND UTILITIES	7-1
7.1 Capital Facilities Overview	7-1
7.2 Capital Facilities Planning Framework	7-1
7.3 Capital Facilities Inventory	7-1
Municipal Buildings	7-2
Police Services	7-3
Fire and Emergency Services	7-5
Schools	7-5
Stormwater	7-8
Streets	7-10
Water	7-13
Sewer	7-15
7.4 Utilities	7-17
Overview	7-17
Regulatory Context	7-17
Existing Conditions	7-17
Key Issues for Comprehensive Plan Update	7-18
8.0 PARKS, RECREATION, AND OPEN SPACE	8-1
8.1 Overview	8-1
8.2 Regulatory Context and Planning Framework	8-1
Washington State Growth Management Act	8-1
King County Countywide Planning Policies	8-1
8.3 Parks, Recreation, and Open Space Facilities	8-2
8.4 Level of Service	8-9
9.0 SHORELINES	9-1
9.1 Overview	9-1
9.2 Regulatory Context and Planning Framework	9-1
9.3 Existing Conditions	9-1

10.0 REFERENCES 10-1

Draft

1.0 INTRODUCTION

1.1 PLANNING PROCESS AND REPORT PURPOSE

Planning Mandate and Coordination

In accordance with the Growth Management Act (GMA), the City of Covington is required to adopt and maintain a Comprehensive Plan. A comprehensive plan guides a community's physical development (land use) over the long term, addresses the entire community and all its values, activities, or functions – housing, employment, transportation, recreation, utilities, etc. – and provides a statement of policy guiding how the community's desires for growth and character are to be achieved.

Covington's first Comprehensive Plan was adopted shortly after the City was incorporated in 1997. A major update was completed in 2003. The City updated Land Use and Downtown elements in 2012 and adopted the Lakepointe Urban Village Subarea Plan in 2014. Other minor amendments have been made to individual elements during intervening years.

The Covington Comprehensive Plan must address a 20-year planning period, and demonstrate an ability to accommodate future growth in the City and its planning area. The City must plan in coordination with King County and neighboring cities through Countywide Planning Policies for King County and through VISION 2040 a regional plan adopted through the Puget Sound Regional Council (PSRC).

The City must now update its comprehensive plan and development regulations to address the 2015-2035 planning period and demonstrate compatibility with state goals and regional plans. The statutory deadline is June 30, 2015; the City anticipates adopting its Comprehensive Plan by December 2015 allowing more time for preparing a compliant, streamlined, and well-designed plan.

As the City of Covington continues "Growing Towards Greatness" the Comprehensive Plan will guide the physical development of the City, ensure that change is consistent with the community's vision and principles, and coordinate the provision of public services and amenities to support new growth.



Covington's 2015 Comprehensive Plan Logo

Required and Optional Plan Elements

GMA requires the City to address the following elements in its plan: land use, housing, capital facilities, utilities, transportation, economic development, and parks and recreation. Optional elements include subarea plans or other element topics.

The existing 2014 Covington Comprehensive Plan consists of twelve elements, seven of which are mandated by the GMA: Land Use, Housing, Transportation, Parks and Recreation, Utilities, Capital Facilities, and Economic Development. The plan also includes four optional elements: Downtown, Environmental, Surface Water Resources, and Natural Hazard Mitigation. Consistent with GMA and SMA the Shoreline Master Program Element is part of the Comprehensive Plan.

In the Comprehensive Plan Update, the City has chosen to combine existing elements to streamline the plan and consolidate related information; the City has also chosen to develop selected optional elements that helps it formulate policies and strategies on topics of local concern.

Inventory and Purpose of Existing Conditions Report

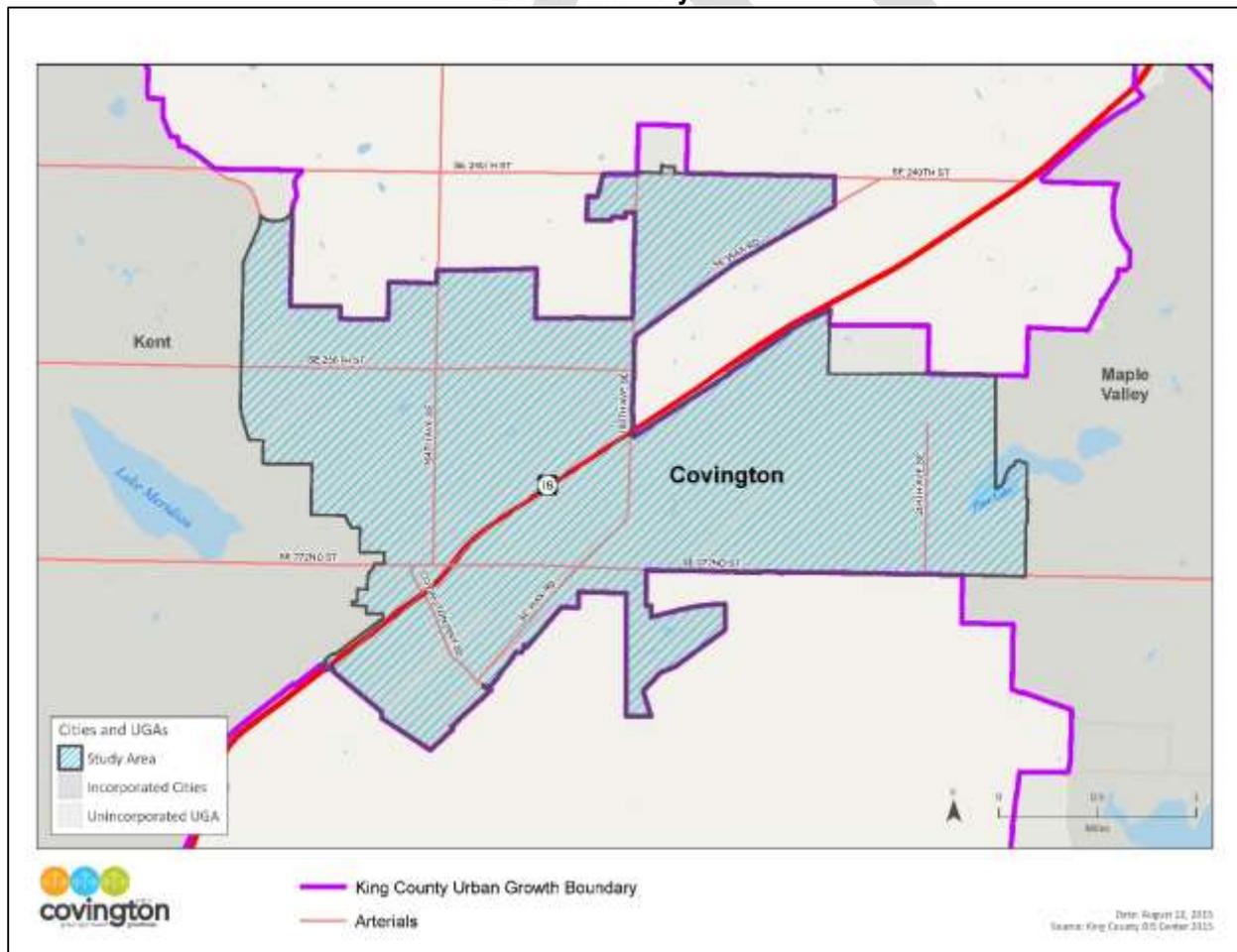
For each required element, GMA requires an inventory of conditions. This Existing Conditions Report presents current built and natural environment conditions for land use, housing, transportation, economic development, natural environment, capital facilities and utilities, parks, recreation, and open space, and shorelines. This Existing Conditions Report is intended to provide a base of information to support the preparation of the Covington Comprehensive Plan and associated State Environmental Policy Act (SEPA) review documents. This information has been revised as the Comprehensive Plan Update progresses through a public review process in 2015. Additional information about the project can be found at the City's project website: <http://www.covingtonwa.gov/update2015/>.

1.2 STUDY AREA

The study area for the Comprehensive Plan Update is the City limits and assigned Potential Annexation Areas in the King County Urban Growth Area (UGA). The study area for the Comprehensive Plan Update is depicted on Exhibit 1-1 and includes the following:

- The Covington city limits comprising 6.55 square miles or 4,190 gross acres or 3,320 parcel acres.
- Within the UGA, there are two Potential Annexation Areas (PAAs) areas assigned to the City. The Tahoma High School lies to the north on 36.8 acres, and a portion of the Lakepointe Urban Village lies to the northeast on 75.6 acres.

Exhibit 1-1. Study Area



Source: King County GIS Center, 2015

2.0 LAND USE

2.1 OVERVIEW

This chapter of the Existing Conditions Report provides information about land use patterns and trends in Covington, including existing land uses, adopted land use plans, zoning, and growth targets. This inventory relies primarily on information from the City of Covington and the King County Assessor. Also presented are population, housing, and job estimates by the Washington State Office of Financial Management (OFM), American Community Survey (ACS), and Employment Security Department (ESD). Growth targets are presented based on the Countywide Planning Policies for King County.

2.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

Washington State Growth Management Act

The Washington State Growth Management Act (GMA) contains 13 broad planning goals (Revised Code of Washington [RCW] 36.70A.020) to guide local jurisdictions in determining their vision for the future and in developing plans, regulations, programs and budgets to implement that vision. The 13 planning goals are summarized below:

- Guide growth in urban areas
- Reduce sprawl
- Encourage an efficient multimodal transportation system
- Encourage a variety of housing types including affordable housing
- Promote economic development
- Recognize property rights
- Ensure timely and fair permit procedures
- Protect agricultural, forest, and mineral lands
- Retain and enhance open space, protect habitat, and develop parks and recreation facilities
- Protect the environment
- Ensure adequate public facilities and services
- Encourage historic preservation
- Foster citizen participation

A fourteenth goal of GMA consists of the goals and policies of the Shoreline Management Act (SMA) as set forth in RCW 90.58.020.

The most relevant goals for the City's land use plans include: focusing growth in urban areas where services existing, reducing sprawl, promoting housing and economic development activities while protecting the environment.

The land use element is a central part of the Comprehensive Plan and the implementation of GMA goals. GMA requirements for land use elements include:

RCW 36.70A.070 (1) A land use element designating the proposed general distribution and general location and extent of the uses of land, where appropriate, for agriculture, timber production, housing, commerce, industry, recreation, open spaces, general aviation airports, public utilities, public facilities, and other land uses. The land use element shall include population densities, building intensities, and estimates of future population growth. The land use element shall provide for protection of the quality and quantity of groundwater used for public water supplies. Wherever possible, the land use element

should consider utilizing urban planning approaches that promote physical activity. Where applicable, the land use element shall review drainage, flooding, and storm water run-off in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state, including Puget Sound or waters entering Puget Sound.

The Land Use Element in Covington’s Comprehensive Plan will provide for a distribution of land use designed to meet local City visions and needs for residential, employment, recreation, public facilities and other land uses, as well as accommodate the City’s share of growth allocated to it by King County through the Countywide Planning Policies.

VISION 2040

In coordination with its member jurisdictions, the Puget Sound Regional Council (PSRC) developed VISION 2040 to provide a regional framework for growth and serve as multi-county planning policies for the purposes of GMA.

Covington is designated as a “Small City”, described as:

The region’s 46 smaller cities and towns ... are expected to remain relatively small for the long term. Their locally designated city or town centers provide local job, service, cultural, and housing areas for their communities. These central places should be identified in local comprehensive plans, and become priority areas for future investments and growth at the local level. The Regional Growth Strategy envisions a moderate role for most of these cities in accommodating growth.

Though Covington is designated as a Small City it has grown consistently, even during the Great Recession, and has become a hub for retail, medical services, and other services in southeast King County.

Countywide Planning Policies

Comprehensive Plans for all jurisdictions in King County are to be guided by Countywide Planning Policies (CPPs) established per the GMA. The 2012 updated CPPs were ratified by the requisite number of jurisdictions representing a certain percentage of the county population. The CPPs establish housing and job targets for cities and unincorporated King County. Growth is directed into urban growth areas (UGAs) such as cities and potential annexation areas. CPPs also are focused around a centers concept similar to VISION 2040.

2.3 HISTORY

Prior to European settlement, the Stkamish, Smulkamis, and Skopamish people inhabited the Covington area; eventually these tribes, together with other tribes along the White and Green Rivers, were resettled on the Muckleshoot Reservation, named for the prairie on which the reservation was established. ((Kershner, 2013); (Muckleshoot Indian Tribe, 2015))

Covington was originally known for lumber mills on Jenkins and Soos Creeks, and a place where irrigated berry farms and dairies were successful. As with other places in King County, following World War II, the community grew from a rural farming community into a suburb. ((Kershner, 2013))

In 1992, Covington was designated as an Urban Activity Center by King County. Eventually the community advocated for incorporation and Covington became a full-fledged city in 1997.

2.4 EXISTING LAND USES

Covington’s current land use pattern is dominated by single family residential, parks and schools, and commercial uses. Vacant land is sizable though some of it is the subject of pending residential and commercial permit activity. See Exhibit 2-1 and Exhibit 2-2 for parcel acres and Exhibit 2-3 for a map.

Exhibit 2-1. Existing Land Use Categories and Parcel Acres

Category	Parcel Acres
Civic/Institutional/Religious	100
Public and Utility	179
Commercial	206
Industrial	8
Multifamily Residential	15
Private Open Space	134
Public Parks, Recreational Facilities and Schools	432
Resource	131
Singe Family Residential	1,708
Vacant	408
Total	3,320

Source: King County Assessor, 2015; City of Covington, 2015

Note: This exhibit sums parcel acres by current land use activities, and does not include public rights of way.

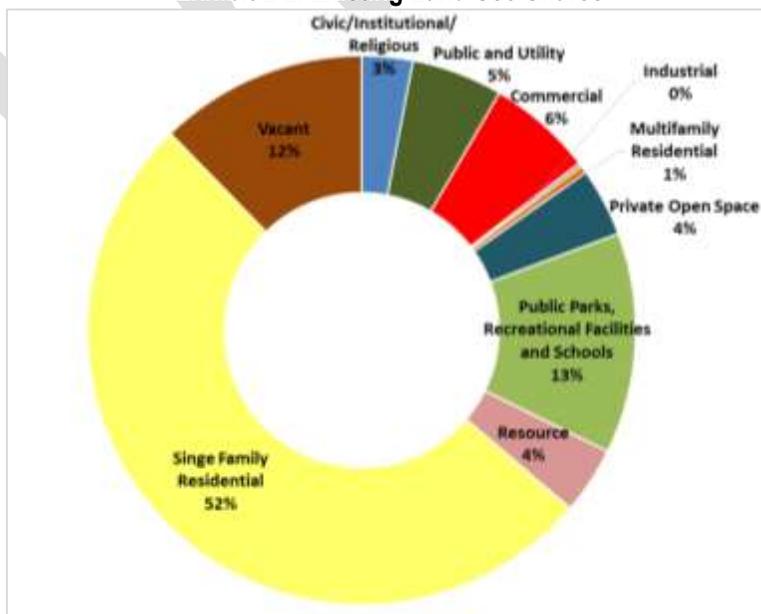


Soos Creek Trail, Studio Cascade 2014

Example Home, John L Scott 2015

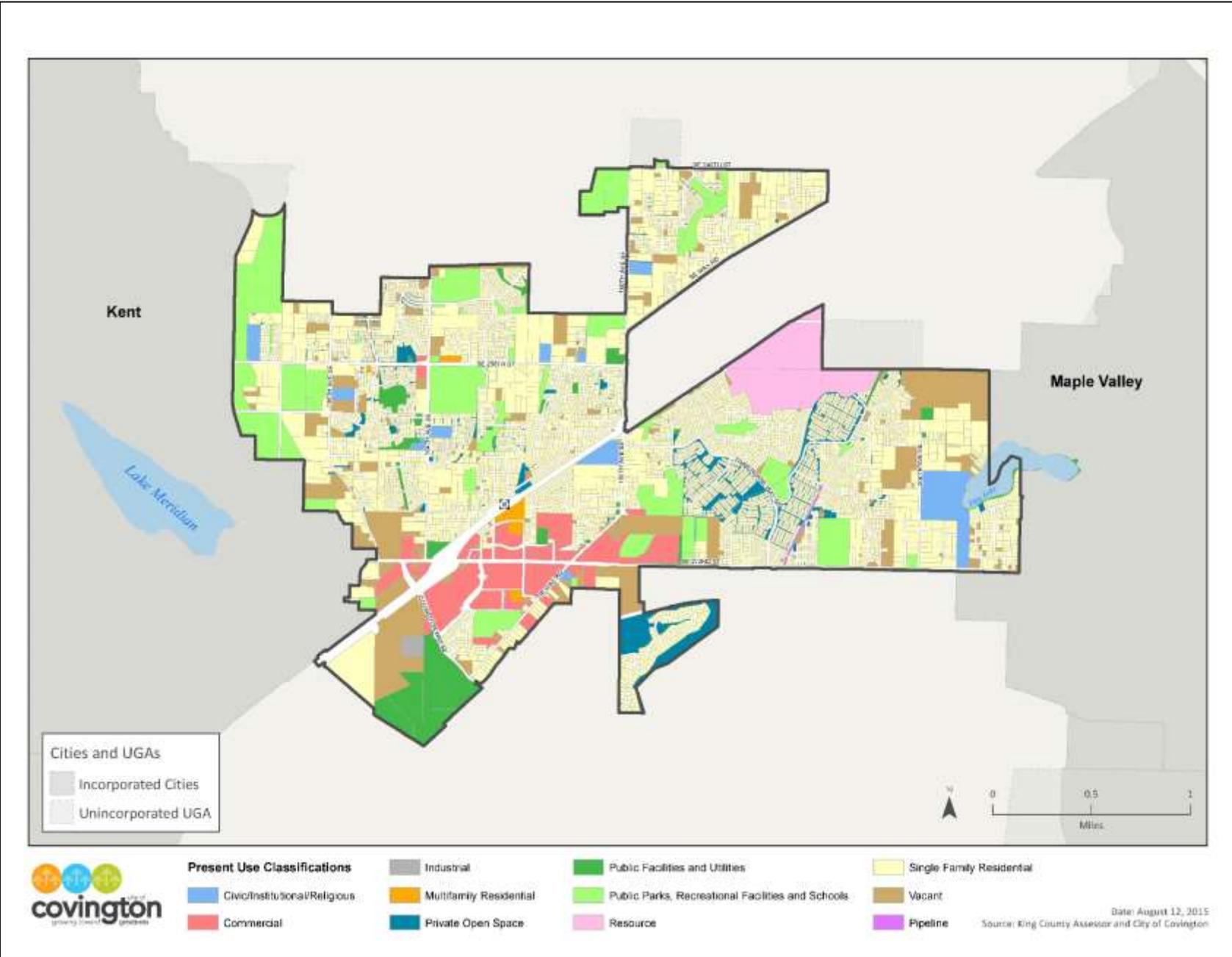
Commercial Areas, Studio Cascade 2014

Exhibit 2-2. Existing Land Use Shares



Source: King County Assessor, 2015; City of Covington, 2015

Exhibit 2-3. Existing Land Use Map



Source: King County GIS Center, 2015; City of Covington, 2015

2.5 EXISTING LAND USE DESIGNATIONS

City Limits and Potential Annexation Areas

A comprehensive plan under GMA is a generalized coordinated land use policy statement (RCW 36.70A.030 (4)); the land use plan and its accommodation of planned growth is central to the comprehensive plan.

Future land use designations provided in the Comprehensive Plan as of 2014 are listed below in Exhibit 2-4 and shown in Exhibit 2-5.

Exhibit 2-4. Current (2014) Comprehensive Plan Land Use Designations: Parcel Acres in City Limits

Land-Use Category	Parcel Acres	% of Total
Single Family: Low, Medium, High	1,882	56.3%
Multifamily	20	0.6%
Downtown (Commercial)	414	12.4%
Neighborhood Commercial	6	0.2%
Community Commercial	4	0.1%
Lakepointe Urban Village	217	6.5%
Industrial	0	0.0%
Public Use	203	6.1%
Public Utility	107	3.2%
Urban Separator	343	10.3%
Open Space	147	4.4%
Total	3,343	100%

Source: City of Covington 2014

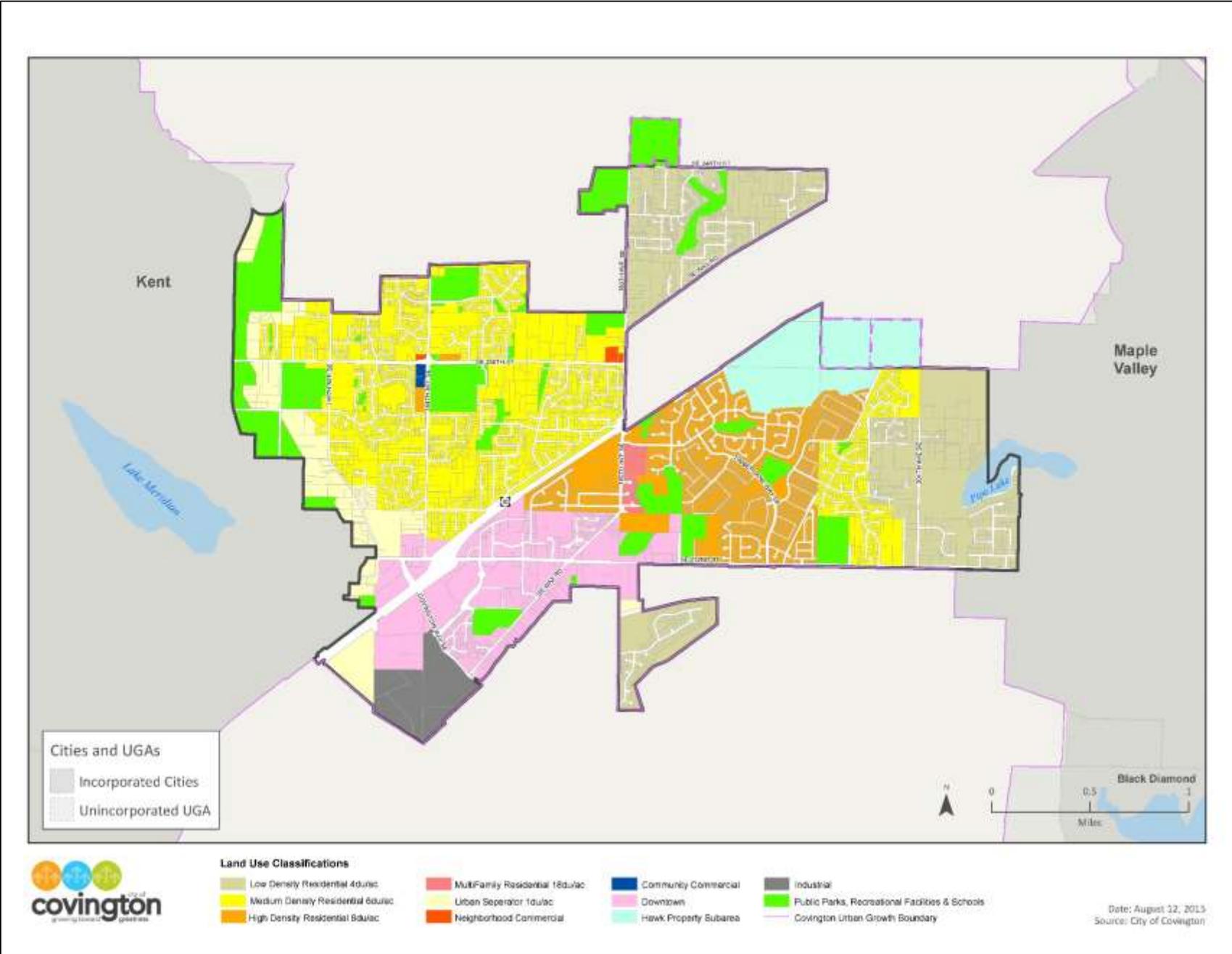
The planned pattern of land use recognizes the pattern of existing uses – single family residential, commercial, public lands and open space predominate. The central features of the Future Land Use Plan – and the main areas of transformation – are Covington’s downtown and the Lakepointe Urban Village, both planned for mixed-uses as further described below.

The City is updating its Future Land Use Map in its 2015 Update to recognize more consistently public, parks, and utilities uses. The City also intends to designate lands in its Potential Annexation Areas (PAAs) on the Future Land Use Map. There are two areas assigned as PAAs:

- The City adopted a subarea plan in 2014 applying the Lakepointe Urban Village designation and implementing zoning to the Lakeside Mine undergoing reclamation, including 75.6 acres in the PAA.
- The Tahoma High School site represents 36.8 acres in the PAA. The present Tahoma High School will become a middle school. A new high school is under construction outside of the Covington planning area.

See the Comprehensive Plan Update under separate cover for a revised Future Land Use Map.

Exhibit 2-5. Current 2014 Comprehensive Plan: Future Land Use Map



Source: City of Covington 2014

Downtown and Town Center

Covington’s downtown area is presently in a low rise development pattern with commercial shopping centers predominating. See Exhibit 2-6.

Exhibit 2-6. Covington Town Center Vicinity Aerial and Photos



Source: Google Earth, 2015



Source: commercial-development.com, 2015



Source: Studio Cascade 2014



Source: Studio Cascade 2014

In 2009, Covington completed a Downtown Plan and zoning study to set a new course and vision for the community. The 2009 Downtown Plan has been updated with the 2015 Town Center proposal. The plan addresses core economic development and land use goals:

- Identify a new town center site
- Make strategic town center investments
- Improve vehicular linkages
- Develop a parking study
- Provide greater pedestrian connections
- Establish new street and building design standards

- Consider and support Covington as a regional transportation focal point

The proposed land use pattern is based on a core surrounded by several areas of focus:

The future downtown area should consist of a central Town Center Focus Area developed around a central civic plaza and open space, a new City Hall and/or other community facilities, and a public parking facility/transit center. Surrounding this Town Center core should be other Mixed Commercial and/or General Commercial focus areas permitting a wide variety of retail, residential, office, service, and public uses. Surrounding the retail, residential, office, service and public uses should be a less intensive Mixed Housing and Office focus area with a variety of housing and office uses at various levels of density and height. These four inter-related but discreet land use focus areas are described below. They are (a) Town Center; (b) Mixed Commercial; (c) Mixed Housing and Office; and (d) General Commercial.

Downtown Element, 2014

The vision is to create a dynamic Town Center that includes retail, office, residential and communal gathering spaces, and provides for development-friendly zoning and transportation requirements as well as improved surrounding areas. See Exhibit 2-7 for the Town Center Plan.

Exhibit 2-7. Covington Town Center Plan



Source: City of Covington, 2009

Lakepointe Urban Village



Lakepointe Mine Site

Source: The Watershed Company 2013

The Lakepointe Urban Village (formerly known as the Hawk Property) encompasses approximately 212 acres southeast of SR 18 in the northern portion of the city. The Lakepointe Urban Village primarily consists of the former Lakeside gravel mine, an asphalt batch plant, vacant land, and a highway interchange. Resource extraction operations at the mine site have ceased, and reclamation is in progress. Approximately 132 acres of this area lies within the City’s corporate limits; the remainder (75.6acres) lies within one of the City’s assigned PAAs. At the time of writing this existing conditions report the City was processing an annexation application for the 75.6acres within the Lakepointe Urban Village with an initial zoning of R-6 consistent with the Subarea Plan that would be

rezoned as part of a site wide rezone to locate zoning districts consistent with the intent of the Subarea Plan and concept zoning map. See Exhibit 2-8.

The community vision for the subarea is as a mixed-use village secondary to the Town Center:

The vision ... is the creation of an Urban Village at Covington's northern gateway that provides a mix of commercial development focused on regional uses and a variety of housing types. This village would provide regional shopping and employment opportunities for residents of both Covington and neighboring communities, as well as new housing opportunities for the Covington community. In addition to commercial and residential development, the village would offer public recreational amenities, such as parks, natural open space, a pond, and bicycle and pedestrian trails that link to the regional trail system. The ...Subarea, while providing both economic and lifestyle benefits would be a secondary center within Covington, providing an experience that is distinct from Covington's town center, not competing with it.

Until the Lakepointe Urban Village is annexed to the City of Covington, King County plans and zoning apply to this PAA. The County has designated the property for Mineral use and provided similar zoning:

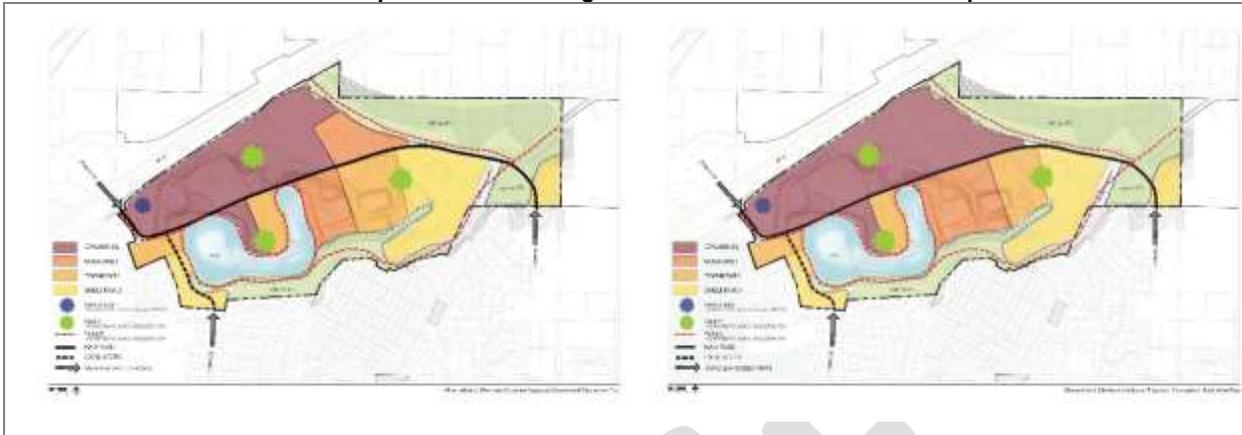
King County Comprehensive Plan – Mining

Policy R-680 of the King County Comprehensive Plan states that the Mining designation shall be applied to areas with a history of being designated for mineral extraction uses in earlier versions of the County's comprehensive plan. Policy R-681 supports designation of additional sites as Mining only following a site-specific environmental study and rezone to the Mineral zoning district.

King County Zoning – M-P

Chapter 21A.04.050 of the King County Code regulated mineral resource lands in the Covington area prior to the City's incorporation in 1996, and the County's zoning language was incorporated verbatim into the City's zoning ordinance, quoted above. In addition to the development regulations associated with the Mineral zone, the portion of the subarea under King County jurisdiction is also subject to site-specific conditions, denoted by the zoning designation's "P" suffix. These conditions pertain specifically to the property's use for gravel extraction and processing and include requirements for annual grading permits, coordination with the Department of Public Works on haul routes, limits on hours of operation and noise levels, and limits on the location of excavation or tree removal (Ordinance 3494, adopted 1997).

Exhibit 2-8. Lakepointe Urban Village Minimum and Maximum Concept Plans



Source: City of Covington, 2014

2.6 EXISTING ZONING

Zoning districts implement the 2014 Covington Future Land Use Map, as shown in Exhibit 2-9 below.

Exhibit 2-9. 2014 Future Land-Use Designations & Corresponding Zoning Districts

Land Use Designation	Zoning District
Urban Separator	US(R-1) Urban Separator
Single Family Residential (<i>Low, Medium, High</i>)	
Low Density Residential	R-4 Residential 4 Units Per Acre
Medium Density Residential	R-6 Residential 6 Units Per Acre
High Density Residential	R-8 Residential 8 Units Per Acre
Neighborhood Commercial	NC Neighborhood Commercial
Community Commercial	CC Community Commercial
Downtown (Commercial)	DN Downtown Commercial
Town Center	TC Town Center
Mixed Commercial	MC Mixed Commercial
Mixed Housing/ Office	MHO Mixed Housing/ Office
General Commercial	GC General Commercial
Multifamily Residential	R-18 Residential 18 Units Per Acre
Lakepointe Urban Village	<p><i>Pending a rezone consistent with Lakepointe Urban Village Subarea Plan, the Mineral zone applies on an interim basis. Future zoning consistent with approved Lakepointe Urban Village (formerly Hawk Property) Subarea Plan Ord 1-14 includes the following:</i></p> <p><i>R-6 Residential 6 Units Per Acre</i></p> <p><i>R-12 Residential 12 units per acre</i></p> <p><i>MR Mixed Residential</i></p> <p><i>RCMU Regional Commercial Mixed-Use</i></p>
Industrial (<i>Not Mapped in 2014</i>)	I Industrial
Mineral	M Mineral
Public Utility	<i>All underlying zones</i>

Land Use Designation	Zoning District
Open Space / Public Facility	PF Public Facility
Public Use	All underlying zones

Source: City of Covington, 2014; BERK, 2015

2.7 CURRENT AND FUTURE POPULATION, HOUSING, AND JOBS

Covington is a community of 18,520 persons in 2015, estimated to grow nearly 50% to approximately 27,645 persons by 2035. See Exhibit 2-10. Currently, there are approximately 6,374 dwellings (OFM 2015) and most are occupied with 5,957 households (ACS 2013). Based on a market demand study (BERK and Associates, 2012), it is anticipated that there will be 3,920 added dwellings. This will result in a total of 9,826 households and 10,294 dwellings by 2035.

The City has a solid base of jobs, largely retail and service oriented, equaling 4,753 (ESD 2013). See Exhibit 2-10. Based on a market analysis (BERK and Associates, 2012) the City could add over 1.6 million square feet of commercial space by 2035. This would support over 3,700 jobs. That would mean a total of 8,459 jobs by 2035.

Exhibit 2-10. Estimated Population, Housing, and Jobs: 2015 and 2035



Note: * Households and Jobs are 2013 estimates.

Source: ACS 2013; OFM, 2015; ESD, 2013

The City is required to accommodate its fair share of growth in its Comprehensive Plan. The City received a housing and job growth target adopted in the King County Countywide Planning Policies: 2006-2031. This target was updated to 2012-2031 in the King County Buildable Lands Report. Since Comprehensive Plans are required to address a 20-year period from 2015-2035 the target was extended in a straight-line method following guidance from an Interjurisdictional Team of planning directors. (Interjurisdictional Staff Team, 2013)

The City has grown continuously even through the Great Recession and has already made significant progress towards its growth targets, especially jobs. A buildable lands analysis, including a market demand study, was conducted in 2014 and updated in 2015 and shows that the City can more than accommodate the growth target it was given by King County (King County, 2014); (BERK Consulting, 2014) updated 2015). See Exhibit 2-11 and Exhibit 2-12.

Exhibit 2-11. Housing Targets and Capacity: 2012-2035

Targets and Capacity	Number
Housing Growth Target (2006-2031)	1,470
Permits 2006-2012 (issued/finaled)	- 163
Remaining Target 2012-2031	= 1,307
Extended Target 2031-2035	+ 235
Remaining Target 2012-2035	= 1,542
Pending Development 2012, updated 2015	+ 785
Hawk Property Capacity	+ 1,500
Parcel Capacity 2012, updated 2015	+ 2,164
Total Capacity	= 4,449
Capacity Surplus (Deficit) versus Target	2,907

Note: King County considers permits issued in its calculation of remaining growth target, and not permits both issued and finaled. The County subtracted 374 dwelling permits leaving a smaller target 2012-2031 - 1,096 units instead of 1,307 above. BERK Consulting has used permits issued and finaled as the time period overlaps the Great Recession. Not all permits were implemented. This alternative approach is similar to the City of Seattle's approach.

Source: City of Covington, 2015; BERK, 2015

Exhibit 2-12. Employment Targets and Capacity: 2012-2035

Targets and Capacity	Number
Employment Growth Target (2006-2031)	1,320
Job Change 2006-2012	- 1,148
Remaining Target 2012-2031	= 172
Extended Target 2031-2035	+ 211
Remaining Target 2012-2035	= 383
Pending Development 2012, updated 2015	+ 514
Hawk Property Capacity	+ 1,889
Parcel Capacity 2012, updated 2015	+ 2,093
Total Capacity	= 4,496
Capacity Surplus (Deficit) versus Target	4,113

Note: Consistent with the King County Buildable Lands Report, this table presents the remaining target 2012-2031 based on actual job change from 2006-2012 rather than estimating jobs based on permits.

Source: City of Covington, 2015; BERK, 2015

The City has more than adequate capacity to meet its growth targets as illustrated in Exhibit 2-13.

Exhibit 2-13. Covington Growth Targets, Market Demand, Capacity



Source: BERK, 2015

2.8 SURROUNDING LAND USES

Covington is bounded by the City of Kent on the west, Maple Valley on the east, and rural King County to the north and south. The city's western boundary is characterized by the Soos Creek trail and parkland. Along north, and south city boundaries are low density single family residential.

The City's southern boundary includes utility, commercial, and residential uses abutting rural residential lands. To the north in the vicinity of Tahoma High School is also the 160 acre Tahoma National Cemetery, established in 1993 and opened in 1997.

Further south in rural designated King County is the Crest Airpark, The airport is located 1 mile from SR 18 and SR 516. Single engine craft number 327 and multi-engine planes number 5. The airport is privately owned but in the public airport system of the state. Total annual operations as of July 2014 were 113,850. The runway is 3,288 feet long and 40 feet wide. The airport lies at 472 ft. above sea level. Based on State information, the airport has full ownership of the runway protection zone. It is unlikely that development in Covington would affect this airport's operation but the City will notify the Washington State Department of Transportation Aviation division through the Comprehensive Plan Update process. (Washington State Department of Transportation, 2015))

2.9 SUMMARY OF CONDITIONS AND TRENDS

Covington is predominately residential in character, with a low-rise suburban commercial corridor. While retaining strong residential neighborhoods oriented around parks and schools, Covington has defined two centers for future growth. First, shopping centers along SE 272nd Street would transform into the community's pedestrian oriented, mid-rise, mixed-use Town Center. Second, a reclaimed mine along SR 18 would become an urban village with both large format retail and mixed-use residential apartments, townhomes, and single family dwellings along a network of water, recreation, open space and trail features. Covington's quality of life will continue to attract residents over the next 20 years – by 2035,

housing would increase by 65% accommodating a population increase by 50%. Likewise, commercial retail and service enterprises would increase through 2035 offering adding 78% more jobs.

Draft

3.0 HOUSING

3.1 OVERVIEW

This chapter of the Existing Conditions Report is designed to fulfill the housing needs assessment both required by GMA and the Countywide Planning Policies. It describes current and projected household and housing stock characteristics in support of the Housing Element. Particular topics include housing variety, affordability, special needs populations, growth targets, land capacity, and jobs-housing balance.

Data Sources

This inventory is based on data from the American Community Survey, US Census, State of Washington Office of Financial Management, and Puget Sound Regional Council.

The American Community Survey (ACS) is a nationwide survey designed to provide communities with a more frequent set of data to inform how communities are changing. The ACS replaced the decennial census long form in 2010 and thereafter by collecting long-form type information throughout the decade rather than only once every 10 years.

Questionnaires are mailed to a sample of addresses to obtain information about households and the people living in them.

The ACS produces demographic, social, housing and economic estimates in the form of 1-year and 5-year estimates based on population thresholds (3-year estimates have recently been suspended). The strength of the ACS is in estimating population and housing characteristics. It produces estimates for small areas, including census tracts and population subgroups.

Although the ACS produces population, demographic and housing unit estimates, the Census Bureau's population estimates program produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns, and estimates of housing units for states and counties.

For 2010 and other decades, the Decennial Census provides the official counts of population and housing units.

The State of Washington Office of Financial Management (OFM) provides annual population and housing counts as April 1st for counties and cities across Washington State. Data from OFM as of 2010 has since been corrected and is reflected in this Existing Conditions Report.

The Puget Sound Regional Council (PSRC) provides regional, county, and local population, housing, and employment growth estimates as well as building permit, subsidized housing, and other data. Data are available for King, Kitsap, Pierce, and Snohomish Counties.

3.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

State goals and Countywide Planning Policies guide the City's housing element as summarized below.

Washington State Growth Management Act

The Growth Management Act (GMA) housing goal is to:

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. (RCW 36.70A.020 (4))

The goal addresses housing variety, affordability, and preservation.

The housing element is a required section of a Comprehensive Plan, and is to contain an inventory and analysis as well as goals and policies:

RCW 36.70A.070(2) A housing element ensuring the vitality and character of established residential neighborhoods that: (a) Includes an inventory and analysis of existing and projected housing needs that identifies the number of housing units necessary to manage projected growth; (b) includes a statement of goals, policies, objectives, and mandatory provisions for the preservation, improvement, and development of housing, including single family residences; (c) identifies 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 (d) makes adequate provisions for existing and projected needs of all economic segments of the community.

The GMA requires that each county and its cities plan to accommodate the growth that is projected over the next 20 years. In King County, the county and its cities collaboratively decided how to allocate the 20-year projection. See Chapter 2 and section 3.5 for additional information on targets.

King County Countywide Planning Policies

There are several King County Countywide Planning Policies that address affordable housing and that have guided this assessment of housing conditions:

- **H-1** Address the countywide need for housing affordable to households with moderate, low and very-low incomes, including those with special needs. The countywide need for housing by percentage of Area Median Income (AMI) is:
 - 50-80% of AMI (moderate) 16% of total housing supply
 - 30-50% of AMI (low) 12% of total housing supply
 - 30% and below AMI (very-low) 12% of total housing supply
- **H-2** Address the need for housing affordable to households at less than 30% AMI (very low income), recognizing that this is where the greatest need exists, and addressing this need will require funding, policies and collaborative actions by all jurisdictions working individually and collectively.
- **H-3** Conduct an inventory and analysis of existing and projected housing needs of all economic and demographic segments of the population in each jurisdiction. The analysis and inventory shall include:
 - a. Characteristics of the existing housing stock, including supply, affordability and diversity of housing types;
 - b. Characteristics of populations, including projected growth and demographic change;
 - c. The housing needs of very-low, low, and moderate-income households; and
 - d. The housing needs of special needs populations.

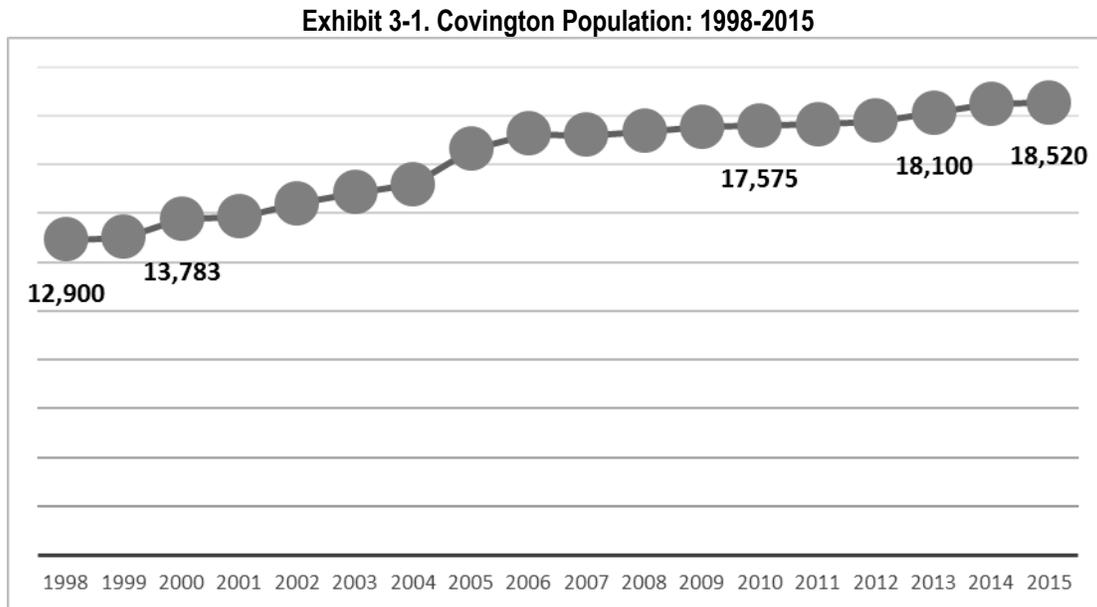
Policy H-1 addresses the need for Covington to work collectively with King County and other cities in meeting the countywide need for housing for households earning very low, low, and moderate incomes. Policy H-2 indicates Covington should both individually and collectively work towards meeting the housing needs of those earning very low incomes. Policy H-3 identifies the need for an assessment of existing and projected housing needs including those with special needs such as senior citizens, those with disabilities, the homeless and others.

3.3 POPULATION AND HOUSEHOLD CHARACTERISTICS

This section examines Covington’s population and household characteristics, describing who lives in Covington through population, age distribution, and special needs (e.g. disability, homelessness, and other conditions).

Population and Age

Covington has grown since its incorporation on August 31, 1997 from a population of 12,900 to 18,520 in 2015. See Exhibit 3-1. This growth reflects Covington’s attraction as a residential community with middle income homebuyer opportunities.



Source: OFM, 2015

The City experienced a compound annual growth rate of 2.5% between 2000 and 2010, slowing to 0.5% between 2010 and 2015. Covington’s growth rate was higher than King County’s compound annual growth rate of 1.4% between 2000 and 2010, and is similar now to the County’s rate of 0.6% between 2010 and 2015. See Exhibit 3-2.

Exhibit 3-2. Population Growth (2000 – 2015)

	Population Estimates			Compound Annual Growth Rates (CAGR)	
	2000	2010	2015	2000-2010 CAGR	2010-2015 CAGR
Covington	13,783	17,575	18,520	2.5%	0.5%
King County	1,685,600	1,931,249	2,052,800	1.4%	0.6%

Source: OFM, 2015

Based on the 2009-2013 ACS, persons under 20 years old comprise 31% of Covington’s total population. The senior population (ages 65 years and over) was 6.1% of the total population. Exhibit 3-3 compares Covington to King County averages using broad age categories.

Exhibit 3-3. Population by Age: 2013

	Covington	King County
Under 20 years	31.0%	23.6%
20-64 Years	63.0%	65.0%
65 Years and Over	6.1%	11.2%

Source: 2009-2013 ACS 5-Year Estimates

- Covington has a larger percentage of population under 20 years old (31%) than King County overall (23.6%).
- Covington's senior population (6.1%) is almost half of King County's percentage of the population that is 65 years and over (11.2%).

Despite a large share of children, Covington's median age is rising. See Exhibit 3-4.

Exhibit 3-4. Median Age: 2000, 2010 and 2013

Year	Covington	King County
2000	32.1	35.7
2010	34.7	37.1
2013	36.1	37.1

Source: U.S Census 2000 and 2010, 2009-2013 ACS 5-Year Estimates

- The median age for both Covington and King County has increased since 2000.

Household Size

Household size is another indicator of the community's composition and can be related to dwelling sizes found in the community. See Exhibit 3-5 and Exhibit 3-6 for household size and Section 3.4 for more discussion on dwelling sizes.

Exhibit 3-5. Average Household and Family Sizes: 2013

	Covington	King County
Average Household Size	3.02	2.42
Average Family Size	3.31	3.07

Source: 2009-2013 ACS 5-Year Estimates

- According to 2009-2013 ACS estimates, Covington has an average household size¹ of 3.02 persons and an average family size² of 3.31 persons, larger compared to King County's rates. This reflects that Covington has a greater population of children than the county as a whole.

¹ According to US Census definitions, the term "size of household" includes all the people occupying a housing unit.

² According to US Census definitions, "Size of family" includes the family householder and all other people in the living quarters who are related to the householder by birth, marriage, or adoption. (Source: <http://www.census.gov/cps/about/cpsdef.html>)

Exhibit 3-6. Household Size: Covington and King County: 2013

	Covington		King County	
1-person household	806	14%	250,756	31%
2-person household	1,813	30%	266,866	33%
3-person household	1,391	23%	121,961	15%
4-person household	1,157	19%	102,961	13%
5-person household	450	8%	37,824	5%
6-person household	232	4%	13,913	2%
7-or-more person household	108	2%	8,325	1%
Total	5,957	100%	802,606	100%

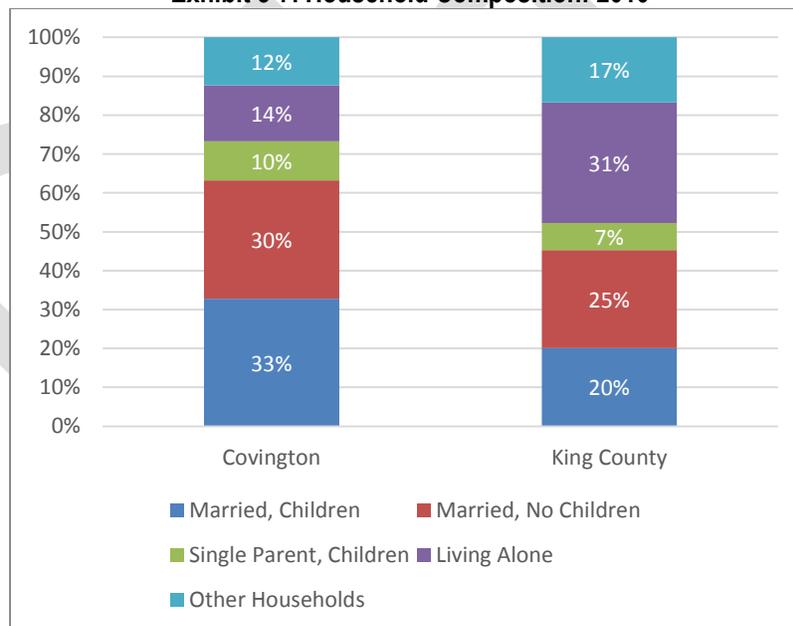
Source: 2009-2013 ACS 5-Year Estimates

- Covington has a smaller percentage of 1-person households (14%) than King County households (31%).
- Covington has larger percentages of households with three persons and larger compared to King County. This reflects that Covington has a greater population of children than the county as a whole.

Household Composition

Understanding the composition of households can inform the types of dwellings needed or services that may be useful. Households may consist of 1 or more persons, with or without children. See Exhibit 3-7. Single-person households may have preferences for attached housing whereas families with children may need or desire detached dwellings. Each household may participate in different recreation programs.

Exhibit 3-7. Household Composition: 2010



Source: U.S. Census, 2010

- The majority of Covington households that are married, 33% with children in the household and 30% with no children living with them. This is higher than King County, where married with children households make up 20% of all households and married without children make up 25%.
- While King County has a large percentage of households living alone at 31%, Covington has only 14%. It may be that young Covington residents move away from the City and potentially return as married householders seeking homes in proximity to quality schools and recreation areas.

Special Needs Population

Population Living with a Disability

Exhibit 3-8 and Exhibit 3-9 compare Covington and King County populations living with a disability.

Exhibit 3-8. Covington and King County Population Living with a Disability: 2013

	Covington	King County
Total Civilian non-institutionalized population	17,967	1,961,461
With Disability	1,578	182,987
Percent of Total	8.8%	9.3%

Source: 2009-2013 ACS 5-Year Estimates

- Approximately 8.8% of the total population in Covington has a disability. This is similar to King County at 9.3%.

Exhibit 3-9. Covington's Estimated Population Living with a Disability: 2013

	Covington		King County	
	Total	With a disability	Percent with a disability	Percent with a disability
Total Civilian non-institutionalized population	17,967	1578	8.8%	9.3%
Population 5 to 17 years	3,922	350	8.9%	3.8%
With a hearing difficulty		0	0.0%	0.6%
With a vision difficulty		174	4.4%	0.6%
With a cognitive difficulty		334	8.5%	2.8%
With an ambulatory difficulty		0	0.0%	0.4%
With a self-care difficulty		0	0.0%	0.8%
Population 18 to 64 years	11,871	851	7.2%	7.2%
With a hearing difficulty		280	2.4%	1.6%
With a vision difficulty		210	1.8%	1.2%
With a cognitive difficulty		263	2.2%	3.3%
With an ambulatory difficulty		384	3.2%	3.2%
With a self-care difficulty		122	1.0%	1.3%
With an independent living difficulty		282	2.4%	2.5%
Population 65 years and over	1,093	377	34.5%	34.5%
With a hearing difficulty		208	19.0%	14.7%
With a vision difficulty		100	9.1%	6.3%
With a cognitive difficulty		161	14.7%	9.7%
With an ambulatory difficulty		207	18.9%	21.1%
With a self-care difficulty		147	13.4%	8.8%
With an independent living difficulty		197	18.0%	16.1%

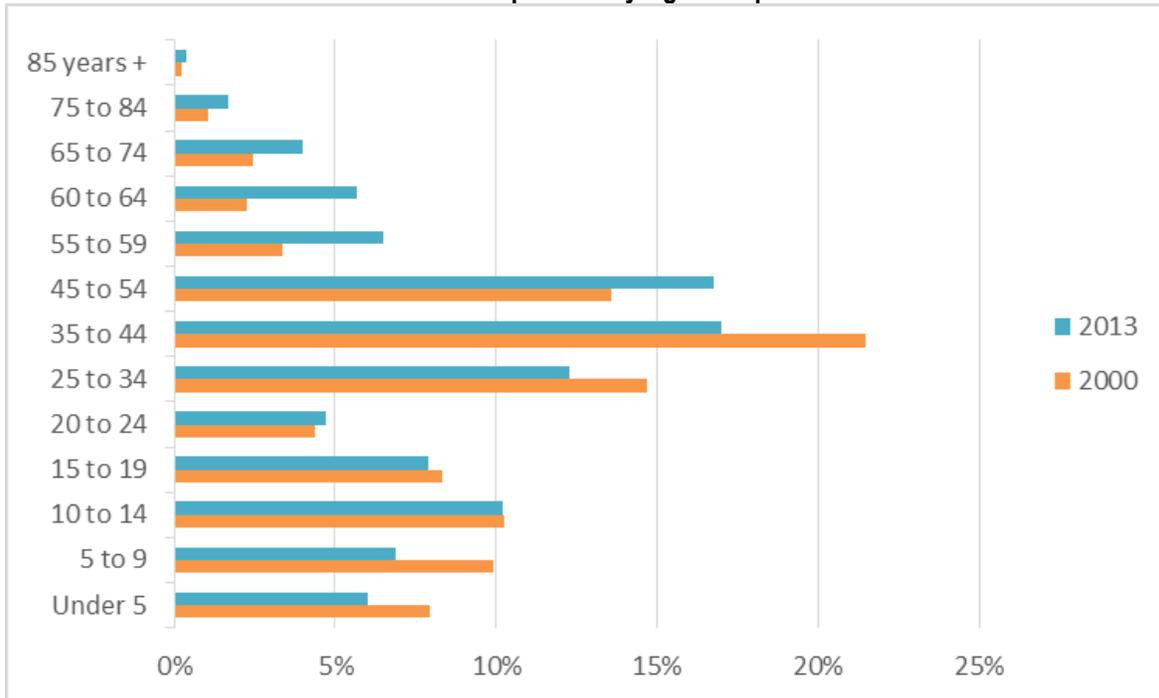
Source: 2009-2013 ACS 5-Year Estimates

- The most prevalent disabilities include ambulatory difficulty (difficulty walking around) at 3.2% and independent living difficulty at 2.4%. This is similar to King County.
- About 34.5% of adults 65 years and older have a disability, with many having hearing, ambulatory, cognitive, self-care and independent living difficulty.

Senior Population

Senior citizens as a share of the population has been increasing since the year 2000. See Exhibit 3-10.

Exhibit 3-10. Share of Population by Age Group: 2000 and 2013



Source: US Census 2000 and 2009-2013 ACS 5-Year Estimates

Exhibit 3-11. Broad Age Category Distributions: 2013

Age	Covington		King County
	Population	Percent	Percent
Under 5 years	1,080	6.0%	6.2%
5 to 9 years	1,243	6.9%	5.9%
10 to 14 years	1,837	10.2%	5.6%
15 to 19 years	1,423	7.9%	5.9%
20 to 24 years	846	4.7%	6.7%
25 to 29 years	1,297	7.2%	8.3%
30 to 34 years	918	5.1%	8.1%
35 to 39 years	1,225	6.8%	7.6%
40 to 44 years	1,837	10.2%	7.6%
45 to 49 years	1,351	7.5%	7.4%
50 to 54 years	1,675	9.3%	7.3%
55 to 59 years	1,171	6.5%	6.6%
60 to 64 years	1,026	5.7%	5.4%
65 to 69 years	504	2.8%	3.7%
70 to 74 years	216	1.2%	2.5%
75 to 79 years	162	0.9%	1.8%
80 to 84 years	144	0.8%	1.5%
85 years and over	72	0.4%	1.7%
Total Population	18,008	100%	100%

Source: 2009-2013 ACS 5-Year Estimates

- While the percentage of seniors in Covington’s overall population is currently about 6%, less than King County’s, in the future, the senior population is expected to grow as baby boomers retire. There will be a large portion of the population that will be 65 and over by 2035. Currently, 45-59 year olds make up about 23% of Covington’s total population. See Exhibit 3-11. This is almost four times the current senior population.

Single Parent Population

According to Exhibit 3-7, 10% of Covington’s households are single parent households. This is slightly higher than King County (7%).

Group Quarters

According to 2009-2013 ACS 5-Year Estimates, there was a total of 18 persons living in group quarters. This will likely increase as assisted living and other care facilities increase in the community.

Homeless Population

Estimating the total homeless population is difficult. In King County, a 2015 one-night analysis of homelessness in King County found that 3,772 persons were outside between the hours of 2 and 5 am on a January night. This is a 21% increase from 2014. However, there are no specific homeless counts for Covington. According to the Covington Human Services Master Plan developed in 2012 and updated in 2015, data from the Police Chief shows that the number of homeless encampments has decreased since 2009.

According to recent data from the Police Chief, the number of homeless encampments has decreased since 2009. This decrease is due in part to increased policing of areas known to house homeless, stricter pan-handling regulations passed by the City Council, and commercial development that has eliminated the dense woods behind Fred Meyer and Safeway. The police work with the Human Services Specialist to provide these folks with a list of resources that are available for them. We also know that the Storehouse Food Bank provides food boxes to several chronically homeless individuals at designated drop-off locations.

According to the Covington Human Services Master Plan, Covington is also served by the Auburn Youth Resources (AYR) which provides assistance and referrals to help runaway and homeless youth to move them off the streets and into shelters or permanent housing.

In 2010 the Auburn Youth Resources (AYR) Street Outreach Team began to provide mobile street outreach services to Covington and Maple Valley. The mobile street outreach is designed to locate and make contact with homeless youth and young adults (ages 14-24) in South King County. The goal of the program is to provide assistance and referrals in an attempt to transition runaway and homeless young people off the streets and into safe and stable housing. The most basic services are focused toward meeting the emergent needs of the homeless with the distribution of emergency survival food packs, hygiene packs and winter clothing. The outreach team also provides referral services and transportation for homeless young people seeking food, medical services, mental health services, educational and vocational needs, substance abuse services as well as shelter and permanent housing.

Domestic Violence

The City also provides housing service for victims of domestic violence. Because domestic violence shelters have a turn-away rate of 29 women for every one they receive, the Covington Domestic Violence Task

Force (CDVTF) developed a Safe Nights program with local motels to provide up to a one-week stay, allowing the victim and their children a safe place to live while working with a domestic violence advocate to find shelter or transitional housing. Funds for this service are raised through Purple Light Nights campaign, which sells purple lights for display in homes and businesses to raise awareness of domestic violence, as well as street tree sponsorships.

- Since 2006, a total of 89 Safe Night clients have been given assistance for temporary and transitional housing costs.
- The number of clients varies year to year. In 2011, Covington domestic violence services assisted 11 clients.

3.4 HOUSING SUPPLY AND CONDITION

This section examines Covington’s housing supply, including the amount, type, and condition of units.

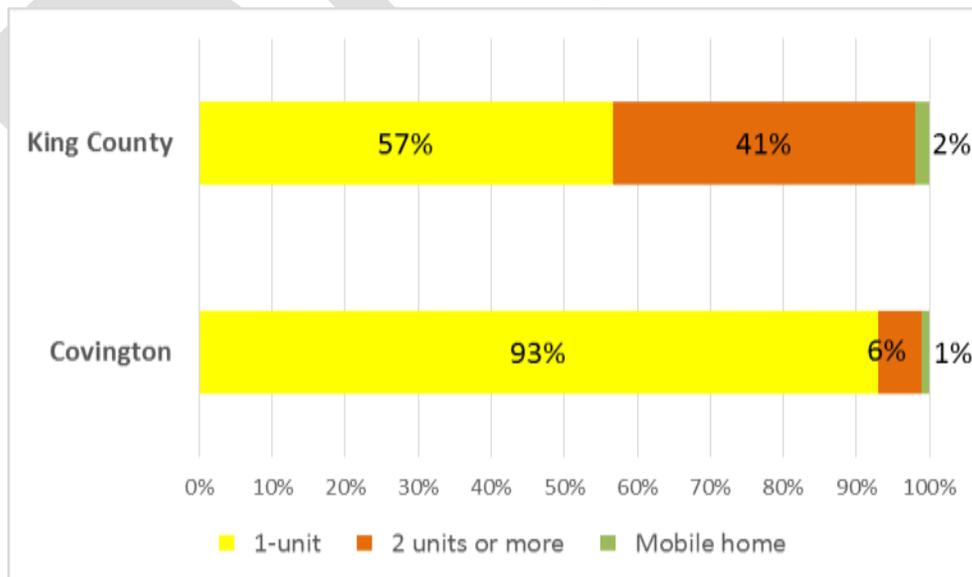
Housing Units

The housing inventory changes daily as new units are built and older units are demolished and replaced. OFM estimates current housing units for all Washington jurisdictions over time.

Exhibit 3-12 and Exhibit 3-13 present the recent proportion of housing units by unit type. The types include:

- One unit,
- Two or more units, and
- Mobile homes and special units. Special units include permanent residents living in travel trailers, RVs, boats, sheds, tents, and others.

Exhibit 3-12. Housing Unit Types and Share: 2015



Source: OFM, April 2015

Note: An updated report issued by OFM is reflected in the data.

Exhibit 3-13. Housing Unit Estimates 2010-2015

	2010	2011	2012	2013	2014	2015	Change 2010-2015
Covington Total	6,081	6,107	6,153	6,261	6,368	6,374	293
One Unit	5,637	5,663	5,705	5,813	5,919	5,926	289
Two Units or more	370	370	374	374	374	374	4
Mobile Homes and Specials	74	74	74	74	75	74	-
King County Total	851,261	857,119	862,042	869,811	879,744	893,275	42,014
One Unit	494,228	496,324	498,347	500,799	503,575	506,079	11,851
Two Units or more	338,645	342,495	345,413	350,737	357,883	369,051	30,406
Mobile Homes and Specials	18,388	18,300	18,282	18,275	18,286	18,145	(243)

Source: OFM, April 2015

Note: An updated report issued by OFM is reflected in the data correcting 2010 data and carrying it through to 2015.

- The overwhelming majority of housing units in Covington are single family units (one unit), making up 92% of all housing units. This is significantly higher than King County, with 57% of all housing units as single family. Only 1% are mobile homes or special units. See Exhibit 3-12 and Exhibit 3-13.
- Covington has very little multifamily (2 units or more) housing units, comprising only 7% of all housing units. This is much lower than King County, where multifamily units account for 41% of all housing units.
- New housing growth in Covington has been concentrated in single family units since 2010, and there has been very little new multifamily units built from 2010 to 2015. There was a net increase of 263 one unit structures compared to just 4 two or more unit types. This is different than the trend in King County overall, which built 11,851 new single family units and 30,406 new multifamily units – more than double the amount of single family units.

Housing options have begun to evolve based on City land use plans and zoning. Covington permits accessory dwelling units, cottages, and a variety of multifamily development styles in the High Density Residential, Multifamily Residential and Mixed Housing land use designations. Within the Town Center and Lakepointe Urban Village, mixed-use and other high-density residential development types are encouraged. Recent developments demonstrating this evolution to a variety of housing types are described below.

Accessory Dwelling Units. Between 2006 and 2012, the City approved two accessory units in the R-4 zone.

Townhomes. Covington also has one townhouse-style condominium development, Shiloh Village, constructed in 2001, with 18 attached units located in two story buildings in the High Density Land Use designation. Shiloh Village is located near the intersection of SE 256th St and 164th Ave SE.

Apartments. As of 2014, Covington has only two multifamily apartment developments. The Allegro Apartments project has 200 units, and the age-restricted Covington Place Senior Apartments project has 121 units. Both of these multifamily developments are located in the downtown area.

- The Allegro Apartments, built in 2002, are a low-rise three-story development with a mix of one, two and three-bedroom units they report a low vacancy rate.
- The Covington Place Senior Apartments is a five-story structure with one and two-bedroom units. Built in 2008, Covington Place typically has a waiting list for new residents.

Multifamily Development in Permit Review. In 2015, the City issued permits for a 170 market rate apartments in the Downtown, Mixed Commercial zone. The Cedar Springs Apartments includes 172 market rate units and is expected to be ready for occupancy in the summer of 2016.

In 2012, Covington adopted provisions, consistent with state law, to allow for property tax exemptions for affordable multifamily development, meeting specific requirements in the downtown, to encourage high-quality, mixed-use, affordable housing in the heart of the city close to a variety of commercial and personal services. As of 2015, Covington has three multifamily structures under construction in the Town Center, expected to be ready for occupancy in 2016, which are utilizing this property tax exemption provisions. Two of these buildings, Polaris at Covington, are six-story multifamily structures with a total of 200 units of affordable family apartments above ground-level commercial space and parking. The third building, Affinity at Covington, contains 156 units of age-restricted housing for seniors.

These 200 units of new affordable family apartments will include a mix of one to three-bedroom apartments. All of these units will be restricted for 12 years from date they are ready for occupancy to households earning 60% of the King County Area Median Income (AMI), as adjusted for household size. This means the County will delay collecting property taxes on the residential improvement portion of the development until the 12-year tax exemption period ends. The senior housing contains a mix of studio, one and two-bedroom units, and the majority of the senior housing will be market rate. However, 32 units will be restricted for 12 years from the date they are ready for occupancy to seniors with low or moderate incomes less than 80% of King County’s AMI.

Housing Size

Covington’s housing size pattern reflects its household composition to date. See Exhibit 3-14.

Exhibit 3-14. Number of Bedrooms: 2013

Bedrooms	Covington		King County
	Housing Units	Percent	Percent
No bedroom	0	0.0%	3.9%
1 bedroom	195	3.0%	17.2%
2 bedrooms	221	3.4%	26.1%
3 bedrooms	3,759	58.2%	29.2%
4 bedrooms	1,893	29.3%	17.9%
5 or more bedrooms	392	6.1%	5.7%
Total Housing Units	6,460	100%	100%

Source: 2009-2013 ACS 5-Year Estimates

- The majority of Covington’s housing types have 3-4 bedrooms, accounting for 87.5% of all housing units. This is nearly twice as much as King County (47%). The majority of King County’s housing types have 2-3 bedrooms, accounting for 55.3% of all housing units.
- Covington has 2,282 large units (having 4 or more bedrooms). They account for a third of all housing units (35.4%).
- Covington has no studios (no bedrooms) and few 1 bedroom units (3%) compared to King County, where studios and 1 bedroom units make up about 20% of all housing units.

Housing Tenure

Exhibit 3-15. Housing Tenure: 2013

	Covington		King County
	Occupied Units	Percent	Percent
Owner-occupied	5,056	84.9%	58.2%
Renter-occupied	901	15.1%	41.8%
Occupied Housing Units	5,957	100%	100%

Source: 2009-2013 ACS 5-Year Estimates

- Covington has a higher percentage of owner-occupied units (84.9%) than King County (58.2%). See Exhibit 3-15. It has a much lower percentage of renter-occupied units (15.1%) compared to King County (41.8%).

Vacancy Rates

Vacancy rates are a leading indicator of a housing market, which can indicate future changes in housing prices and demand.

Exhibit 3-16. Vacancy Rates: 2013

Unit Type	Covington	King County
	Percent	Percent
Homeowner	3.1%	1.7%
Renter	10.0%	4.3%
Overall	13.1%	6.0%

Source: 2009-2013 ACS 5-Year Estimates

- Covington's overall vacancy rate is 13.1%, which is twice as high as King County (6%). See Exhibit 3-16.
- Covington's vacancy rate for owner-occupied units is 3.1%, slightly higher than King County.
- As of 2013, Covington's renter vacancy rate is 10%, over twice that of King County's at 4.3%. In general, a vacancy rate of 5% or less for rental units is considered a very tight market that will put upward pressure on prices and potentially stimulate investment for new housing stock. The higher rental vacancy rate in Covington in 2013 may not reflect current conditions as described for the Allegro apartments and Covington Place development that have low vacancies.

Housing Units by Year Built

Across all housing units, age of structure is the single most important physical attribute in predicting the degree of structure quality. National research has demonstrated a negative correlation between the age of a unit and its condition. Generally speaking, a residential unit will have a functional life of around 40 years, at which point additional investments will be needed to maintain structural adequacy.

Exhibit 3-17 and Exhibit 3-18 present the age of housing units for all residential structures in Covington.

- Covington's housing construction appears to have occurred to a between 1960 to present day. As noted in the table below a large percentage has occurred over the last 15 years.

Exhibit 3-17. Residential Housing by Year Built in Covington

	Covington		King County
	Housing Units	Percent	Percent
Built 2010 or later	19	0.3%	0.9%
Built 2000 to 2009	1,728	26.7%	14.8%
Built 1990 to 1999	1,171	18.1%	13.7%
Built 1980 to 1989	1,092	16.9%	15.4%
Built 1970 to 1979	899	13.9%	14.8%
Built 1960 to 1969	1,251	19.4%	12.6%
Built 1950 to 1959	137	2.1%	9.3%
Built 1940 to 1949	45	0.7%	5.8%
Built 1939 or earlier	118	1.8%	12.8%
Total Housing Units	6,460	100%	100%

Source: 2009-2013 ACS 5-Year Estimates

- 27% of housing units in Covington are new (built in 2000 or later). This is higher than King County overall, where 15.7% of housing units are new
- 4.6% of housing units in Covington were built in 1959 or earlier. This is much lower compared to King County overall, where 27.9% of housing units were built in 1959 or earlier.

There are three home repair programs available to the Covington community – one of which the City administers:

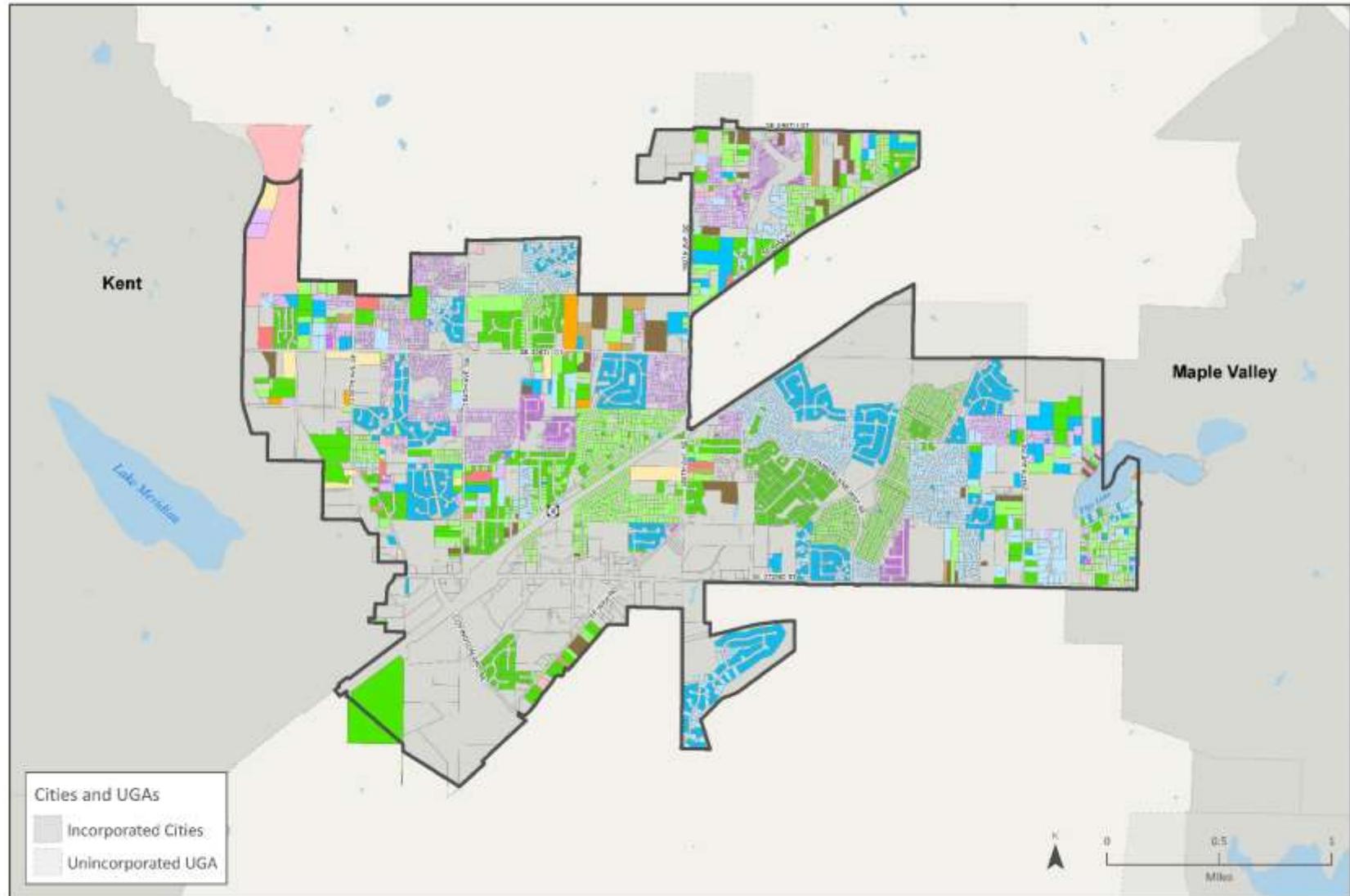
- The Housing Stability Program, administered country-wide through Solid Ground, makes no-interest loans and grants to low-income residents who are in danger of losing their homes either through foreclosure or eviction. The program also offers loans and grants to homeless families to help them obtain permanent housing or move-in rental costs.
- The King County Housing Repair Program provides no-interest deferred loans to low to moderate-income homeowners to make necessary health and safety repairs to their homes. The program also makes loans to landlords for repair of rental housing in exchange for a rent ceiling for up to five years and a requirement that property be rented to low income tenants.
- The City of Covington has been awarded Community Development Block Grant funds in a joint effort with the cities of Des Moines, SeaTac, and Tukwila to manage the Minor Home Repair Program since 2010. This program provides free grant money for the total cost of eligible and necessary minor home repairs. This is a valuable program for low to moderate-income Covington residents who would not have the ability to afford necessary home repairs.

According to the Covington Human Services Master Plan, there were only a few households being served by the Minor Home Repair program since 2010. The Covington Minor Home Repair program provides free grant money (from the King County Community Development Block Grant funds) for the total cost of eligible and necessary minor home repairs. It is a valuable program for low to moderate-income Covington residents who would not have the ability to afford necessary home repairs.

- In 2010, 12 households were served.
- In 2011 17 households were served.
- About 18 households were projected to be served in 2012.

This also indicates that Covington’s housing supply is in good condition.

Exhibit 3-18. Year Built Map: 2015



Date: June 25, 2015
Source: King County Assessor 2015

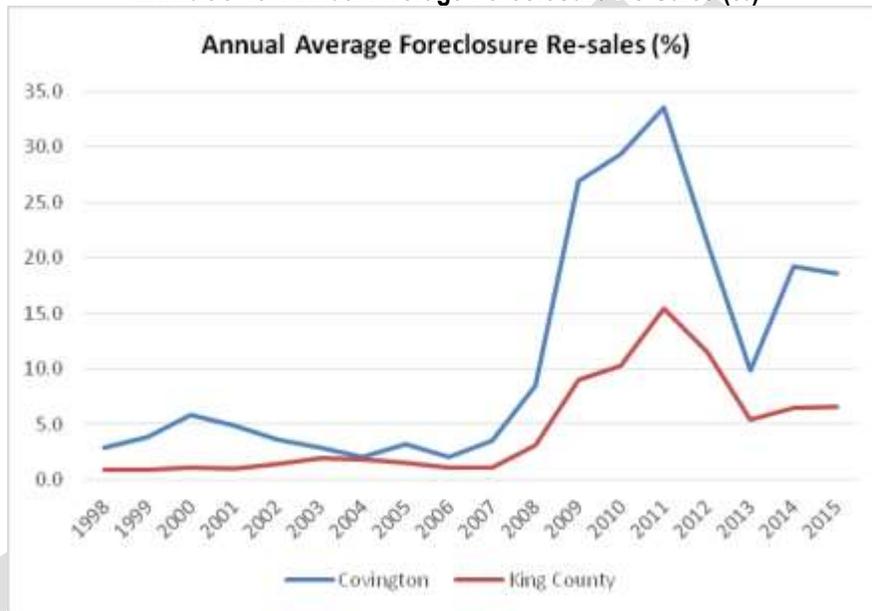
Source: King County GIS Center, 2015

Foreclosures

Foreclosure indicators provide information on the health of the housing market in Covington. Two indicators below are examined:

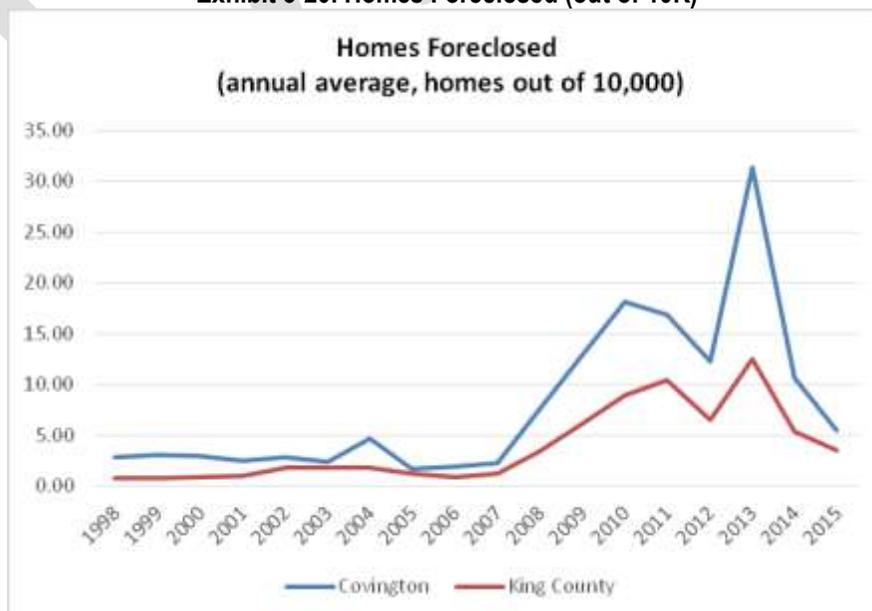
- **Foreclosure re-sales (%)** – The percentage of home sales in a given month where the home was foreclosed upon within the previous 12 months (e.g. sales of bank-owned homes after the bank repossessed a home during a foreclosure). See Exhibit 3-19.
- **Homes foreclosed** – The number of homes per 10,000 that were foreclosed in a given month. A foreclosure is when a homeowner loses their home to their lending institution or it is sold to a third party at an auction. See Exhibit 3-20.

Exhibit 3-19. Annual Average Foreclosure Re-Sales (%)



Source: Zillow.com, 2015

Exhibit 3-20. Homes Foreclosed (out of 10K)



Source: Zillow.com, 2015

- There was a spike in home foreclosures during the Great Recession from 2008 to 2013. See Exhibit 3-19.
- In 2011, 33% of homes for sale were foreclosures. In 2015, 18.6% of homes for sale were foreclosures.
- In 2013, an average of 31 homes out of 10,000 were foreclosed within a given month.
- The foreclosure trends are similar to King County overall, but Covington had a higher percentage of foreclosure re-sales in 2011 (Exhibit 3-19), and a higher ratio of homes foreclosed in 2013 (Exhibit 3-20).

Subsidized Housing

Subsidized housing refers to housing managed by public agencies that received Federal, State, and local funding sources, incentives, and subsidies. According to PSRC, Covington has a total of 121 subsidized housing units as of 2013. See Exhibit 3-21.

Exhibit 3-21. Subsidized Housing in Covington: 2011-2013

	Number Units
Total Units	121
Total Units Affordable to HH < 30% AMI	0
Total Units Affordable to HH 31-50% AMI	37
Total Units Affordable to HH 51-80% AMI	84
Total Units Affordable to HH 81-100% AMI	0

Source: PSRC 2011-2013

- About 30% of the subsidized units are available to those earning 31-50% of the County AMI, and 70% are affordable to those earning 51-80% of the County AMI.
- Based on 2015 housing data for total housing units (see Exhibit 3-13), subsidized units account for just 2% of all housing units.

Amount of Housing Units at Different Price Levels

Cost of Rental Units

Exhibit 3-22. Gross Rent: 2013

	Covington		King County
	Occupied Units	Percent	Percent
Less than \$200	0	0.0%	1.3%
\$200 to \$299	0	0.0%	2.4%
\$300 to \$499	0	0.0%	3.1%
\$500 to \$749	14	1.7%	8.8%
\$750 to \$999	44	5.3%	23.2%
\$1,000 to \$1,499	308	37.3%	35.7%
\$1,500 or more	459	55.6%	25.5%
Occupied Units Paying Rent	825	100%	100%

Source: 2009-2013 ACS 5-Year Estimates

- The majority of rental units in Covington have a monthly gross rent of \$1,500 or more (55%), which is a greater proportion compared to King County (25%).

- Covington does not have many housing units in diverse rental price ranges compared to King County. However, this does not show the rental prices for different unit sizes. According to Exhibit 3-14, Covington has a majority of units with 3 or more bedrooms than King County. Additionally, the average household and family size in Covington is larger than King County overall.

Cost of Homeowner Units

Exhibit 3-23. Monthly Owner Costs (with mortgage): 2013

	Covington		King County
	Housing Units	Percent	Percent
Less than \$300	10	0.2%	0.1%
\$300 to \$499	0	0.0%	0.3%
\$500 to \$699	43	0.9%	1.1%
\$700 to \$999	110	2.4%	3.2%
\$1,000 to \$1,499	650	14.0%	12.7%
\$1,500 to \$1,999	1,288	27.8%	21.4%
\$2,000 or more	2,536	54.7%	61.1%
Housing Units with Mortgage	4,637	100%	100%
Median (dollars)	\$2,086		

Source: 2009-2013 ACS 5-Year Estimates

- The majority of owner-occupied units in Covington have a monthly cost of \$2,000 or more (54.7%), compared to King County (61.1%).
- Covington has more units in the \$1,500 to \$1,999 cost range (27.8%) compared to King County. This may be due to the size and bedrooms of the homes. According to Exhibit 3-14, Covington has a majority of units with 3 or more bedrooms, compared to King County.

Note: Monthly owner costs include real estate taxes, property insurance, utilities, fuel, water, garbage collection, homeowner association fees, mobile home fees, and mortgage.

Overcrowding

HUD defines an overcrowded housing unit as one where there is an average of more than 1 person living per room. Exhibit 3-24 shows the percentage of rental units that are overcrowded in Covington and King County.

Exhibit 3-24. Percentage of Rental Units that are Overcrowded: 2013

	Covington	King County
Total Rental Units	901	335,642
Occupants per room		
0.50 or less	415	204,752
0.51 to 1.00	441	113,457
1.01 to 1.50	45	11,372
1.51 to 2.00	0	4,940
2.01 or more	0	1,121
Number of Overcrowded Units (>1)	45	17,433
Percent of Units that are Overcrowded (>1)	5.0%	5.2%

Source: 2009-2013 ACS 5-Year Estimates

- Covington and King County have a similar percentage of rental units that are overcrowded, approximately 5%. However, the absolute number is low in Covington at 45 units. The few overcrowded units may reflect the larger average household size in Covington.

3.5 HOUSING AFFORDABILITY

This section describes household incomes in Covington, identifies the number of households in different income ranges, analyzes how many households may be cost-burdened, and considers the availability of affordable homes to different income levels.

Household Income

Exhibit 3-25 compares Covington’s and King County’s median household income and the segmentation of household income for Covington and King County. The data reflect income for all households regardless of size.

Exhibit 3-25. Household Income: 2013

Income Range	Covington		King County
	Households	Percent	Percent
Less than \$10,000	96	1.6%	5.7%
\$10,000 to \$14,999	79	1.3%	3.3%
\$15,000 to \$19,999	62	1.0%	3.4%
\$20,000 to \$24,999	141	2.4%	3.8%
\$25,000 to \$29,999	53	0.9%	3.6%
\$30,000 to \$34,999	118	2.0%	4.0%
\$35,000 to \$39,999	98	1.6%	3.6%
\$40,000 to \$44,999	192	3.2%	4.1%
\$45,000 to \$49,999	197	3.3%	3.8%
\$50,000 to \$59,999	379	6.4%	7.0%
\$60,000 to \$74,999	737	12.4%	9.6%
\$75,000 to \$99,999	1,239	20.8%	13.1%
\$100,000 to \$124,999	1,065	17.9%	10.4%
\$125,000 to \$149,999	700	11.8%	7.2%
\$150,000 to \$199,999	508	8.5%	8.3%
\$200,000 or more	293	4.9%	9.1%
Total Households	5,957	100%	100%
Median Income	\$90,280		\$71,811

Source: 2009-2013 ACS 5-Year Estimates

- Covington’s median household income is higher (+26%) than King County’s median household income.
- Covington has a greater percentage of households with incomes between \$60,000 to \$149,000 annually than King County as a whole. King County has a greater percentage of the population with lower incomes than this range as well as a greater percentage of those earning higher incomes than this range.

Estimating Households by Percent of Median Income

To estimate the demand for affordable housing, this section estimates the number of households that belong to each of the Housing Need categories described in Countywide Planning Policies. ACS provides information on the number of households by income in \$5,000 to \$10,000 income ranges, but not the

number of households according to ratios of Area Median Income (AMI). Using the available household income data, this analysis groups households according to affordability income categories. In cases where the income category falls between the income ranges reported by the ACS, the analysis assumes that households are evenly distributed within the ACS's household income range. For example, if there are 5,000 households in the \$20,000 to \$24,999 income range, we assume there are 1,000 households with income between \$20,000 to \$21,000, or 20% of that income range's households. If 30% of the County's median income was \$21,000, to estimate the number of households at or below 30% of median income, the methods includes all households below \$20,000 plus the 1,000 households assumed to earn between \$20,000 and \$21,000.

King County's 2013 median income was \$71,811. Exhibit 3-26 presents the estimated number of households in each income category for King County and Covington. In the most recent Countywide Planning Polices, King County estimates that in 2012, 12% of households in King County have incomes at 30% or below AMI. However, looking at the 2013 ACS 5-year estimates (the best available estimates with least margin of error) it estimates approximately 14% of all households having an income under 30% AMI in King County.

Exhibit 3-26. Household Estimates by Percentage Median Income, 2013 dollars.

	Income Ranges		Rounded (1,000s)		Estimated Households			
	Low	High	Low	High	Covington		King County	
Under 30%	\$0	\$21,543	\$0	\$22,000	293	4.9%	111,717	13.9%
30 - 50%	\$21,543	\$35,906	\$22,000	\$36,000	276	4.6%	85,203	10.6%
50 - 80%	\$35,906	\$57,449	\$36,000	\$57,000	732	12.3%	125,560	15.6%
80 - 100%	\$57,449	\$71,811	\$57,000	\$72,000	704	11.8%	78,632	9.8%
100 - 120%	\$71,811	\$86,173	\$72,000	\$86,000	692	11.6%	61,779	7.7%
120% or Over	\$86,173	\$1,000,001	\$86,000	\$1,000,001	3,260	54.7%	339,715	42.3%
Total					5,957	100%	802,606	100%

Source: Figure based on 2009-2013 ACS 5-Year Estimates; BERK, 2015. Figures may not add to total due to rounding.

- **Under 30% AMI (HUD Extremely Low / County Very Low).** Covington has a lower percentage of the population earning less than 30% of the AMI at 4.9% versus 13.9% for King County.
- **Between 30-50% AMI (HUD Very Low / County Low Income Housing Need).** Covington also has a lower proportion of households earning 30-50% of the County AMI than King County at 4.6% versus 10.6%.
- **Between 50-80% AMI (HUD Low / County Moderate Income Housing Need).** Covington's proportion of moderate income households at 50-80% of the King County AMI is likewise lower than the County proportion at 12.3% versus 15.6%.
- **Above 80% AMI.** At 80-100% and 100-120% of AMI, generally middle incomes, Covington is higher than King County. At over 120% AMI, Covington has a much higher percent of households in high income levels compared to King County as a whole at 54.7% versus 42.3%.

While Covington has a lower percentage of households 80% and below the County AMI, there is still a number of residents in need. As described below, there are households with cost burdens. Also, according to the Covington Human Services Master Plan, the number of residents using the food bank and number of children who are income-eligible for the free or reduced lunch program is growing (Human Services Master Plan, 2015 page 19).

Housing Cost Burden

The traditional measure of affordability recommends that housing cost no more than 30% of household income. This benchmark is used by the U.S. Department of Housing and Urban Development (HUD) in many of their housing programs and policies on affordable housing. The figures below look at several indicators on housing cost burden to better understand housing needs in Covington.

Housing cost burden is defined according to the HUD CHAS data definition: Cost burden is when monthly housing costs (including utilities) exceed 30% of monthly income. Please see http://www.huduser.org/portal/datasets/cp/CHAS/bg_chas.html.

Housing and Transportation Costs

While the traditional measure of housing cost burden looks at the cost of housing alone, transportation costs can also be factored into housing affordability. Transportation costs are usually a household's second largest expense, making location an important part of the affordability equation. Exhibit 3-27 shows the means of transportation for workers over 16 years old in Covington and King County. In Exhibit 3-28, the Center for Neighborhood Technology's H+T Index aims to provide a more complete measure of affordability by taking into account the cost of housing combined with the cost of transportation. These indicators provide a sense of how Covington compares to King County overall in terms of convenience of and preference for modes of transportation and commute burden.

Exhibit 3-27. Means of Transportation to Work: 2013

	Covington		King County	
Total Workers 16 and Older	9,187		1,011,388	
Car, truck, or van - drove alone:	7,122	78%	659,536	65%
Car, truck, or van - carpooled:	1,149	13%	103,744	10%
Public transportation (excluding taxicab):	371	4%	115,633	11%
Walked:	76	1%	45,946	5%
Taxicab, motorcycle, bicycle, or other means:	58	1%	26,619	3%
Worked at home:	411	4%	59,910	6%

2009-2013 ACS 5-Year Estimates

- Covington has a higher percentage (78%) of workers over 16 years old who travel to work via car, truck or van alone compared to King County overall (65%).
- Covington has a lower percentage of workers who use public transportation (4%) compared to King County overall (11%).

Exhibit 3-28. Housing + Transportation Costs as Percent of Income

	Covington	King County
Housing	35%	33%
Transportation	21%	18%
Housing + Transportation	56%	51%

Source: Center for Neighborhood Technology, H+T Affordability Index, 2015

Note: Housing Costs are defined by the H+T Affordability Index as follows: Average Monthly Housing Costs are derived directly from the ACS. Median Selected Monthly Owner Costs and Median Gross Rent are averaged and weighted by the ratio of owner- to renter-occupied housing units from the Tenure variable.

- According to the H+T index, Covington households on average spend about 56% of their income on housing and transportation costs combined. This is slightly more than King County households overall, which on average spend about 51% of their income on housing and transportation.

Households and Cost Burden

Another important measure is housing cost burden among households, particularly those of moderate, low, and very low incomes, who spend more than 30% of their income on housing. HUD has created a data set for the purposes of creating a Comprehensive Housing Affordability Strategy that looks at this relationship.

Exhibit 3-29 and Exhibit 3-30 provide data on the number and percentage of households earning less than 80% AMI and spending more than 30% of their income on housing. Those that spend more than 50% are considered severely cost burdened.

Exhibit 3-29. Number of Households earning less than 80% of Area Median Income Who Are Housing Cost Burdened: 2012

Percent of Income Spent on Housing	Covington			King County		
	Owner	Renter	Total	Owner	Renter	Total
Not Cost Burdened (<=30%)	3,245	465	3,710	312,730	179,185	491,915
Cost Burdened (>30% to <=50%)	1,175	215	1,390	95,350	73,330	168,680
Severely Cost Burdened (>50%)	415	200	615	58,685	69,285	127,970
Cost Burden not available	0	0	0	2,265	5,720	7,985
Total	4,835	880	5,715	469,030	327,525	796,555

Source: U.S. Department of Housing and Urban Development, CHAS Data Tool 2008-2012. Note that low-income here is primarily 30, 50, and 80 percent of median income. Cost burden is monthly housing costs (including utilities) exceed 30% of monthly income.

Exhibit 3-30. Percent of Low-Income Households Who Are Housing Cost Burdened: 2012

Percent of Income Spent on Housing	Covington			King County		
	Owner	Renter	Total	Owner	Renter	Total
Not Cost Burdened (<=30%)	67.1%	52.8%	64.9%	66.7%	54.7%	61.8%
Cost Burdened (>30% to <=50%)	24.3%	24.4%	24.3%	20.3%	22.4%	21.2%
Severely Cost Burdened (>50%)	8.6%	22.7%	10.8%	12.5%	21.2%	16.1%
Cost Burden not available	0.0%	0.0%	0.0%	0.5%	1.7%	1.0%
Total	100%	100%	100%	100.0%	100.0%	100.0%

Source: U.S. Department of Housing and Urban Development, CHAS Data Tool 2008-2012.

- The majority of owners (67.1%) and renters (52.8%) in Covington are not housing cost burdened. This is similar to King County overall.
- Covington has a slighter larger percentage of owner and renter households (24.3%) who are cost burdened (earn less than 80% of AMI spend over 30% of their household income on housing costs) versus King County overall (21.2%).
- Covington has a lower percentage of owners (8.6%) who are severely cost burdened (spend more than 50%) than King County overall (12.5%). However, Covington has a slightly higher percentage of renters (22.7%) that are severely cost burdened versus King County (21.2% of low-income renters).

Affordability of Renter Occupied Housing

Breaking out renter occupied housing units according to income levels, households that rent housing in Covington tend to have lower incomes. Exhibit 3-31 compares the number of renter households by housing need category to the number of units being rented at rents affordable to each category. Exhibit

3-31 compares renters (people) with housing rents (unit costs) and does not speak to the housing burden of any particular household or group. Very low income households may be renting at prices much more than they can afford, and median and upper income households may be paying a smaller proportion of their monthly income on rent.

Exhibit 3-31. Covington Renter-Occupied Income and Current Rents: 2013

Ratio to King County AMI \$71,811	Income Ranges		Monthly Housing Budget*		Estimated Renter HHs		Estimated	Gap
	Low	High	Low	High	Count	Percent	Units	over/(under)
Under 30%	\$0	\$21,543	\$0	\$539	128	14%	-	(128)
30 - 50%	\$21,543	\$35,906	\$539	\$898	373	41%	57	(316)
50 - 80%	\$35,906	\$57,449	\$898	\$1,436	395	44%	278	(117)
80 - 100%	\$57,449	\$71,811	\$1,436	\$1,795	5	1%	266	261
100 - 120%	\$71,811	\$86,173	\$1,795	\$2,154	-	0%	169	169
120% or Over	\$86,173		\$2,154		-	0%	55	55
Total					901	100%	825	(76)

*Estimated monthly housing budget based on 30% of monthly gross income.

Source: Figures based on ACS 2009 – 2013 5-year average; BERK Consulting, 2015. Figures may not add to total due to rounding.

The gap analysis shows:

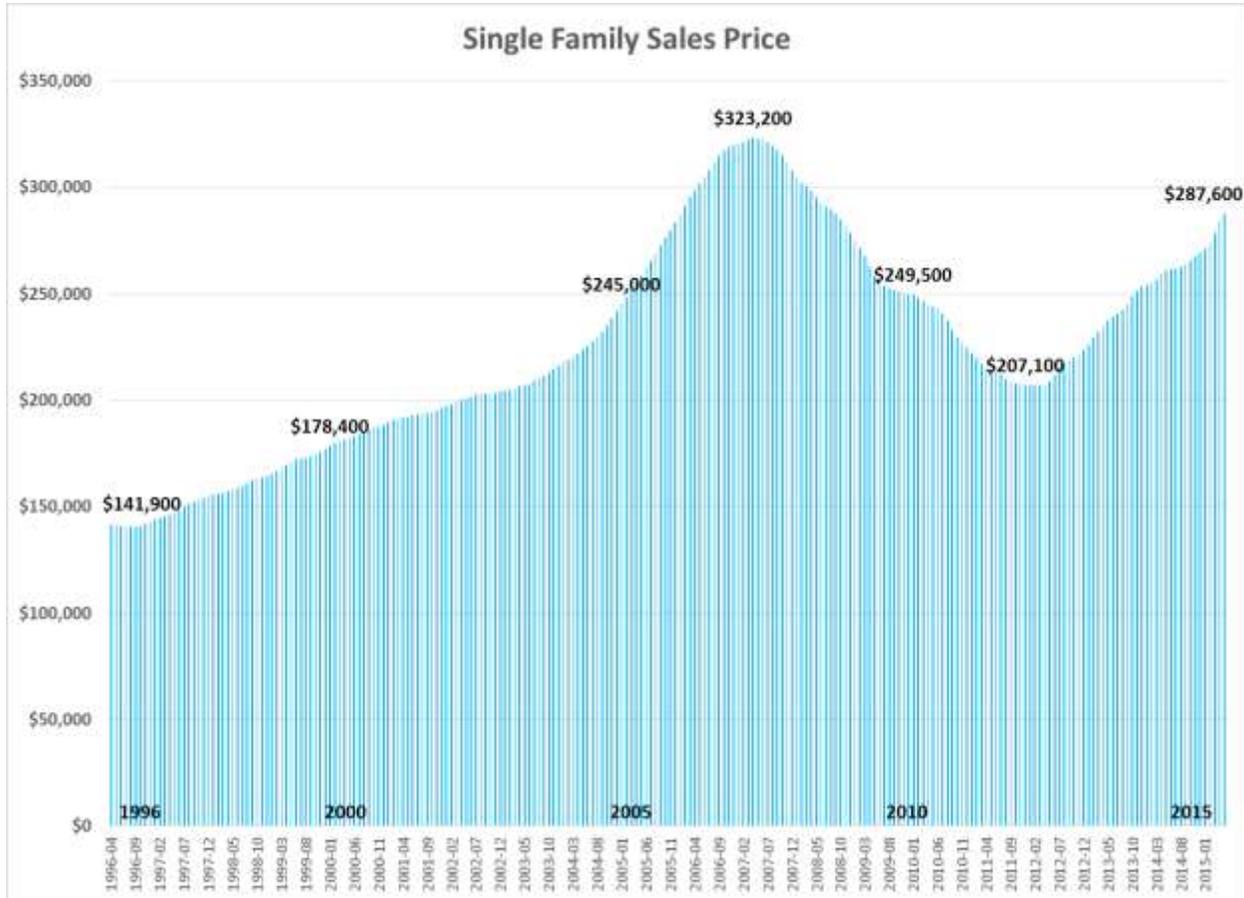
- There are approximately 128 renting households in Covington with incomes under 30% of AMI. There is a gap in housing units affordable to this Housing Need category of 128 units.
- There are approximately 373 renting households in Covington with incomes between 30-50% of AMI. There is a gap in housing units affordable to this Housing Need category of 316 units.
- About 44% of Covington’s renting households can afford rentals in the range of \$898 - \$1,436 per month. In this market bracket, there is a deficit of units (-117). These units are likely occupied by households with lower incomes and are rent burdened, as well as households in higher income brackets who are paying less than 30% of their income on rent.
- Covington has more units with rents affordable to households with annual incomes of \$57,449 to \$71,811 than there are renter households earning those annual incomes (+430). Due to the gap in units available at the extremely low income level, it is likely that many households in the very low-income category (less than \$21,000 annual income) are renting in higher monthly rent ranges. These households would be considered “rent burdened” because they are spending more than 30% of their income on rent. Households in the median income ranges (80 – 120% of AMI) are good candidates for entry-level homeownership housing.

Affordability of Owner Occupied Housing

Home ownership helps create stability in neighborhoods, and has historically been a significant driver of personal and household wealth for individuals and families. A key aspect to addressing a community’s housing needs is to ensure there are opportunities for home ownership for moderate-income levels and first time homebuyers.

Home sales prices increased from 1996 to 2007 and then declined in the Great Recession. Home sales prices began to recover since 2012. See Exhibit 3-32.

Exhibit 3-32. Single Family Home Sales Prices 2006-2015



Source: Zillow.com com, June 2015

A key aspect to addressing a community’s housing needs is to ensure there are opportunities for home ownership for moderate-income levels and first time homebuyers. Exhibit 3-33 shows the distribution of households living in owner occupied housing in Covington and King County by housing need category.

Exhibit 3-33. Household Estimates of Owners by Percent of Median Income

	Income Ranges		Rounded (1,000s) Income Ranges		King County		Covington	
	Low	High	Low	High	Estimated		Estimated	
					HHs	Percent	HHs	Percent
Under 30%	\$0	\$21,543	\$0	\$22,000	29,418	6%	165	3%
30 - 50%	\$21,543	\$35,906	\$22,000	\$36,000	31,880	7%	143	3%
50 - 80%	\$35,906	\$57,449	\$36,000	\$57,000	57,687	12%	516	10%
80 - 100%	\$57,449	\$71,811	\$57,000	\$72,000	43,766	9%	492	10%
100 - 120%	\$71,811	\$86,173	\$72,000	\$86,000	38,653	8%	607	12%
120% or Over	\$86,173		\$86,000		265,560	57%	3,133	62%
Total					466,964	100%	5,056	100%

2009-2013 ACS 5-Year Estimates

- For both Covington and King County, there is owner-occupied housing across all income categories.
- Generally, Covington has more households in the middle and upper income levels that are able to own a home compared to King County.

Housing Growth Targets and Land Capacity

Countywide Planning Policies set growth targets including a net number of housing units. Through a buildable lands analysis the City considers its capacity for growth to ensure targets can be met. The results show the City has more than sufficient capacity to meet its growth target. See Exhibit 3-34.

Exhibit 3-34. Growth Targets and Capacity: 2012-2035

Targets and Capacity		Number
Housing Growth Target (2006-2031)		1,470
Permits 2006-2012 (issued/finaled)	-	163
Remaining Target 2012-2031	=	1,307
Extended Target 2031-2035	+	235
Remaining Target 2012-2035	=	1,542
Pending Development 2012, updated 2015	+	785
Hawk Property Capacity	+	1,500
Parcel Capacity 2012, updated 2015	+	2,164
Total Capacity	=	4,449
Capacity Surplus (Deficit) versus Target		2,907

Source: King County Countywide Planning Policies; BERK, 2012 and 2015

According to King County goals on affordable housing, described in section 2.2 of this chapter, the County as a whole has targets for housing affordable to the following low-income household groups:

- 50-80% of AMI (moderate) 16% of total housing supply
- 30-50% of AMI (low) 12% of total housing supply
- 30% and below AMI (very-low) 12% of total housing supply

Individual jurisdictions do not have to meet these numbers, but they should contribute to these goals at the County scale.

According to the King County Buildable Lands Report, Covington's remaining housing allocation growth for 2012 to 2025 is to add 1,542 additional new housing units.

Housing need percentages applied to the 2035 growth allocation would mean planning to add units affordable at these levels:

- 50-80% of AMI (moderate): approximately 247 units
- 30-50% of AMI (low): approximately 185 housing units
- 30% and below AMI (very-low:) approximately 185 housing units

3.6 HOUSING TRENDS

Continued Housing Demand and Greater Housing Variety

A 2012 BERK analysis for the Northern Gateway estimated housing unit demand. In the high growth scenario it assumed that housing unit growth for each housing type grows at the same rate that it did from 2000 to 2010 and a lower growth scenario assumed less than historic growth. See Exhibit 3-35. Because multifamily uses were historically low in demand, a small share had been predicted in the future and largely included a pipeline development at that time (178 units).

Exhibit 3-35. City of Covington 20-Year Housing Unit Demand Estimates (2012-2035)

Unit Type	Slower Growth	High Growth
	Scenario	Scenario
SF	2,000	3,700
MF	300	230
MH	-10	-10
Total	2,290	3,920

Notes: SF = Single Family, MF=Multifamily, and MH = Mobile Homes

Source: OFM, 2011; BERK, 2012

The Town Center Plan and Lakepointe Urban Village Subarea Plan propose new housing types in Covington, with vertical and horizontal mixed-uses. The City has begun to see interest in mixed-use development. For example, in 2015, a six-story mixed-use development with 200 units of affordable family apartments and ground level commercial space and a six-story senior living building with 156 dwelling units are under construction in the Town Center. The Lakepointe Urban Village Subarea Plan anticipates 1,500 dwellings, mostly multifamily in nature.

If the high growth residential market demand scenario occurs and if the patterns proposed in the Town Center Plan and Lakepointe Urban Village Subarea Plan are implemented, the community’s housing pattern would change from 94% single family units to 75% single family units. See Exhibit 3-36 and Exhibit 3-37. This still shows a dominance of single family uses but allows a greater variety of housing choices.

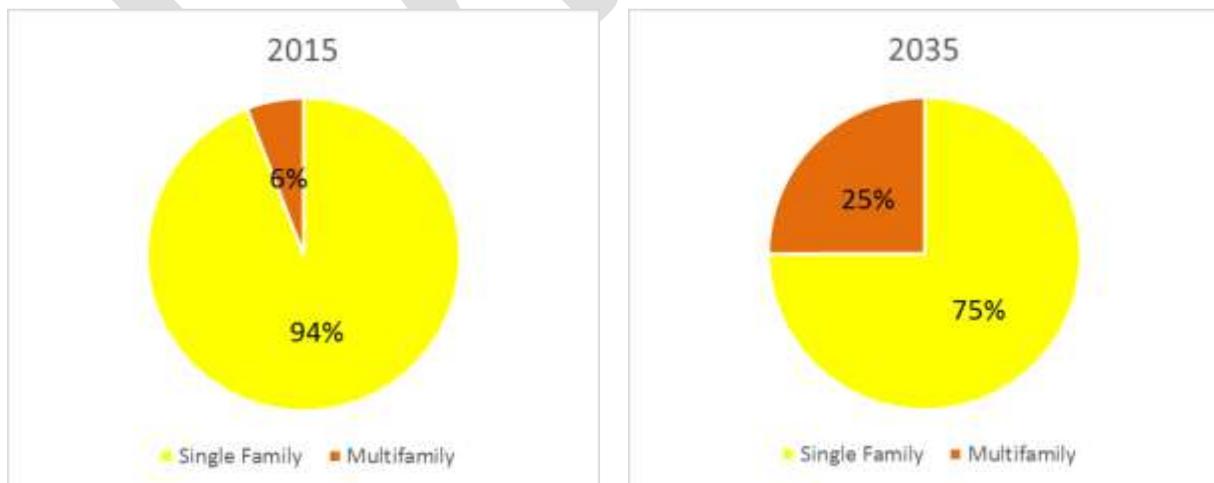
Exhibit 3-36. 2015 and 2035 Residential Dwelling Units

Unit Type	2015 Net Growth	2035	
Single Family	6,000	1,718	7,718
Multifamily	374	2,202	2,576
Total	6,374	3,920	10,294

Note: Single family includes detached dwellings and mobile homes/special units.

Source: OFM 2015, BERK, 2012 and 2015.

Exhibit 3-37. Current and Future Share of Single Family and Multifamily Housing



Source: OFM 2015; BERK, 2012 and 2015

Improving Housing and Jobs Balance

A Jobs/housing balance calculates the number of jobs in a community divided by the number of households in that community. Jobs/household balance ratios give information relevant to likely home-work travel patterns. A community with a greater balance of jobs and housing may reduce vehicle miles traveled as other commute options are more likely available. A low jobs/household ratio indicates a housing-rich “bedroom community,” while a high jobs/housing ratio indicates an employment center.

The current and projected jobs housing balance is shown in Exhibit 3-38 and Exhibit 3-39.

Exhibit 3-38. Households and Jobs in Covington and King County: 2013

	Covington	King County
Total Number of Jobs (PSRC 2013)	4,753	1,183,811
Number of Households (ACS)	5,957	802,606
Jobs: Households Ratio	0.80	1.47

Source: 2009-2013 ACS 5-Year Estimates. PSRC, 2013

- According to 2013 ACS data, there are 5,957 households in Covington. PSRC 2013 data reports there are 4,753 jobs in Covington. The job to household ratio is 0.80.
- King County has 802,606 households and 1,183,811 jobs. The job to household ratio is 1.47.

Exhibit 3-39. Projected Jobs-Housing Balance: 2035

	Covington	King County
Total Number of Jobs 2035	8,459	1,869,025
Number of Households 2035	9,826	1,043,444
Jobs: Households Ratio	0.86	1.79

Note: Assumes percentage of households to housing units consistent with PSRC 2035 projections (98.7%).

Source: BERK, 2015; PSRC Land Use Targets, 2013

- The City could work to reduce the jobs-housing imbalance. In the future a jobs-housing balance is anticipated to improve for the City based on the City’s plans and estimated jobs based on market demand and land capacity. However, based on the City’s current mix of jobs which are more service and retail oriented, it would be difficult to afford market-rate housing. Some options include:
 - Increasing opportunities for workforce housing affordable to those with service careers such as education, emergency services, and others.
 - Attracting family wage jobs would be important for Covington to achieve a greater jobs-housing balance; the Economic Development chapter offers some areas of focus such as regional businesses and professional services.
- The countywide estimate of jobs-housing balance is based on PSRC growth target projections and shows a greater share of jobs to housing in 2035 than 2015, which may mean a continued commute pattern into King County from nearby counties. Some options include:
 - Supporting extension of transit service to Covington such as inclusion in the Sound Transit district.

3.7 SUMMARY OF CONDITIONS AND TRENDS

- **Covington is a community of families** with a higher proportion of children and a higher household size than King County as a whole.
 - Covington has a larger percentage of population under 20 years old (31%) than King County overall (23.6%).
 - According to ACS data 2009-2013 estimates, Covington has an average household size of 3.02 persons and an average family size of 3.31 persons, larger compared to King County with an average household size of 2.42 persons and average family size of 3.07.
- **Senior citizens will become a greater proportion of the population** over the 20-year life of the comprehensive plan. Seniors tend to have a greater likelihood of disability.
 - Currently, 45-59 year olds make up about 23% of Covington's total population. This is almost four times the current senior population of around 6%.
 - Currently, about 34.5% of adults 65 years and older have a disability, with many having hearing, ambulatory, self-care and independent living difficulty.
 - Senior citizens may need alternative forms of housing, such as smaller units with less maintenance responsibilities or assisted living units, and supportive services, such as day health, meals on wheels, etc.
- **Covington households have higher incomes than the county has a whole but there are some affordability gaps.** Covington's median household income is higher (+26%) than King County's area median household income (AMI). Nevertheless, there are some challenges:
 - About 35% of Covington's households in 2012 were spending more than 30% of their incomes on housing and earned less than 80% of the AMI. Nearly half of renter households had a cost burden: 47%. One-third of homeowners have a cost burden: 33%.
 - There is a gap in the availability of rental units affordable to households in Covington earning 0-80% of the countywide AMI. The gap in 2013 is 560 dwellings.
 - A mixed-use project in the permit process would add 200 affordable family units in the Town Center, as well as 156 senior units. Cedar Springs would add 170 market rate apartments and if affordable to moderate incomes could help close the gap in affordable rental units.
- **Housing variety is expected to increase with implementation of Town Center and Lakepointe Urban Village Subarea Plans.** Covington's share of single family homes is about 96% but will transform with the implementation of the Town Center Plan and Lakepointe Urban Village Subarea Plan to be 75% single family. The City will continue to add housing that is affordable to middle income households and also increase housing variety as its citizens' needs change, such as senior citizens.
- **Jobs-housing balance is expected to improve over the next 20 years.** Currently, Covington has fewer jobs than dwellings at a ratio of 0.80, but with the projected market demand for commercial uses in conformance with the Comprehensive Plan the ratio is projected to improve to 0.86. This may allow for less vehicle miles travelled as jobs and services are available to the local population. However, this will depend on the type of jobs attracted to Covington and if they match the education of Covington residents and offer wages that allow for market rate rentals and home purchases.

4.0 TRANSPORTATION

4.1 OVERVIEW

This chapter of the Existing Conditions Report provides information about the existing transportation system in Covington, including streets, walkways, bicycle facilities, freight routes and transit. This inventory relies primarily on information from the City of Covington and the King County Assessor. Also presented are population, housing and job estimates by the Washington State Office of Financial Management (OFM), American Community Survey (ACS), and Employment Security Department (ESD). Growth targets are presented based on the Countywide Planning Policies for King County.

4.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

Washington State Growth Management Act

The Washington State Growth Management Act (GMA) requires that the transportation element implements, and is consistent with, the land use element, and includes the following sub-elements (RCW 36.70A.070(6)):

- Inventory of facilities by mode of transport;
- Forecasts of traffic for at least ten years based on the adopted land use plan, to provide information on the location, timing, and capacity needs of future growth;
- Level of service assessment to aid in determining the existing and future operating conditions of the facilities;
- Identification of infrastructure needs to meet current and future demands, and proposed actions to bring deficient facilities into compliance;
- Estimated impacts to state-owned transportation facilities resulting from planned land use;
- Identification of demand management strategies as available;
- Pedestrian and bicycle component to include collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors;
- Funding analysis for needed improvements, including identification of contingencies in case of future funding shortfalls; and
- Identification of inter-governmental coordination efforts.

In addition to these elements, GMA establishes a “concurrency” requirement, which mandates that development cannot occur unless adequate supporting infrastructure either already exists or is built concurrent with development. The concurrency timeframe is defined as the 6-year period from the time the need for improvement is triggered. In addition to capital facilities, improvements may include transit service, Transportation Demand Management (TDM) strategies, or Transportation System Management (TSM) strategies.

Under the GMA, local governments and agencies must annually prepare and adopt six-year Transportation Improvement Programs (TIPs), which must be consistent with the transportation element of the local comprehensive plan as well as other state and regional plans and policies.

Transportation 2040

Transportation 2040 is the region's long-range transportation plan developed by the Puget Sound Regional Council (PSRC) that implements VISION 2040. The transportation plan establishes three integrated strategies:

1. **Congestion and Mobility** – The plan calls for improved mobility through a combination of effective land use planning, demand management, efficiency enhancements, and strategic capacity investments. The plan calls for capacity improvements that strategically expand roadway, transit, and non-motorized facilities, with new streets limited to key missing links and enhancing existing facilities. It also establishes a process for monitoring transportation system performance.
2. **Environment** – A key focus of the plan is to protect and improve the region's environmental health. This includes ensuring that the region has healthy air that meets all standards, ensuring that transportation projects improve the handling of stormwater runoff to protect Puget Sound and other surface waters, and addressing emerging issues such as transportation's role in reducing greenhouse gas emissions and adapting to climate change. The plan includes a specific strategy to address state greenhouse gas goals and vehicle-miles-traveled (VMT) reduction bench-marks. The four-part strategy includes Land Use, Transportation Pricing, Transportation Choices and Technology. In addition, the plan builds on current efforts to protect natural areas and support vibrant, livable communities.
3. **Funding** – The plan's financial strategy relies on traditional funding sources in the early years, but over time calls for transition to a new funding structure based on user fees, which could include high-occupancy toll (HOT) lanes, facility and bridge tolls, highway system tolls, VMT charges, and other pricing approaches that would replace the gas tax and further fund and manage the transportation system. The plan acknowledges that funding strategies need to include a nexus between the tax, fee, or toll, and the use of the revenues.

These strategies guide transportation investment decisions to meet growing travel needs for people and freight, calling for more transit, biking and walking facilities, as well as more complete streets. Within these strategies, the plan identifies four major categories of investment: (1) preservation, maintenance and operations, (2) safety and security, (3) efficiency, and (4) strategic capacity, which lays out strategies for all modes, including local roads, non-motorized transportation, vehicle and passenger ferries, aviation, and rail.

Countywide Planning Policies

The King County Countywide Planning Policies (CPPs) organize transportation policies into the following three sections:

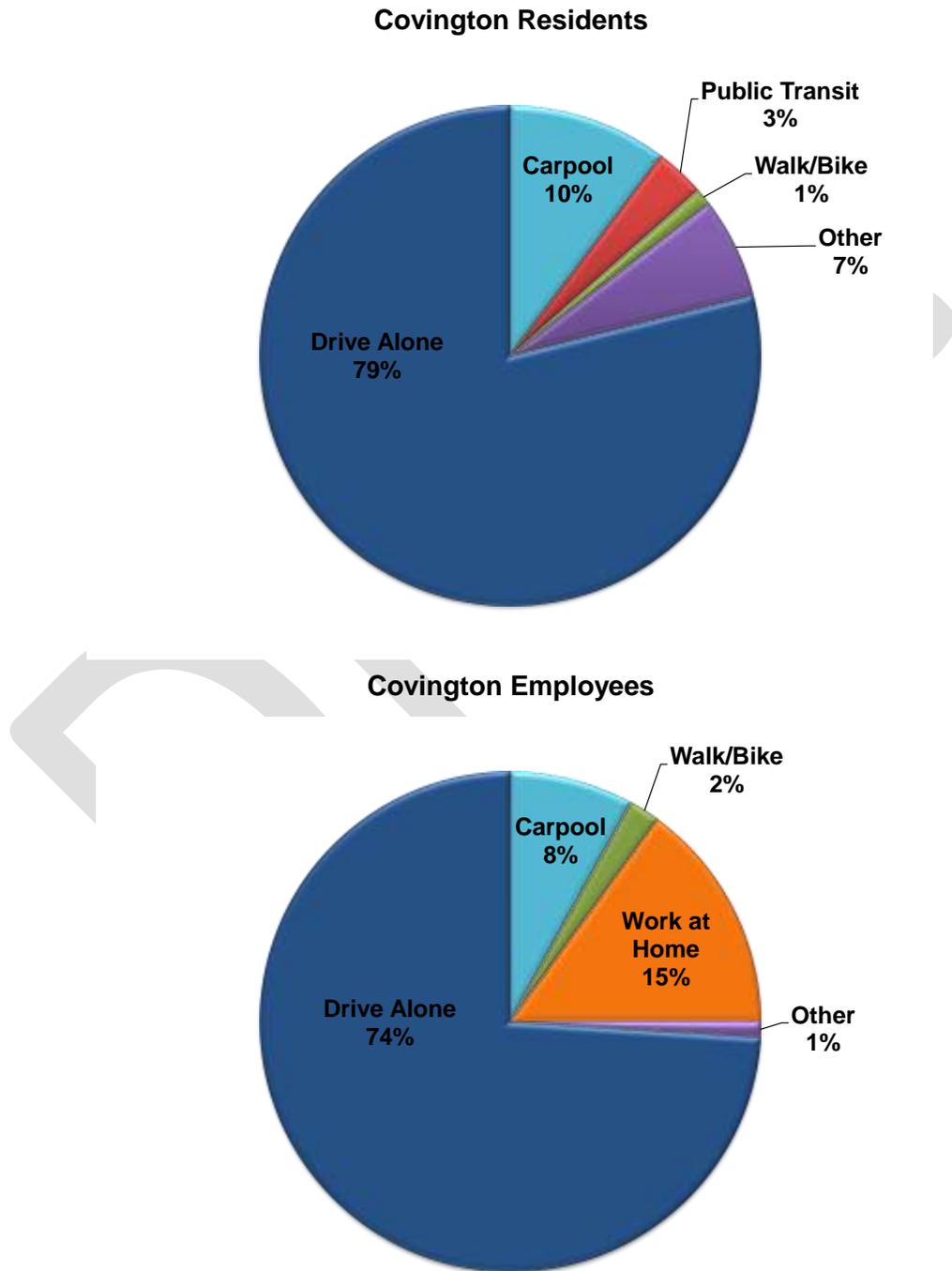
- **Supporting Growth** – focusing on serving the region with a transportation system that furthers the Regional Growth Strategy, which identifies a network of walkable, compact, and transit-oriented communities that are the focus of urban development;
- **Mobility** – addressing the full range of travel modes necessary to move people and goods efficiently within the region and beyond; and
- **System Operations** – encompassing the design, maintenance and operation of the transportation system to provide for safety, efficiency and sustainability.

The overarching transportation goal of the CPPs is that the region be well served by an integrated, multimodal transportation system that supports the regional vision for growth, efficiently moves people and goods, and is environmentally and functionally sustainable over the long term.

4.3 EXISTING TRAVEL CHARACTERISTICS

Exhibit 4-1 shows the ways people who live and work in Covington typically travel. As shown, the majority of travel in Covington occurs by automobile, but residents and employees also walk, bike, telecommute, and use the public transit service that is available in the city.

Exhibit 4-1. Typical Travel Choices in Covington



Source: Puget Sound Regional Council (PSRC), 2014; Journey-to-Work Data from 2010 Census; Transportation Analysis Zones 462, 464 and 481.

4.4 EXISTING TRANSPORTATION SYSTEM

Street Network

State Highways

Regional access is provided by State Route 18 (SR 18), which is a limited access freeway that connects the study area to Interstate-90 (I-90), SR 169, SR 167, and I-5, with direct connections between Covington and the cities of Auburn and Federal Way to the southwest. SR 18 has existing full access interchanges at SE 256th Street and at SE 272nd Street (SR 516). Through Covington, SR 18 has two general purpose travel lanes in each direction. SR 18 is designated as a Highway of Statewide Significance, which is codified in the Revised Code of Washington (RCW) 47.06.140. Highways of Statewide Significance are those highways and other transportation facilities needed to promote and maintain significant statewide travel and economic linkages in Washington State; the legislation emphasizes that these significant facilities should be planned from a statewide perspective, and they are not subject to local city standards. Planning for Highways of Statewide Significance is led by the Washington State Department of Transportation (WSDOT).

SR 516 (also known by SE 272nd Street and Kent-Kangley Road within the city) serves as the primary east-west roadway through Covington. It provides direct connection between Covington and the City of Kent to the west, and the City of Maple Valley to the east. Currently, it is five lanes wide (two travel lanes in each direction plus a center left-turn lane) to the west of Jenkins Creek (about 1,000 feet east of SE Wax Road). To the east of Jenkins Creek, it is primarily three lanes wide (one travel lane in each direction plus a center left-turn lane), but the City has future plans to widen the street between Jenkins Creek and the east city limits to five lanes. SR 516 is a Highway of Regional Significance, and is subject to local City standards.

City Streets

All streets in Covington have a designated functional classification, which depends on the level of traffic volume each street carries and which of the following stages of trips that it predominantly serves:

- Traveler accesses street system from origin (access),
- Traveler travels through street system (mobility), and
- Traveler accesses destination from street system (access).

The different types of streets that serve these functions are reflected through the Federal Functional Classifications. Covington streets are classified as Freeway, Principal Arterial, Minor Arterial, Major Collector, Minor Collector and Local Access (Exhibit 4-2). Freeways and arterials have a higher mobility function with more limited access. Local access streets primarily provide access to adjacent residential and commercial development, and serve a limited mobility (e.g. through trip) function. Collectors tend to provide more balanced access and mobility functions. These classifications are recognized by the Federal Highway Administration (FHWA) and WSDOT, and they are further classified as either Urban or Rural—all streets in Covington are considered Urban under the federal system.

The City has also identified four downtown street types—labeled Type I, II, III or IV (Exhibit 4-3)—that primarily reflect different non-motorized and transit mobility goals. The downtown street types are not correlated with functional classifications—they have been identified for a mix of arterial, collector and local streets, and overlay the functional classifications.

The existing federal functional classifications of streets within Covington are shown on Exhibit 4-4, and the designated downtown street types are shown on Exhibit 4-5.

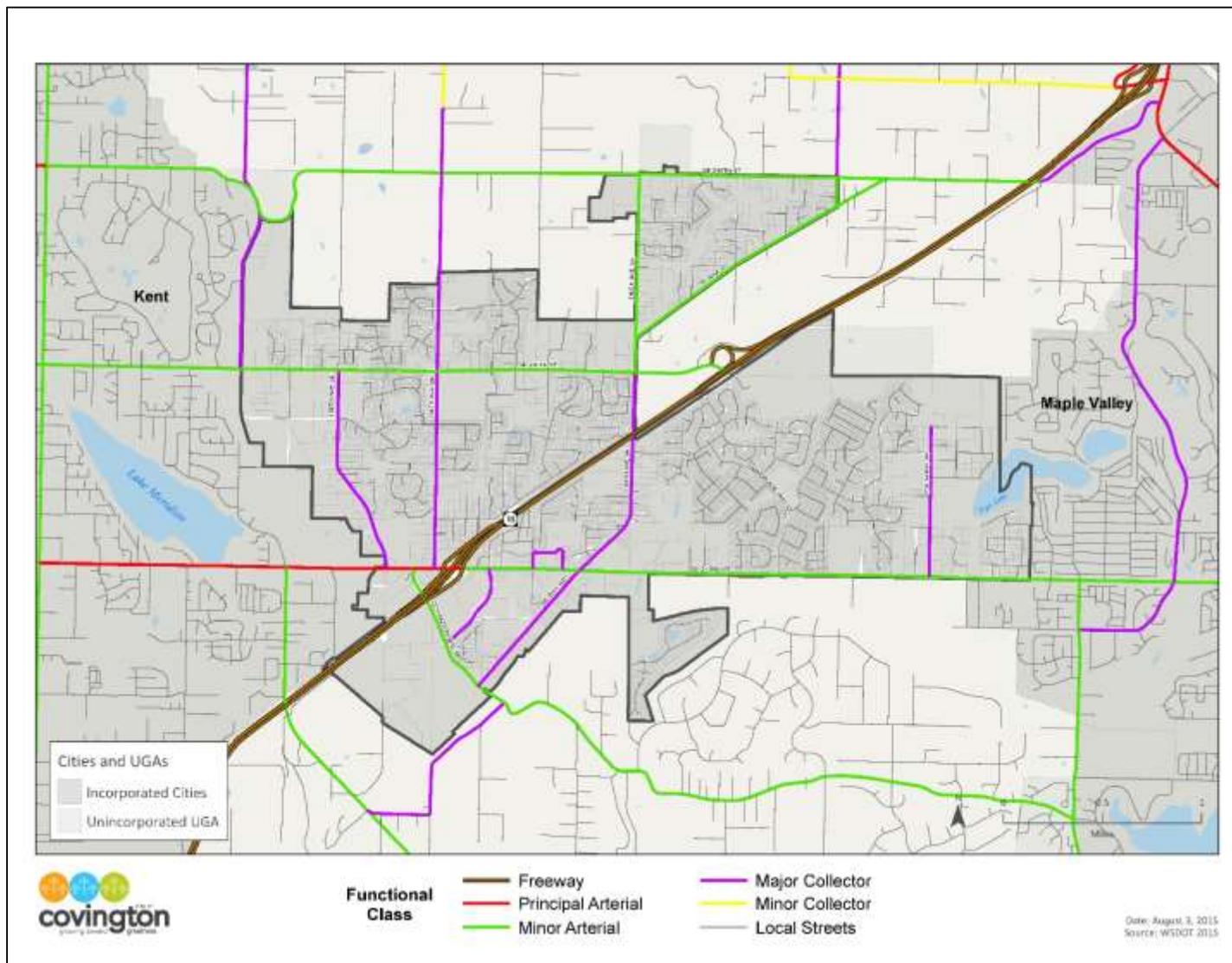
Exhibit 4-2. Description of Street Functional Classifications

Functional Classification	Primary Function
Freeway	High-speed, high-capacity road intended exclusively for motorized traffic. All access is controlled by interchanges and road crossings are grade-separated.
Principal Arterial	Provides for movement across and between large subareas of an urban region and serves predominantly “through traffic” with minimum direct service to abutting land uses. This category includes the freeways and major highways (SR 18 and SR 516) under the jurisdiction of WSDOT.
Minor Arterial	Provides for movement within the larger subareas bound by principal arterials. A minor arterial may also serve “through traffic” but provides more direct access to abutting land uses than does a principal arterial.
Major Collector	Provides for movement within smaller areas which are often definable neighborhoods, and which may be bound by arterials with higher classifications. Major collectors serve very little “through” traffic and serve a high proportion of local traffic requiring direct access to abutting properties. Major collector arterials provide the link between local neighborhoods streets and larger arterials.
Minor Collector	Provides for movement between local access streets and the arterial and major collector streets. The distinctions between Major Collectors and Minor Collectors are often subtle. Generally, Minor Collectors are shorter in length, have more driveway connections, and have lower average traffic volumes than their Major Collector counterparts.
Local Access	Provides access to the street network for abutting residential and commercial development. All streets not designated as principal arterials, minor arterials, major collectors or minor collectors are local access streets.

Exhibit 4-3. Description of Downtown Street Types

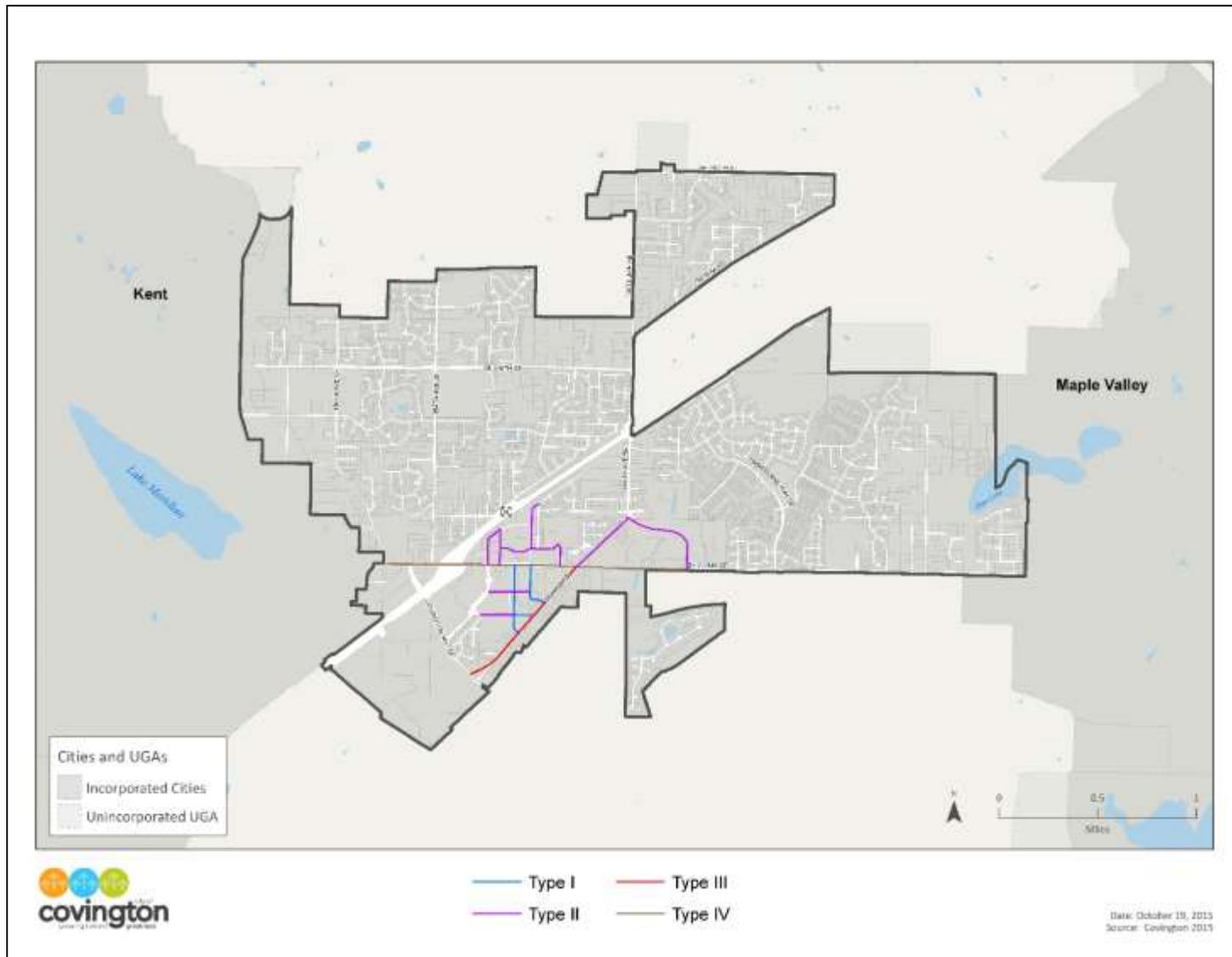
Downtown Street Type	Primary Function
Type I	Pedestrian-oriented street with two driving lanes, on-street parking and minimum 10-foot clear walkway.
Type II	Pedestrian, bicycle, and vehicle-oriented street with two driving lanes, on-street parking, center landscaped median, bicycle facilities and minimum 8-foot clear walkway.
Type III	Pedestrian, bicycle, and vehicle-oriented street with landscaped boulevard with two driving lanes, center landscaped median, bicycle facilities, minimum 15-foot clear walkway, and amenity zone.
Type IV	Major arterial street with four driving lanes, center median, transit access lane, no on-street parking, 6-foot landscape buffer and minimum 8-foot clear walkway.

Exhibit 4-4. Covington Street Functional Classification Map



Source: King County GIS Center, 2015; City of Covington, 2015

Exhibit 4-5. Covington Downtown Street Type Map



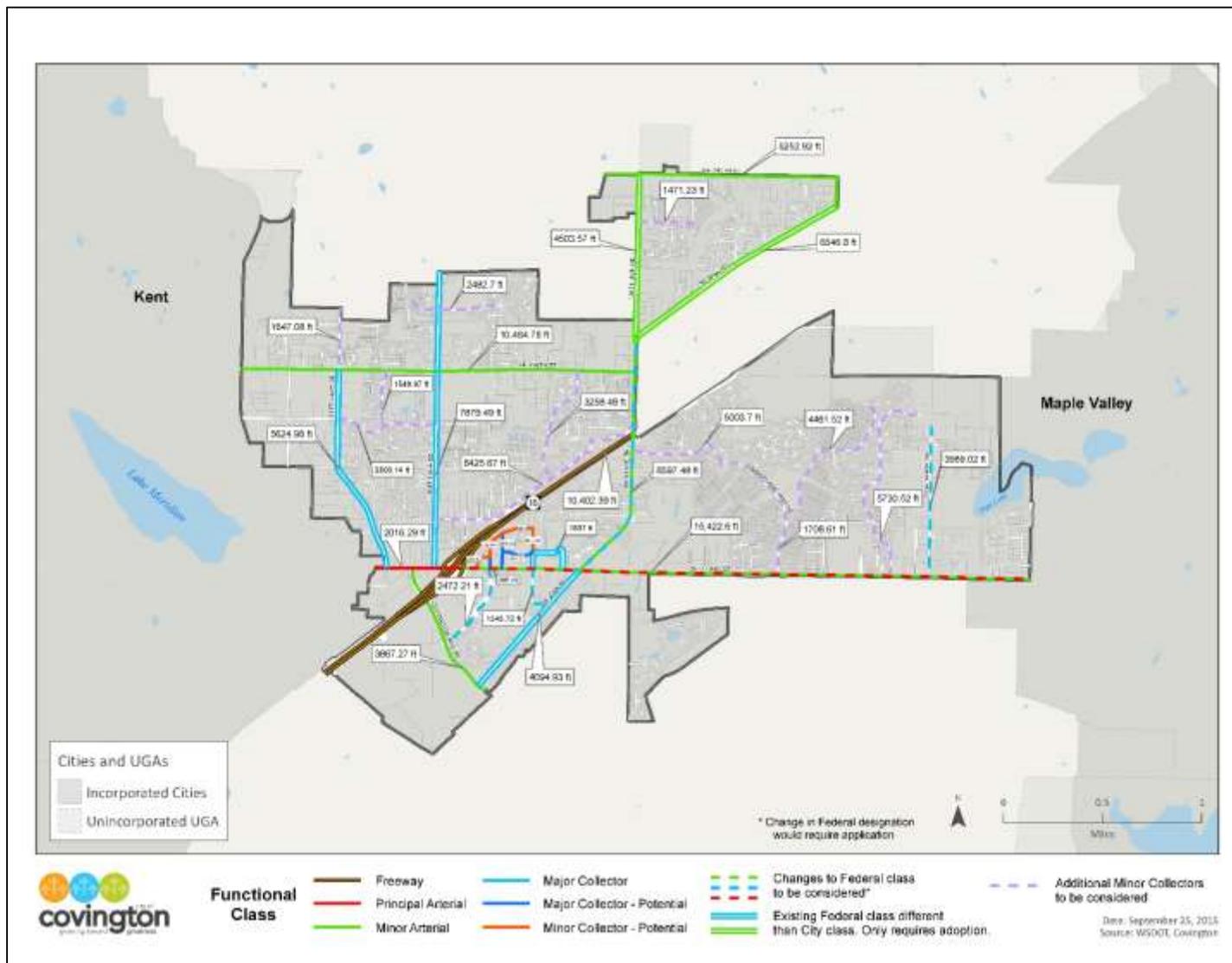
Source: King County GIS Center, 2015; City of Covington, 2015

Over time, changes in traffic volumes and shifts in land use and traffic patterns may cause the function of a street to change. It is important to periodically review the functions city streets serve, and evaluate whether any changes in classification are warranted. Guidelines set forth by the FHWA and WSDOT (WSDOT, 2013a) were applied to identify appropriate updates to the federal functional classifications of city streets; considerations include existing and projected future traffic volumes, characteristics of surrounding land uses and the balance between mobility and access the street provides, overall spacing of arterials and collectors within the city, and the proportions of each classification within the street system. Recommended updates to street classifications are summarized in Exhibit 4-6, and the street system with recommended classifications is illustrated on Exhibit 4-7.

Exhibit 4-6. Recommended Updates to Street Functional Classifications

Street	Location	Existing Classification	Recommended Classification
SE 272 nd St (SR 516)	SR 18 – East City Limits	Minor Arterial	Principal Arterial
SE Wax Rd/180 th Ave SE	SE 256 th St – SE 272 nd St	Major Collector	Minor Arterial
172 nd Ave SE/SE 275 th St	SE 272 nd St – SE Wax Rd	Local Access	Major Collector
165 th PI SE /168 th PI SE	Covington Wy SE – SE 271 st St	Local Access	Major Collector
169 th PI SE	SE 268 th PI – SE 270 th PI	Local Access	Major Collector
204 th Ave SE	SE 261 st PI – SE 272 nd St (planned future extension to SE 256 th St)	Local Access	Major Collector
156 th Ave SE	North City Limits – SE 256 th St	Local Access	Minor Collector
SE 260 th St	156 th Ave SE – 164 th Ave SE	Local Access	Minor Collector
160 th Ave SE	SE 256 th St – SE 260 th St	Local Access	Minor Collector
SE 251 st St	161 st PI SE – 168 th PI SE	Local Access	Minor Collector
172 nd Ave SE / 175 th Wy SE	SE 256 th St – SE 264 th St	Local Access	Minor Collector
SE 268 th St/SE 267 th St/SE 264 th St/176 th Ave SE/SE 261 st St	164 th Ave SE – SE Wax Rd	Local Access	Minor Collector
167 th PI SE/SE 271 st St/168 th PI SE/169 th PI SE/SE 268 th PI/171 st Ave SE	SE 272 nd St – SE 270 th PI	Local Access	Minor Collector
SE 244 th St	180 th Ave SE – 184 th Ave SE	Local Access	Minor Collector
SE 262 nd St/SE Timberlane Blvd/Timberlane Wy SE/192 nd Ave SE	SE Wax Rd – SE 272 nd St	Local Access	Minor Collector
SE 267 th St/194 th Ave SE / SE 262 nd St/199 th Ave SE	192 nd Ave SE – SE 259 th St	Local Access	Minor Collector
201 st Ave SE/199 th PI SE/200 th Ave SE/SE 259 th St	SE 272 nd St – 203 rd Ave SE	Local Access	Minor Collector

Exhibit 4-7. Covington Street Functional Classification Map with Recommended Updates



Source: King County GIS Center, 2015; City of Covington, 2015

Exhibit 4-8 summarizes the proportion of each category of functionally classified streets within Covington, with existing and recommended classifications; the typical range of proportions for cities within Washington State is shown for comparison. With existing classifications, the proportion of principal arterial is lower than typical ranges, and no streets within Covington are currently classified as minor collector. With recommended updates, all four arterial and collector classified streets would be within typical ranges. The proportion of freeway (SR 18, with no recommended changes to the freeway classification) would be slightly higher than typical ranges, and the proportion of local access streets would be slightly lower.

Exhibit 4-8. Street Functional Classifications – Proportions within Covington

Functional Classification	Typical Proportion in Washington State	Existing Classifications		Recommended Classifications	
		Length in Covington (miles)	Proportion in Covington	Length in Covington (miles)	Proportion in Covington
Freeway	0% - 2%	2.0	3%	2.0	3%
Principal Arterial	4% - 5%	0.4	1%	3.3	5%
Minor Arterial	7% - 12%	8.7	12%	7.1	10%
Major Collector	7% - 13%	4.9	7%	5.6	8%
Minor Collector	7% - 13%	0.0	0%	7.5	11%
Local Access	67% - 76%	54.9	77%	45.6	63%
Total		70.9	100%	70.9	100%

Operations on City Streets

Vehicle operations on city streets are measured according to level of service (LOS) at major intersections during the weekday PM peak hour, which is the period in which the highest traffic volumes typically occur. Level of service is a qualitative measure used to characterize traffic operating conditions based upon average delay experienced by vehicles. Six letter designations, “A” through “F,” are used to define level of service. LOS A and B represent conditions with the lowest amounts of delay, and LOS C and D represent intermediate traffic flow with some delay. LOS E indicates that traffic conditions are at or approaching congested conditions and LOS F indicates that traffic volumes are at a high level of congestion with unstable traffic flow.

Level of service for intersections is defined in terms of average delay per vehicle in seconds. For a signalized intersection, all-way stop-controlled intersection or roundabout intersections, level of service is based upon average delay for all vehicles traveling through the intersection. The level of service for a one- or two-way stop-controlled intersection is determined by the average delay for the most congested movement through the intersection. Delay is related to the availability of gaps in the main street's traffic flow, and the ability of a driver to enter or pass through those gaps. Exhibit 4-9 shows the level of service criteria for signalized and unsignalized intersections, as defined in the Highway Capacity Manual (Transportation Research Board, 2010). Unsignalized intersections have different level of service threshold values than signalized intersections, primarily because drivers expect different levels of performance from different types of transportation facilities. In general, unsignalized intersections are expected to carry lower volumes of traffic than signalized intersections. Therefore, for the same level of

service, a smaller amount of delay is expected at unsignalized intersections than for signalized intersections.

Exhibit 4-9. Level of Service Criteria for Vehicle Operations

Level of Service (LOS)	Average Delay Per Vehicle	
	Signalized	Unsignalized
A	≤ 10.0 seconds	≤ 10.0 seconds
B	10.1 – 20.0 seconds	10.1 – 15.0 seconds
C	20.1 – 35.0 seconds	15.1 – 25.0 seconds
D	35.1 – 55.0 seconds	25.1 – 35.0 seconds
E	55.1 – 80.0 seconds	35.1 – 50.0 seconds
F	> 80.0 seconds	> 50.0 seconds

Source: Transportation Research Board, 2010

Under GMA, concurrency is the requirement that adequate infrastructure be planned and financed to support the City’s adopted future land use plan. Level of service standards are used to evaluate the transportation impacts of long-term growth and concurrency. In order to monitor concurrency, the jurisdictions adopt acceptable operating conditions on their streets that are then used to measure existing or projected traffic conditions and identify deficiencies.

Street operations in urban areas are generally controlled by the operation at intersections. As established in the 2015 Comprehensive Plan, transportation concurrency in Covington is measured by PM peak hour operation of all signalized, roundabout-controlled and all-way stop controlled intersections located within the city limits. Exhibit 4-10 summarizes the level of service standard established by the City for city streets in the 2015 Comprehensive Plan.

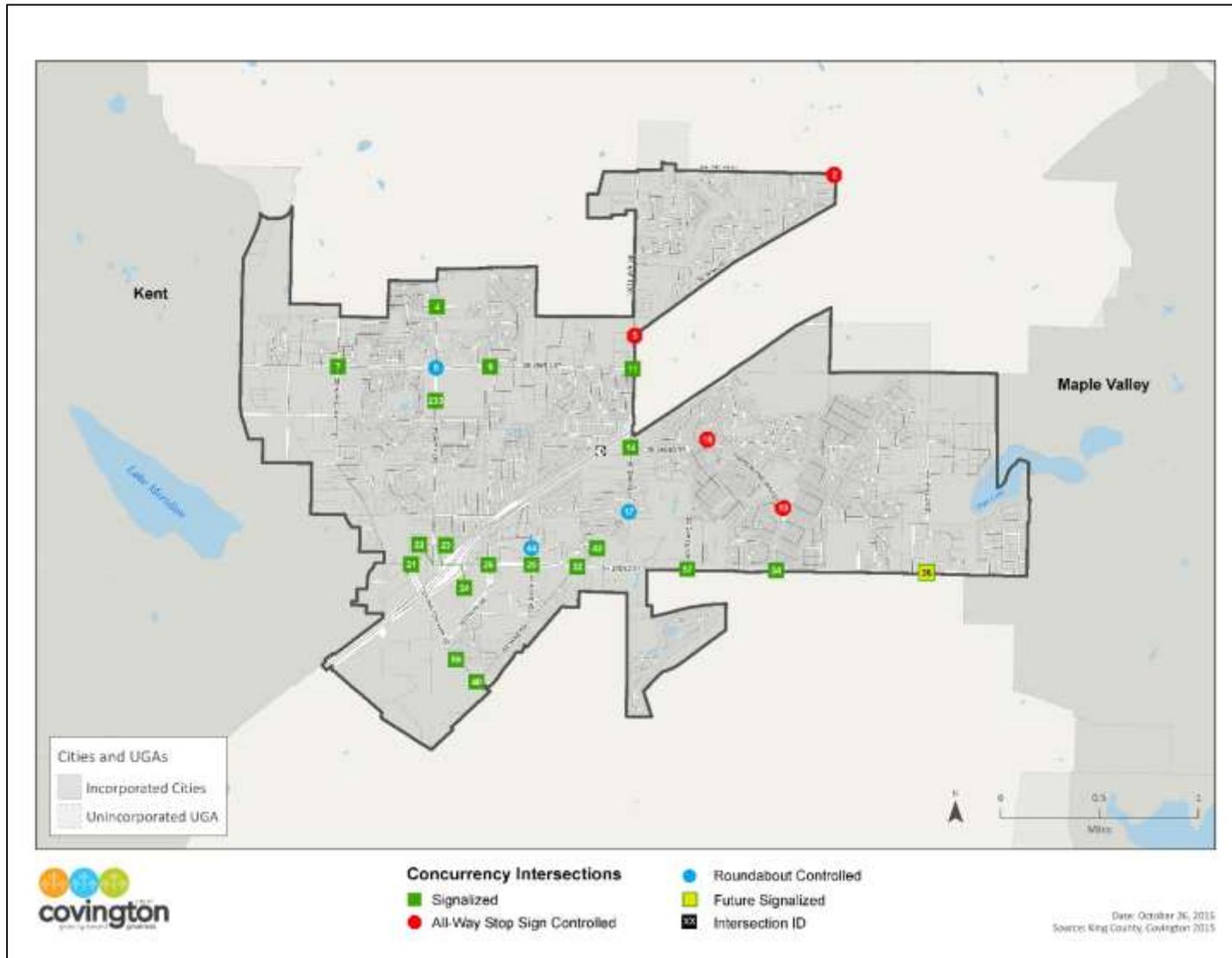
Exhibit 4-10. Level of Service Standard for City Streets

Street Intersection	Standard ¹
Signalized, roundabout-controlled and all-way stop controlled intersections of all Arterial and Collector streets, except SE 272 nd Street (SR 516)	LOS D or better.
Signalized intersections along SE 272 nd Street (SR 516)	LOS D or better, until an ultimate capacity of five lanes (two travel lanes in each direction plus a center left-turn lane) plus sidewalks on both sides is reached for SE 272 nd Street. Once ultimate capacity is reached, vehicle operation worse than LOS D is acceptable.

1. Level of service for the weekday PM peak hour, based upon methods set forth in the current version of the Highway Capacity Manual, unless otherwise authorized by the Director of Public Works.

Exhibit 4-11 shows the concurrency intersections within Covington. Exhibit 4-12 summarizes existing level of service at the concurrency intersections. As shown, all intersections currently meet the level of service standards for city streets and no existing deficiencies are identified.

Exhibit 4-11. Covington Concurrency Intersections



Source: King County GIS Center, 2015; City of Covington, 2015

Exhibit 4-12. Existing (2012) Level of Service at City Concurrency Intersections – PM Peak Hour

ID	Intersection	Standard	LOS¹	Delay²
Signalized				
4	SE 251 st St/164 th Ave SE	D	A	6.9
7	SE 256 th St/156 th Ave SE	D	A	7.6
9	SE 256 th St/168 th PI SE	D	A	8.7
11	SE 256 th St/180 th Ave SE	D	C	37.0
14	SE 262 nd St/180 th Ave SE	D	B	12.4
21	SE 272 nd St (SR 516)/Covington Way	UC ³	E	56.6
22	SE 272 nd St (SR 516)/164 th Ave SE	UC ³	D	37.5
23	SE 272 nd St (SR 516)/Westbound SR 18 Ramps	UC ³	C	28.1
24	SE 272 nd St (SR 516)/Eastbound SR 18 Ramps	UC ³	D	36.9
26	SE 272 nd St (SR 516)/168 th Ave SE	UC ³	C	25.1
29	SE 272 nd St (SR 516)/172 nd Ave SE	UC ³	C	32.7
32	SE 272 nd St (SR 516)/SE Wax Rd	UC ³	D	43.2
34	SE 272 nd St (SR 516)/192 nd Ave SE	D	B	14.8
40	Covington Way/SE Wax Rd	D	C	21.0
43	SE 270 th PI/SE Wax Rd	D	B	16.6
57	SE 272 nd St (SR 516)/185 th Ave SE	D	C	25.7
59	165 th PI SE/Covington Way	D	B	18.4
233	Kenmore High School Dwy/164 th Ave SE	D	A ⁴	<10.0 ⁴
Roundabout				
8	SE 256 th St/164 th Ave SE	D	B	10.9
17	SE 267 th Place/SE Wax Rd/180 th Ave SE	D	A	7.4
44	SE 270 th Place/172 nd Ave SE	D	A	5.8
All-Way Stop-Control				
2	SE 240 th St/196 th Ave SE	D	B	12.7
5	SE Wax Rd/ 180 th Ave SE	D	B	13.2
15	SE Timberlane Boulevard/Timberlane Way SE	D	B	10.3
19	SE 267 th St/Timberlane Way SE	D	B	10.6

1. LOS = Level of Service
2. Delay = Average delay for all vehicles through the intersection in seconds per vehicle
3. UC = Ultimate Capacity provided on SE 272nd Street (SR 516); operation worse than LOS D acceptable.
4. Existing data is not available for this intersection, but existing level of service is estimated based upon future conditions analysis completed at this intersection, which projects LOS A operation through 2035.

Freight Mobility

WSDOT has established the Washington State Freight and Goods Transportation System (FGTS) to classify state highways, county roads and city streets according to the freight tonnage they carry. There are five freight categories, ranging from T-1 to T-5, depending on the annual tonnage of freight that that a street or highway carries, summarized in Exhibit 4-13.

Exhibit 4-13. FGTS Freight Categories

FGTS Category	Freight Tonnage Carried on Highway or Street
T-1	Over 10 million tons per year
T-2	4 million to 10 million tons per year
T-3	300 thousand to 4 million tons per year
T-4	100 thousand to 300 thousand tons per year
T-5	Over 20 thousand tons in 60 days

Source: Washington State Department of Transportation, 2013b

Within Covington, SR 18 (a designated Highway of Statewide Significance, under WSDOT jurisdiction) is designated as a T-1 corridor. SE 272nd Street (SR 516) is designated as a T-2 corridor. WSDOT considers all T-1 and T-2 corridors to be part of the statewide FGTS network. The FGTS is used to support statewide freight planning, to establish funding eligibility for freight improvements, and to plan for pavement needs and upgrades.

The following Covington streets are identified by WSDOT as T-3 freight corridors. Unless otherwise specified, the designation applies to the entire length of the street within the city.

- SE 256th Street
- Covington Way SE (between 168th Street SE and SE 272nd Street)
- 168th Place SE (between Covington Way SE and SE 272nd Street)
- 164th Avenue SE
- 180th Avenue SE
- SE Wax Road

These streets are all classified as arterials or major collectors, except for 168th Place SE which has been identified by the City to be upgraded to a major collector. City design standards for arterials and collectors support their function of accommodating freight movement and higher volumes of trucks.

Non-Motorized Transportation

It can be a challenge for a single street to meet the demands and expectations of all modes at any given time. It also may not be desirable from a user or a planning perspective to have all modes travel on every street. In response to this challenge, the City has adopted a layered network approach that focuses on how the City's transportation network can function as a system to meet the needs of all users. Unlike roadway standards that are capacity-based, the City has established level of service standards for pedestrian and bicycle facilities that recognize the primary objective of providing a complete non-motorized network that allows people to safely walk or bike between destinations in Covington, providing

separation from vehicle traffic where needed. This can be achieved by providing separate vehicle and non-motorized facilities along a street where space allows, but it may also be achieved by identifying alternate routes for pedestrians or bicyclists that are parallel to corridors with high vehicle volumes. The City also recognizes that on many low-volume and low-speed local access streets, vehicular and non-motorized traffic may safely share the street.

The City has established pedestrian facility level of service standards in the 2015 Comprehensive Plan, summarized in Exhibit 4-14, that are applied to all Arterial and Collector streets, as well local access streets and other corridors that serve higher pedestrian generators (such as parks or schools), as identified by the Director of Public Works.

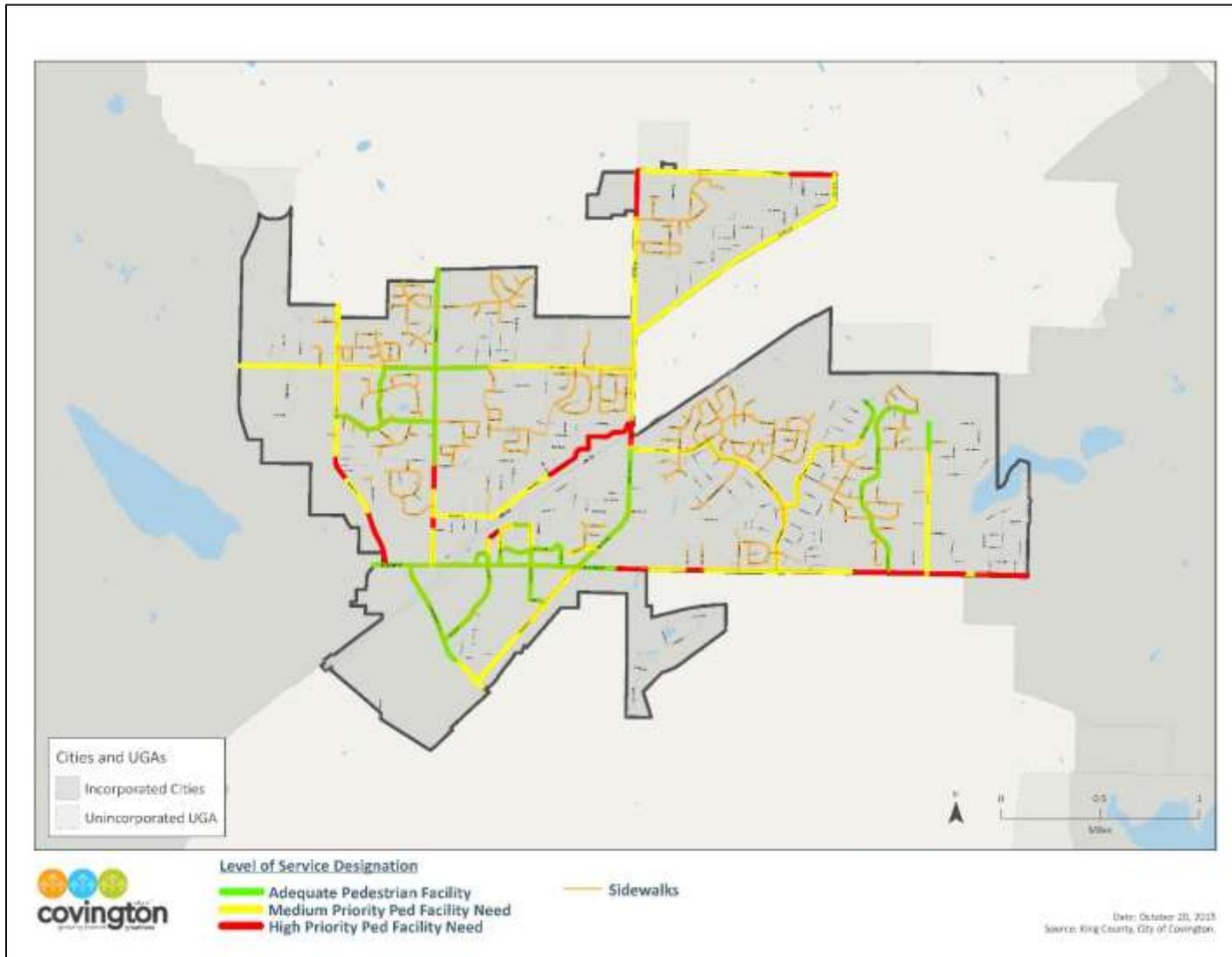
Exhibit 4-14. Walkway Level of Service Standards

Pedestrian Facility Standard ¹	Definition
	<p>Adequate pedestrian facility: Existing pedestrian facility meets City standards and non-motorized goals – no improvements identified.</p>
	<p>Medium priority pedestrian need: Pedestrian facility exists but does not meet City standards and/or non-motorized goals [e.g. narrow sidewalk, shoulder only (≥5 feet wide) or sidewalk on one side of the street when standards call for both sides] – upgraded facility desired.</p>
	<p>High priority transit need: No pedestrian facility exists (or existing shoulder <5 feet wide) – based on City standards and/or non-motorized goals, a gap in the walkway network is identified and a new facility is desired.</p>

1. Applies to all Arterial and Collector streets, as well local access streets and trail corridors identified by the Director of Public Works as warranted by adjacent land use.

Exhibit 4-15 shows the location existing pedestrian facilities in Covington, and the level of adequacy based upon the walkway level of service standards.

Exhibit 4-15. Covington Sidewalk Inventory and Pedestrian Level of Service Map



Source: King County GIS Center, 2015; City of Covington, 2015

The City has established bicycle facility level of service standards in the 2015 Comprehensive Plan, summarized in Exhibit 4-16, that are applied to all Arterial and Collector streets, as well local access streets and other corridors that serve higher pedestrian generators (such as parks or schools), as identified by the Director of Public Works.

Exhibit 4-16. Bicycle Facility Level of Service Standards

Bike Facility Standard ¹	Definition
	<p>Adequate bicycle facility: Existing bicycle facility meets City standards and non-motorized goals, OR, street identified for shared use by vehicles and bicycles – no bicycle improvements identified.</p>
	<p>Medium priority bicycle facility need: Bicycle facility exists but does not meet City standards and non-motorized goals – upgraded facility desired.</p>
	<p>High priority bicycle facility need: Based on City standards and non-motorized goals, a gap in the bicycle network is identified and a new facility is desired.</p>

1. Applies to all Arterial and Collector streets, as well local access streets and trail corridors identified by the Director of Public Works as warranted by adjacent land use.

Exhibit 4-17 shows the location of existing bicycle facilities in Covington, and the level of adequacy based upon the walkway level of service standards.

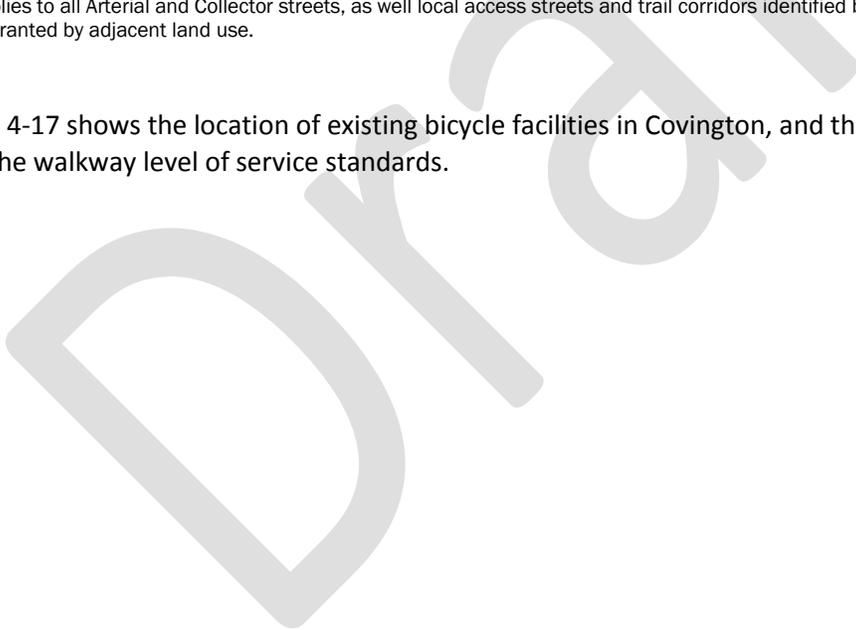
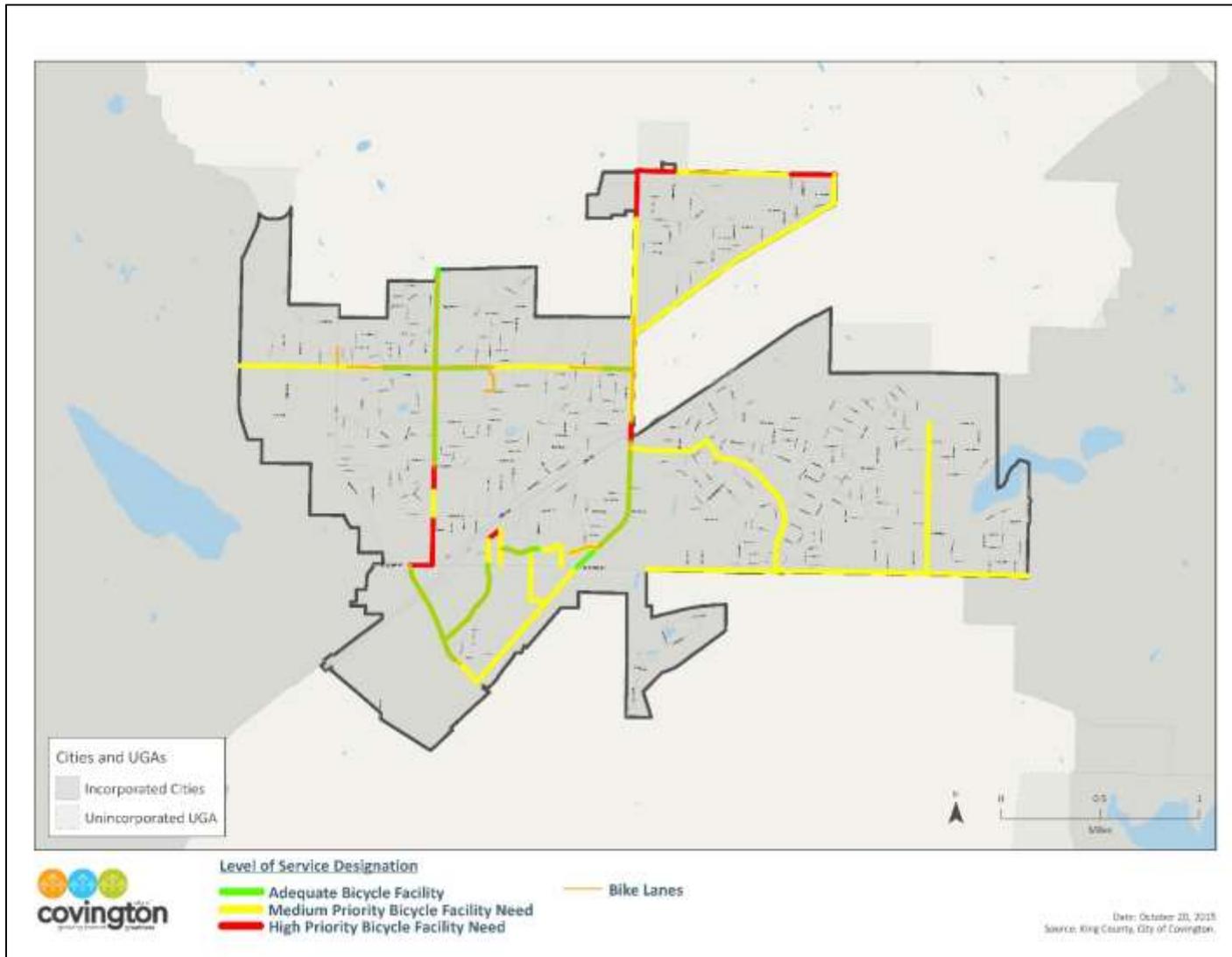


Exhibit 4-17. Covington Bicycle Inventory and Level of Service Map



Source: King County GIS Center, 2015; City of Covington, 2015

The City implements walkway and bike facility improvements to address medium (yellow) and high (red) priority needs identified on Exhibit 4-15 and Exhibit 4-17 as follows:

- Medium and high priority pedestrian and bicycle facility needs are addressed as required frontage or connector improvements for new development, or as part of larger multimodal corridor improvements. Corridors with medium or high priority non-motorized needs receive first consideration for potential multimodal improvement projects.
- Stand-alone pedestrian or bike facility improvements are considered in corridors where needs have been identified as funds become available, with first consideration going to locations of high priority need, and second consideration going to locations of medium priority need.

Transit

Bus service in Covington is provided by King County Metro (Metro) Routes 159 and 168.

Metro Route 159 provides weekday commuter service, with five buses that travel from Covington to Kent and downtown Seattle in the morning, and four buses that travel back to Covington from downtown Seattle and Kent in the evening.

Metro Route 168 provides daily local bus service between Maple Valley, Covington and Kent. Buses operate at about 30-minute headways (time between buses) during weekdays and 60-minute headways during evenings and weekends. This route stops at Kent Station, where riders can transfer to or from the Sound Transit Sounder commuter train or buses that serve other regional destinations.

As a relatively small community that is not designated by PSRC as an urban or regional center, Covington has not been a regional priority for improved transit service. While the City enjoys proximity to the Auburn and Kent Sounder Stations, direct transit connections are limited to the two routes described above between Covington and Kent Station. Extending rail transit service into Covington is also unlikely in the near term, as the City is not a part of the Central Puget Sound Regional Transit Authority (Sound Transit).

Recent efforts related to the Town Center element of the *Downtown Plan*, *Hawk Property Subarea Plan* and the *Downtown Design Standards and Guidelines* plan for development patterns that would support additional transit service. The concentration of uses in the downtown and pedestrian connectivity of the Town Center create a place where transit options, such as bus, Bus Rapid Transit (BRT), and potentially a rail connector to the regional transit system, could succeed in providing more frequent service and transportation choices to the community for both local and regional travel. Planned new development in the Hawk Property Subarea will consist of higher density mixed residential and commercial uses, and the site is being designed to accommodate a park-and ride lot.

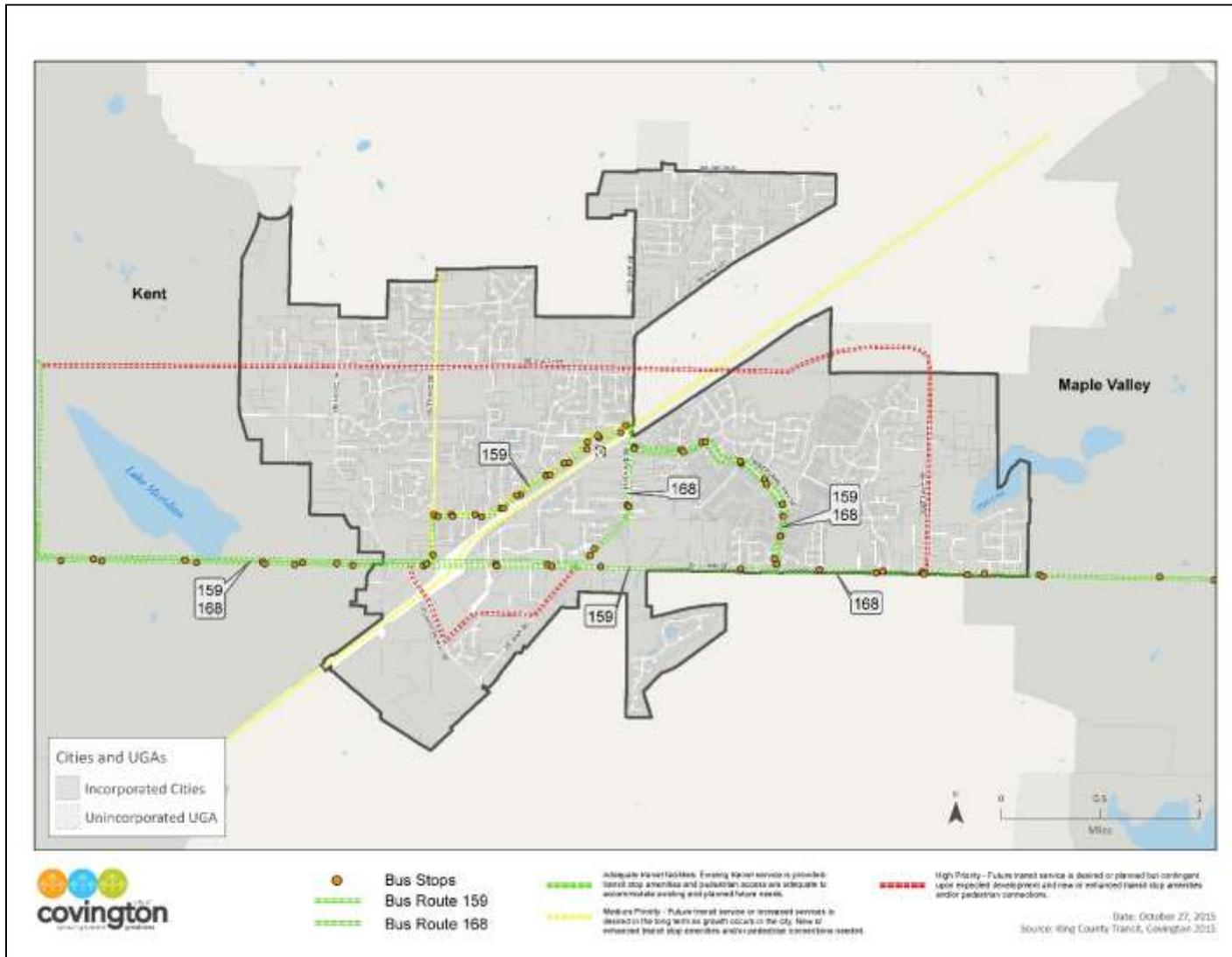
Although transit service is not under Covington's control, the City has established transit level of service standards in the 2015 Comprehensive Plan, summarized in Exhibit 4-18. The transit level of service standards provide a means for identifying corridors where the City intends to focus on increased land use densities and amenities to support future transit, and to help facilitate communication with Metro regarding corridors where future transit improvements should be considered.

Exhibit 4-18. Transit Level of Service Standard

Transit Standard	Definition
= = = = =	<p>No existing or planned future transit service.</p>
= = = = =	<p>Adequate transit facilities: Existing transit service is provided – transit stop amenities and pedestrian access are adequate to accommodate existing and planned future needs.</p>
= = = = =	<p>Medium priority transit need: Existing transit service is provided, and adequate pedestrian connections are in place, but additions or upgrades to transit stop amenities are desired.</p> <p>-OR-</p> <p>Future transit service is desired to support mid- to long-term higher density development, but a new or enhanced transit route, transit stop amenities, and/or pedestrian connections are needed to support that service.</p>
= = = = =	<p>High priority transit need: Existing transit service is provided, and improvements are needed to address inadequate pedestrian connections; additions or upgrades to transit stop amenities may also be desired.</p> <p>-OR-</p> <p>Future transit service is identified to support near-term higher density development, but a new or enhanced transit route, transit stop amenities, and/or pedestrian connections are needed to support that service.</p>

Exhibit 4-19 shows the existing bus routes within Covington, and identifies where a need for future transit improvements are anticipated.

Exhibit 4-19. Covington Transit Corridor and Level of Service Map



Source: King County GIS Center, 2015; City of Covington, 2015

As shown on Exhibit 4-19, the City has identified the following future potential improvements to transit:

High Priority

- A new transit route is desired to support planned development in the Town Center area, as documented in the Downtown Plan, which includes mixed residential and commercial uses and pedestrian-oriented streets. The proposed additional transit route would connect the downtown area to other destinations in Covington and beyond Covington Way SE and SE Wax Road.
- A new transit route is desired to support planned redevelopment at the Lakepointe Urban Village site, located in the northwest area of Covington. The proposed additional transit route would connect the property to other destinations in Covington and beyond via 204th Avenue SE and SE 256th Street. To meet this objective, the City strongly supports a potential future local bus route along SE 256th Street that has been identified by Metro (King County Metro, 2015).

Medium Priority

- Increased bus frequencies, transit stop amenities, and pedestrian connections along the existing Route 159 to support existing and planned future land uses and multimodal choices in the downtown vicinity and Lakepointe Urban Village.
- Other potential future bus routes identified by Metro (King County Metro, 2015), including an express bus route on SR 18, and an additional local routes on 164th Avenue SE.

4.5 SUMMARY OF ISSUES AND TRENDS

- The majority of travel in Covington occurs by automobile, but residents and employees also walk, bike, telecommute and use the public transit service that is available in the city. Arterial streets also support freight movement to and through Covington.
- In addition to accommodating vehicle travel, Covington streets are integral to the city's pedestrian and bicycle network. The City has adopted a layered network approach that focuses on how the City's transportation network can function as a system to meet the needs of all users.
- The existing street network meets the City's operational standards for vehicle travel. However, the operational standards for city streets designate segments of SE 272nd Street (SR 516) that have been widened to five lanes (plus sidewalks on both sides) to be at ultimate capacity, at which point higher levels of vehicle congestion are considered acceptable.
- There are gaps in Covington's pedestrian and bicycle networks. The City continuously seeks to address pedestrian and bicycle facility needs as funding opportunities arise, either as part of development agreements, as part of larger multimodal street improvement projects, or as stand-alone projects.
- As a relatively small community that is not designated as an urban or regional center, Covington has limited existing bus service and has not been a regional priority for improved transit service. The City's recent planning efforts establish a strong policy framework for development patterns that would be more supportive of future transit service, and provide a means to facilitate communication with King County Metro regarding potential future transit priorities, and with the PSRC regarding urban travel trends and multimodal transportation priorities.

5.0 ECONOMIC DEVELOPMENT

5.1 OVERVIEW

The section provides an overview of current economic conditions for the City of Covington to identify important issues facing the City. These issues will subsequently inform the development of goals and policies for updating the Economic Development Element of the Comprehensive Plan. The section is divided into the following topics:

- Regulatory Context and Planning Framework
- Existing Conditions
- Demographics
- Local Economy
- Implications of Existing Conditions and Trends
- Financial Tools for Economic Development
- Key Issues for the Economic Development Element

5.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

There are both state and countywide policies that the City's economic development element should reflect as summarized below.

Washington State Growth Management Act

The Growth Management Act (GMA) requires:

An economic development element establishing local goals, policies, objectives and provisions for economic growth and vitality and a high quality of life" (RCW 36.70A.070 (7))

The economic development element is a required section of a Comprehensive Plan, and is to contain information on the local economy as well as goals and policies:

(a) A summary of the local economy such as population, employment, payroll, sectors, businesses, sales, and other information as appropriate; (b) a summary of the strengths and weaknesses of the local economy defined as the commercial and industrial sectors and supporting factors such as land use, transportation, utilities, education, work-force, housing, and natural/cultural resources; and (c) an identification of policies, programs, and projects to foster economic growth and development and to address future needs. (RCW 36.70A.070(7))

King County Countywide Planning Policies

There are several countywide planning policies that address economic development and that have guided this assessment of economic development conditions:

- EC-2 Support economic growth that accommodates employment growth targets through local land use plans, infrastructure development, and implementation of economic development strategies.

- EC-4 Evaluate the performance of economic development policies and strategies in business development and job creation. Identify and track key economic metrics to help jurisdictions and the county as a whole evaluate the effectiveness of local and regional economic strategies
- EC-5 Help businesses thrive through:
 - Transparency, efficiency, and predictability of local regulations and policies;
 - Communication and partnerships between businesses, government, schools, and research institutions; and
 - Government contracts with local businesses.
- EC-7 Promote an economic climate that is supportive of business formation, expansion, and retention and emphasizes the importance of small businesses in creating jobs.
- EC-9 Identify and support the retention of key regional and local assets to the economy, such as major educational facilities, research institutions, health care facilities, manufacturing facilities, and port facilities.
- EC-15 Make local investments to maintain and expand infrastructure and services that support local and regional economic development strategies. Focus investment where it encourages growth in designated centers and helps achieve employment targets.

5.3 EXISTING CONDITIONS

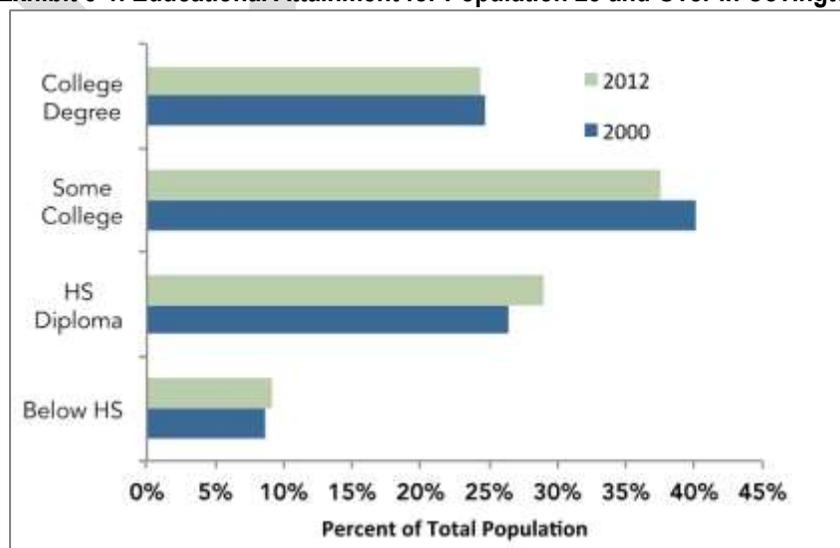
Population

According to the State Office of Financial Management, 2015, Covington’s population has grown an estimated 2.1% annually since 2000 to 18,520 in 2015. According to the 2009-2013 American Community Survey (ACS) 5-Year Estimates, children comprise a greater percentage of the population than King County as a whole, and according to the 2010 U.S. Census, the city is largely one of families with children which is borne out by the fact that 43% of households have either married or single parents with children.

Educational Attainment

Educational attainment and household income provide an understanding of the types of jobs that people living in Covington have. It also tells us if they are well paid and whether or not their jobs require high levels of education. Exhibit 5-1 provides a breakdown of the educational makeup of the city’s age 25 and older population.

Exhibit 5-1. Educational Attainment for Population 25 and Over in Covington



Source: US Census, 2000; US Census American Community Survey 2007-2012

- The share of residents over 25 in Covington with a college degree in 2012 in Covington was 25%, which is much lower than the King County share of 48.1%.
- In 2012 nearly 65% of residents had some college education or a college degree.
- Between 2000 and 2012 the share of residents with some college education decreased while the share of residents with only a high school education increased.

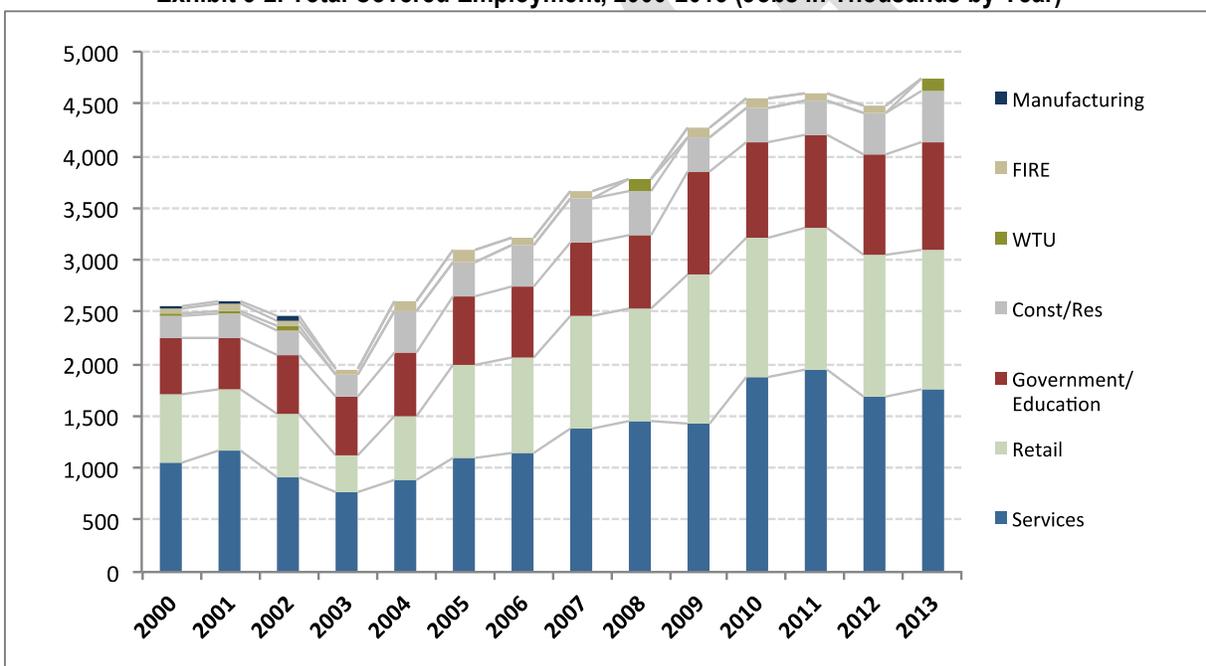
Household Income

The median household income in Covington in 2013 was \$90,280, which is substantially higher than the King County median of \$71,811. (2009-2013 ACS, 5-Year Estimates)

Employment

Exhibit 5-2 provides an understanding of the drivers of local growth and employment in Covington:

Exhibit 5-2. Total Covered Employment, 2000-2013 (Jobs in Thousands by Year)



Source: Puget Sound Regional Council 2000-2013; ECONorthwest, 2014

Note: FIRE (Finance, Insurance, and Real Estate), WTU (Warehousing, Transportation, and Utilities)

- Covington realized strong employment growth from 2003 to 2013
- Local-serving industries such as services, retail, and government/education make up the largest shares of the city's employment base.
- Retail sector employment has grown the most and the fastest from 2003 to 2013.
- Service sector employment is primarily in personal services, which follow population growth.

Covington's average unemployment rate is below that of the Seattle metropolitan area and the state. Covington's 2008-2012 average unemployment rate was 5.0% compared to 8.2% and 8.9% for the Seattle region and state, respectively. (ACS, 2008-2012)

The list of the largest employers in Covington in Exhibit 5-3 below reflects the dynamic growth of the retail sector.

Exhibit 5-3. Largest Employers in Covington

Employer	Service/Product	# of Employees	
		2008	Jun-15
Kent School District	Education K-12	784	555
Wal-Mart Stores, Inc.	Retail Variety	300	195
Multicare Health Systems	Health Care	300	300
Fred Meyer	Retail Variety	250	270
Costco	Retail Warehouse	200	305
Home Depot	Retail	125	130
Kohl's	Retail	125	100
Safeway	Retail Grocery	90	88
City of Covington	Municipal	51	41
Valley Medical	Health Care	37	49

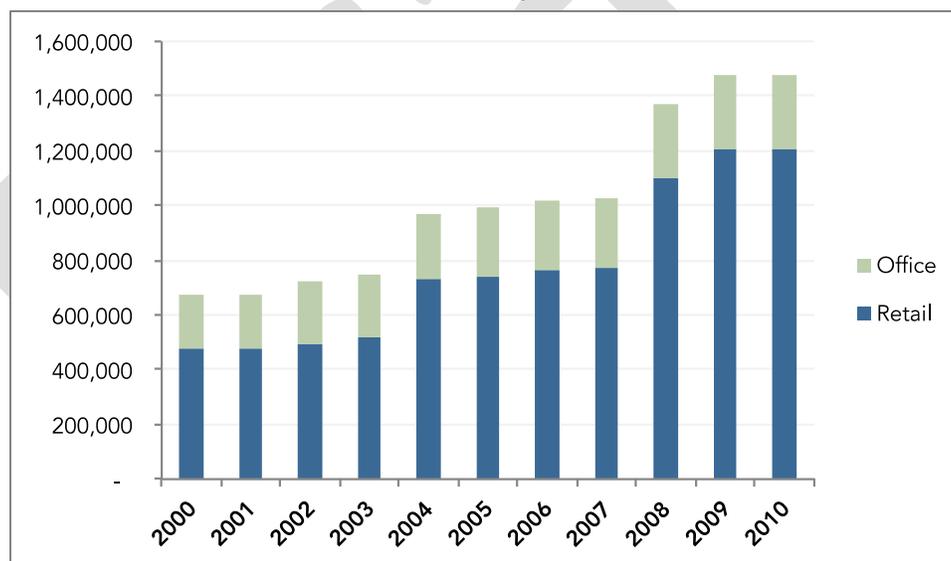
Source: City of Covington, 2015

- Collectively, retailers are the largest group of employers (1,173 employees).
- Kent School District is by far the largest single employer within the city.

Commercial and Industrial Development

Consistent with the rapid growth of retail and service sector employment, commercial space grew rapidly in Covington between 2000 and 2010 as indicated in Exhibit 5-4 below.

Exhibit 5-4. Commercial Square Feet, 2000-2010



Source: King County Assessor, 2012; ECONorthwest, 2014

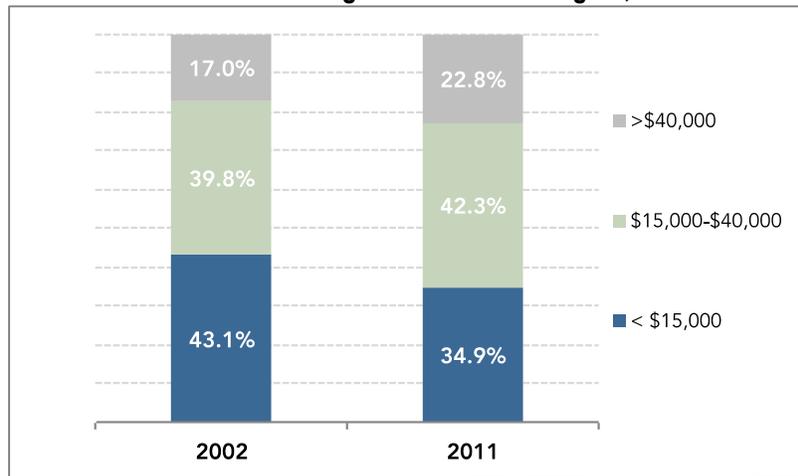
- Between 2000 and 2010, Covington added over 800,000 square feet of commercial space.
- By 2010, 82% of commercial space in Covington was for retail uses.

The Lakepointe Urban Village Subarea Plan includes the potential for an additional 680,000 to 850,000 square feet of new commercial space next to the interchange at SR18 and 204th Avenue SE. Almost all of the commercial space is anticipated to be for retail uses.

Employment Income

As shown in Exhibit 5-5 below, employment income for workers in Covington reflects the large number of service and retail jobs which typically pay lower wages than do jobs in other sectors.

Exhibit 5-5. Annual Earnings for Jobs in Covington, 2002 & 2011



Note: Values are not adjusted for inflation.

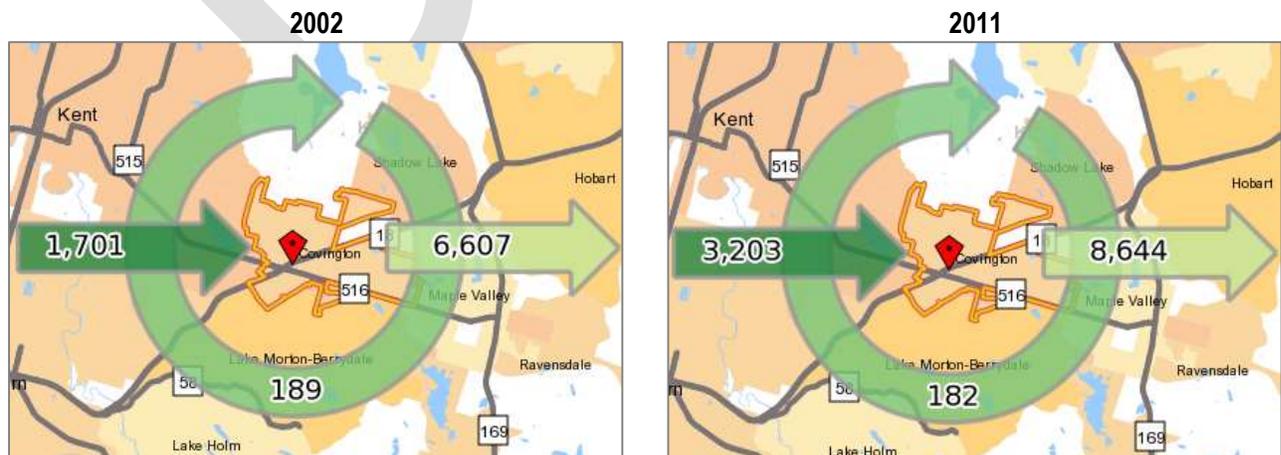
Source: US Census Bureau, Longitudinal Employer-Household Dynamics; ECONorthwest, 2014

- Over 75% of jobs in Covington had annual earnings below \$40,000 per year in 2002 and 2011.
- However, the median level of earnings for workers that live in Covington in 2012 was \$43,740, which is higher than the King County median earnings for workers of \$40,143. (ACS, 2008-2012)

Travel to Work

Given the discrepancy between the low annual earnings for jobs in Covington and the high median household income for Covington residents, it is not surprising that commute flows indicate that Covington is a “bedroom community” where residents leave to work outside its boundaries and where almost all people who work in Covington commute into Covington from locations outside the city. Exhibit 5-6 graphically depicts this discrepancy.

Exhibit 5-6. Where Covington Residents Work and Where Covington Employees Come From



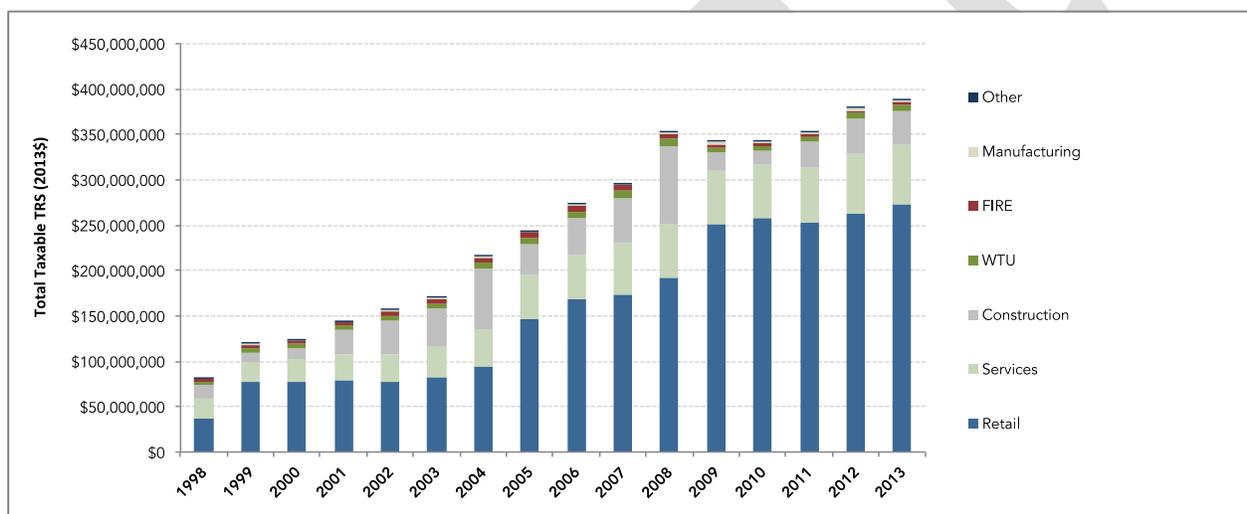
Source: US Census 2000 and ACS 2008-2012; ECONorthwest, 2014

- In 2011, fewer than 200 people lived and worked in Covington, which is relatively unchanged from 2002.
- The mean travel time to work has remained the same from 2000 to 2012 at 34 minutes.
- In 2012, over half of those residents working outside of Covington travel at least 10 miles or more to their job.³

Taxable Retail Sales

Retail sales reflect spending that occurs within the city and are a significant source of tax revenue for the City. As indicated in Exhibit 5-4 earlier, the amount of new retail space was the primary component of the growth in commercial space, which fact is reflected in the growth of taxable retail sales during the same 2003-2013 period. As indicated in Exhibit 5-7 below, taxable retail sales have grown considerably since 2003.

Exhibit 5-7. Taxable Retail Sales In 2013 inflation Adjusted Dollars, 1998-2013



Source: Washington Department of Revenue; ECONorthwest, 2014

Note: FIRE (Finance, Insurance, and Real Estate), WTU (Warehousing, Transportation, and Utilities)

- Total sales dipped during the recession starting in 2008, but sales increased between 2011 and 2013.
- The retail sector accounts for most of the growth: from 2003 to 2011, it grew at an average annual rate of 15.7%.
- Increases in retail sales follow growth in population and housing. Retail sales increased most from 2003 to 2008 while the population increased faster from 2000 to 2006.

Retail Sales Leakage

The amount of spending relative to the size of the local population indicates whether or not the city is attracting spending from outside the city or losing spending to other communities. When resident retail expenditures exceed local retail sales, the difference is referred to as retail sales leakage. As Exhibit 5-8

³ Mean travel time to work Source: US Census 2000 and ACS 2008-2012

Distance to job Source: US Census Bureau, Longitudinal Employer-Household Dynamics

indicates, in 2014 retail expenditures by city residents totaled \$367 million while local retail sales totaled \$338 million, resulting in over \$28 million in retail sales leakage.

Exhibit 5-8. Retail Spending, Local Retail Sales, and Retail Leakage, 2014

Retail Type	2014 Demand (Resident Expenditures)	2014 Supply (Local Retail Sales)	Opportunity Gap/Surplus
Motor Vehicle and Parts	\$80,155,843	\$3,541,494	(\$76,614,349)
Food and Beverage	\$41,657,039	\$12,074,349	(\$29,582,690)
General Merchandise	\$41,656,603	\$215,545,570	\$173,888,967
Building Materials and Garden	\$38,467,164	\$11,591,920	(\$26,875,244)
Food Service and Drinking	\$37,580,196	\$34,763,642	(\$2,816,554)
Gasoline Stations	\$33,681,547	\$17,443,396	(\$16,238,151)
Non-Retail Retailers	\$28,060,591	\$15,788,491	(\$12,272,100)
Clothing and Accessories	\$18,116,867	\$1,376,321	(\$16,740,546)
Health and Personal Care	\$16,174,525	\$17,387,272	\$1,212,747
Miscellaneous Stores	\$9,380,995	\$4,265,718	(\$5,115,277)
Furniture and Home	\$7,871,910	\$2,941,444	(\$4,930,466)
Sporting Goods, Hobby, Books	\$7,409,247	\$1,615,604	(\$5,793,643)
Electronics and Appliances	\$7,022,914	\$640,713	(\$6,382,201)
Total Retail	\$367,235,441	\$338,975,934	(\$28,259,507)

Source: Claritas, 2014

- The city has a retail gap from most categories with the largest in the motor vehicle and parts sector at almost \$77 million.
- However, the city had a large retail surplus of \$174 million for general merchandise due to the number of general merchandise stores in the city such as Walmart, Costco, and Home Depot.

Summary of Existing Conditions and Trends

Covington is a growing community with a population that is relatively young, and the vast majority of whom commute out of the city for work. This trend has not changed even as the city has realized more commercial development and an increasing number of jobs. Much of the commercial activity is in response to the population and housing growth in Covington and the surrounding communities. Below is a summary of conditions and trends that will help identify key issues for the update of the Economic Development Element:

- Covington has realized strong economic growth since its incorporation in 1997.
- Covington has increasingly become a retail and service center for the local population and broader area due to the accessibility provided by SR 18 and SR 516.
- Local employment has realized significant increases primarily in local-oriented service sectors such as retail, personal services, and government/education to support the increasing population.
- Recent growth in healthcare facilities and medical providers in Covington is becoming an important component of the local and regional economy.
- Household incomes of residents are 26% higher than the King County median despite educational levels below that of the county overall.
- Wages and earnings for employees working in the retail and service sectors in Covington are lower than earnings for residents of Covington and the County overall.

- Covington residents continue to commute an average of over 30 minutes elsewhere for jobs that are often better paying.

Implications of Existing Conditions and Trends

The trends identified in the above section show how Covington has been primarily a rapidly growing “bedroom” community and local retail center characterized by large-scale retailers. Housing and the desirability of Covington as a residential location has been the primary driver of this growth. Despite the population growth and corresponding economic activity, the City has a number of economic challenges and is moving towards a different growth pattern from the one that the city experienced over the last 15 years: it is now in the process of pivoting towards more of an infill and redevelopment approach to growth. The City has already embarked on this approach with its Downtown Plan, and, to a lesser extent, the Lakepointe Urban Village Subarea Plan. The need to pivot to a different growth pattern is a result of both regional and local factors.

Regional Factors

Regional factors include broader regional economic trends and state growth-management policies that influence how the region as a whole is growing. This has led to the following regional circumstances that affect Covington:

- Employment growth is increasingly occurring in existing employment centers, such as downtown Seattle and Bellevue.
- The rise of online shopping reduces the share of consumers spending at traditional “brick and mortar” stores, particularly large format discount and department stores.
- The City will not always have the opportunity to capture spending leakage. The market area for each sector will differ in size depending on the product. Sectors with large market areas, such as motor vehicle sales, serve a population much larger than Covington. As a result, a city the size of Covington cannot always support enough retail options to fully accommodate local demand.

Local Factors

Local factors are related specifically to Covington’s development capacity, and to its fiscal and economic situation.

- With the exception of downtown and the Lakepointe Urban Village, many of the large, easily developable sites in the city have already been developed or are in the process of being planned and developed. As a result, the remaining commercial development opportunities will occur as infill development on smaller parcels and/or redevelopment of existing sites.
- Surrounding communities are realizing new retail development that will compete for retail spending with stores in Covington.
- The City is experiencing increasing service and infrastructure costs from population growth paired with limited ability for tax revenues to keep pace. This is due to a 1% limit on property tax revenue increases and increased competition for retail spending.

Successfully making this pivot to a different growth pattern will require significant investment in infrastructure and city services. These reasons – along with the City’s demographic and economic trends – means the City will have to find ways to provide the level of services expected by residents and build the infrastructure needed to support continued growth and maintain the quality of life that make Covington a desirable place to live.

In order to meet these financial challenges, the City and other service providers will need to prioritize infrastructure investments, find ways to provide services more efficiently, and continue to grow (especially in the downtown and Lakepointe Urban Village) to support the City's tax base. The costs of failing to make this pivot include an erosion of its competitive position as a desirable place to live, work, and shop and an increasingly challenging fiscal position.

5.4 FINANCIAL TOOLS FOR ECONOMIC DEVELOPMENT

While Covington feels in many ways like a small town, it has the political and financial wherewithal to be an active, engaged partner in its economic development and the larger regional community. Covington is set in a complex regional context, where its economy is defined largely by influences and actors over which it often has little control. Strategic investment – directed by the community's leaders – will ensure Covington can continue to prosper. Much of this work will need to involve partners, either in coordinating the utility services provided by others or in sharing financial obligations among other jurisdictions. Covington has already demonstrated its ability to do this, through Interlocal Agreements (ILA's), and it must create a conducive environment so its future generations of leaders continue doing so.

Covington has several economic development tools at its disposal. A summary of them appears in Exhibit 5-9 below.

Exhibit 5-9. Applicable Economic Development Financial Tools

Tool	Applicability	Notes
General obligation bonds	Infrastructure funding	The City will want to consider its debt capacity, the ability to service the debt through the general fund revenues, and interest rates before issuing a bond.
Local improvement district	Infrastructure funding	A special assessment on properties benefiting from infrastructure project to help fund the project.
Traffic Impact Fee Funding Source Adjustment (TIFSA)	Infrastructure funding	A process allowing a funding source adjustment of up to fifty percent (50%) of traffic impact fees for three years after a certificate of occupancy is issued for a new, large, retail establishment.
Developer agreements	Development of infrastructure, public space or public amenity as part of a development project	Agreement between a developer and the City to include a public benefit not required by code.

Source: ECONorthwest, 2014

Covington has the capacity to incur additional public debt, but the community's tendency has been to support municipal investment only in those cases where direct benefit will result and where the community's money will be matched by funds from other governments or private entities. It is a fiscally conservative policy that has served the community well, and one that any proposed bond campaign will need to respect. There are opportunities to leverage public investment, making for more attractive partnership-style strategies where City funds are augmented by investment from others.

Key Issues for the Economic Development Element

This section assesses the key issues related of the demographic and economic trends and efforts to change the City's growth pattern for the update of Economic Development Element's goals and policies. Key issues include:

1. Covington's economy may need to become more diverse to adapt to future conditions and to maintain economic opportunities over the long-term.

- The City should recognize its strength—it is and has been a desirable residential community—and position itself to build off that strength while meeting future needs.
- In addition, the City needs to identify opportunities to grow the City's economy through regional businesses and professional services.
 - As the City grows, there will likely continue to be an increasing need for personal services, such as health care, FIRE (finance, insurance, and real estate), education, and entertainment and recreation (which also tend to be better-paying).
 - With the recent expansion of Valley Medical and Multi-Care facilities in Covington and continuing support from City and community leaders, the City has the potential to develop as a regional center for healthcare facilities and medical providers.
 - The City may want to target and recruit local entrepreneurs and business owners who live in the city and are willing to grow there. These local business owners or entrepreneurs, who may be leasing suburban space nearby or working at home, may consider relocating their offices or facilities to the Covington to be closer to home and/or to allow them to grow.
 - The City may want to target and recruit businesses that grow the local economy – this includes industry segments not currently in the city (or complement existing industries) and therefore grow the existing job base.

2. Increased local spending will be important to sustain and grow local commercial activity.

- There is increasing competition for local retail spending in the region, which is an important source of revenue for the City.
- Increasing local spending from local residents will increase local commerce, generating more local sales tax.
- Opportunities and access to well-paying jobs for local residents will be important in determining the amount of disposable income residents have.
- Find ways to keep living costs, especially housing and transportation, relatively low.
- 680,000 to 850,000 square feet of new largely retail commercial space at the Lakepointe Urban Village expands the variety of retail choices and offers the opportunity to capture some of the retail sales leakage.
- New housing in the Town Center and 1,000 to 1,500 new units at the Lakepointe Urban Village, both close to retail and services, offer the opportunity to capture some of the retail sales leakage.
- The City needs to continue to grow the number of households in the City.
- The City needs to support development envisioned with the Downtown Plan and Lakepointe Urban Village Plan so that those visions can be fully realized.

3. The City of Covington, its public agency partners, community residents, and local business owners must expand their capacity to match the community's economic growth and complexity.

- The City needs to position itself to be competitive for future residential, commercial, medical, educational, and retail development.
- A focus on government performance and services will be important as residents have located in the area because of strong public services and efficient local government.
- With local partners, conduct an annual strategic assessment of economic strengths and opportunities
- Annually review and update the economic development action plan

4. Covington's position as an attractive community relies on continued provision of high-quality services and effective public investment

- The City will need a strategy for infrastructure investments and City services to support development and redevelopment in the city.
- The City and its partners will need to make investments in infrastructure to support growth and the quality of life that will make Covington a desirable place to live.
- As a residential community, access to jobs throughout the region will continue to be important. As congestion increases, the City may want to consider how it can support reliable commuting options (better commuting transit service, park-n-rides, etc.).
- Multifamily housing in the Town Center and Lakepointe Urban Village can provide housing for service and retail workers close to their jobs, thereby reducing their commute from 10 miles to a short walk or bike ride.
- The City will need to be in a good fiscal position to make infrastructure investments.

5. Fiscal balance is a challenge for local government, and Covington is no exception.

While a number of these are already somewhat addressed or touched on in the Economic Development Element's current Goals and Policies, a more focused and concise set of goals and policies will make the plan clearer and connect it with other relevant elements, especially Housing and Capital Facilities.

6.0 NATURAL ENVIRONMENT

6.1 OVERVIEW

This section addresses the natural environment in Covington including environmentally critical areas, shorelines, and air and water quality. Conditions and trends for Covington's natural environment are briefly summarized below. For more detail, please see the Review of Best Available Science prepared for the 2015 update to the Comprehensive Plan and the City of Covington Hazard Mitigation Plan.

6.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

Growth Management Act Goals

Two of the established goals of GMA relate directly to the natural environment. One goal is to, "Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks" (RCW 36.70A.020(9)). Another goal is to, "Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water" (RCW 36.70A.020 (10)). GMA defines critical areas as critical aquifer recharge areas (CARAs), fish and wildlife habitat conservation areas (FWHCAs), frequently flooded area, geologically hazardous area, and wetlands, and requires that jurisdictions adopt ordinances to protect them.

The City regulates critical areas in CMC Chapter 18.65 Critical Areas.

Best Available Science Review

The Washington State Growth Management Act and implementing rules require cities and counties to "include the 'best available science' (BAS) when developing policies and development regulations to protect the functions and values of critical areas and must give "special consideration" to conservation or protection measures necessary to preserve or enhance anadromous fisheries." (Washington Administrative Code [WAC] 365-195-900) Critical areas include geologically hazardous areas, frequently flooded areas, critical aquifer recharge areas used for potable water, wetlands, and fish and wildlife habitat conservation areas (Revised Code of Washington [RCW] 36.70A.030(5)). Inclusion of BAS in the development of locally appropriate policies and regulations must be balanced with the many other substantive goals and mandates of the GMA. Use of non-scientific information (e.g., social, legal, cultural, economic, or political) that results in departures from scientifically valid critical areas recommendations must be identified and justified, and potential consequential impacts must also be identified.

A detailed study of the Best Available Science has been prepared under separate cover by The Watershed Company (2015).

Shoreline Management Act

Since the early 1970s, the Washington State Shoreline Management Act (SMA) has required that jurisdictions develop Shoreline Master Programs (SMP) for waterbodies and associated uplands designated as "Shorelines of the State" as defined below. Segments of Big Soos Creek, Jenkins Creek, and Pipe Lake are shorelines of the state in Covington.

"Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where

the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes. (RCW 90.58.030 (2)(e))

One of the goals of the Growth Management Act (GMA) incorporates the goals and policies of the shoreline management act as set forth in RCW 90.58.020. A community's SMP goals and policies are considered part of the Comprehensive Plan. The SMP development regulations are considered part of a community's GMA development regulations.

Water Quality

Covington's Public Works Department is responsible for Surface Water Management and the National Pollutant Discharge Elimination System (NPDES) Phase II Permit implementation. The City has adopted a Stormwater Management Plan (2015) to guide its compliance with NPDES requirements, described as follows:

The NPDES stormwater permitting program is a Federal Clean Water Act requirement delegated to the State Department of Ecology, requires cities with municipal stormwater systems to implement stormwater maintenance and management programs as a means to control polluted discharges. The Western Washington Phase II Municipal Stormwater Permit came into effect on February 16, 2007. The permit allows the municipalities to discharge stormwater from the municipal systems into waters of the state such as rivers, lakes and streams, as long as programs are implemented to reduce pollutants in stormwater by conducting activities and implementing programs in the following areas:

- *Public Education and Outreach*
- *Public Involvement and Participation*
- *Illicit Discharge Detection and Elimination*
- *Controlling Runoff from New Development, Redevelopment and Construction Sites*
- *Pollution Prevention and Operations and Maintenance for Municipal Operations*
- *Monitoring and Assessment*

Air Quality and Greenhouse Gas Emissions

As described in the Hawk Property Planned Action EIS (City of Covington, 2013), the Washington Legislature enacted Revised Code of Washington (RCW) 70.235, Limiting Greenhouse Gas (GHG) Emissions, into state law. The law adds a requirement to help achieve the GHG reduction targets: Decrease the annual per capita vehicle miles traveled 18% by 2020, 30% by 2035, and 50% by 2050. The state law applies only to actions taken by Washington State agencies and local governments. State regulations on GHG emissions include prerequisites for distribution of capital funds for infrastructure and economic development projects, where projects receiving funding must be evaluated for consistency with state and federal GHG limits and state vehicle miles traveled (VMT) goals (RCW 20.235.070). A number of mitigation strategies for new growth were included in the Hawk Property Planned Action Ordinance including voluntary measures that could be applied elsewhere in the City as the City elects.

Further, the Countywide Planning Policies for King County (King County Growth Management Planning Council, 2015) include a new policy for all cities and the county to work collectively towards: EN-17 Reduce countywide sources of greenhouse gas emissions, compared to a 2007 baseline, by 25% by 2020, 50% by 2030, and 80% by 2050. Assuming 1% annual population growth, these targets translate to per capita emissions of approximately 8.5 metric tons of carbon dioxide equivalent (MTCO_{2e}) by 2020, 5 MTCO_{2e}

by 2030, and 1.5 MTCO₂e by 2050. The Growth Management Planning Council for King County has noted a number of activities small communities can undertake to encourage reductions in GHG emissions, some of which the City has elected to conduct for other reasons: urban forestry, reducing single occupant vehicles, promoting energy conservation.

6.3 EXISTING CONDITIONS

Vegetation

Natural vegetation in Covington consists primarily of second- and third-growth Douglas fir, western hemlock, western red cedar and vine maple, as well as many plant species associated with lowland coniferous forests. Meadows and wetland plant species are also fairly common.

In a 2012 analysis done as part of the Urban Forestry Strategic Plan, tree cover was approximately 37 percent. Some of the benefits of maintaining and enhancing a healthy urban forest are reduced stormwater runoff and erosion; provision of shading and cooling; improved air quality and mitigation of wind effects; provision of wildlife habitat; and increased property values.

The City has achieved a designation of Tree City USA since 2002. The designation is based on the City “meeting four core standards of sound urban forestry management: maintaining a tree board or department, having a community tree ordinance, spending at least \$2 per capita on urban forestry and celebrating Arbor Day.” (Arbor Day Foundation, 2015)

Critical Aquifer Recharge Areas (CARAs)

Groundwater is a valuable source of drinking water as well as fresh water for stream, lakes, estuaries, wetlands and springs, and the habitat that such areas provide. Critical Aquifer Recharge Area (CARA) designations are meant to protect this resource by:

1. identifying aquifers that provide potable water, and
2. protecting those areas that provide recharge to aquifers so that water quality and water quantity can be maintained.

The vulnerability of an aquifer is the product of its susceptibility to contamination and the contaminant loading. Susceptibility is determined primarily by how easily water passes from the ground surface to the aquifer. An aquifer that easily receives water is also highly susceptible to contamination. Contaminant loading is a measure of the quantity of contaminants in the recharge area. Contamination may include any number of chemicals used for a variety of industrial or household uses, as well as some natural sources, such as salt water intrusion.

A highly vulnerable aquifer is one with high susceptibility and high contaminant loading (Aller et al, 1987; King County, 1995, 2004). A moderately vulnerable CARA may combine high susceptibility with low contaminant loading, or may combine low to moderate susceptibility with low to moderate contaminant loading.

Water quantity must also be considered when protecting CARA's (Cook, 2000; Morgan, 2005). Water quantity is a function of the amount of water being taken into the aquifer (recharge) and the amount of water being taken out of the aquifer (discharge). Discharge can include both natural releases to streams, springs, lakes, wetlands, estuaries, and shorelines, as well as human withdrawals via wells (Driscoll, 1986; Fetter, 1980, Winter et al, 1988). Development and associated increased impervious surfaces can decrease the amount of water reaching the aquifer by generating increased surface water runoff volumes (Duinne and Leopold, 1978).

Protecting CARA's involves identifying where they are, classifying them based on their vulnerability or some other rational method, and making appropriate land use decisions based on that classification. State and Federal laws regulate a number of activities and wellhead protection areas (RCW, 2013; WAC, 2013), but local jurisdictions may benefit from additional CARA protections.

The City of Covington defines CARAs in CMC 18.20.253 as,

“an area designated on the critical aquifer recharge area map adopted by CMC 13.37.020 that has a high susceptibility to ground water contamination or an area of medium susceptibility to ground water contamination that is located within a sole source aquifer or within an area approved in accordance with Chapter 246-290 WAC as a wellhead protection area for a municipal or district drinking water system, or an area over a sole source aquifer for a private potable water well in compliance with Department of Ecology and Public Health standards. Susceptibility to ground water contamination occurs where there is a combination of Covington Municipal Code 18.20.255 18-22.1 (Revised 12/14) permeable soils, permeable subsurface geology and ground water close to the ground surface.”

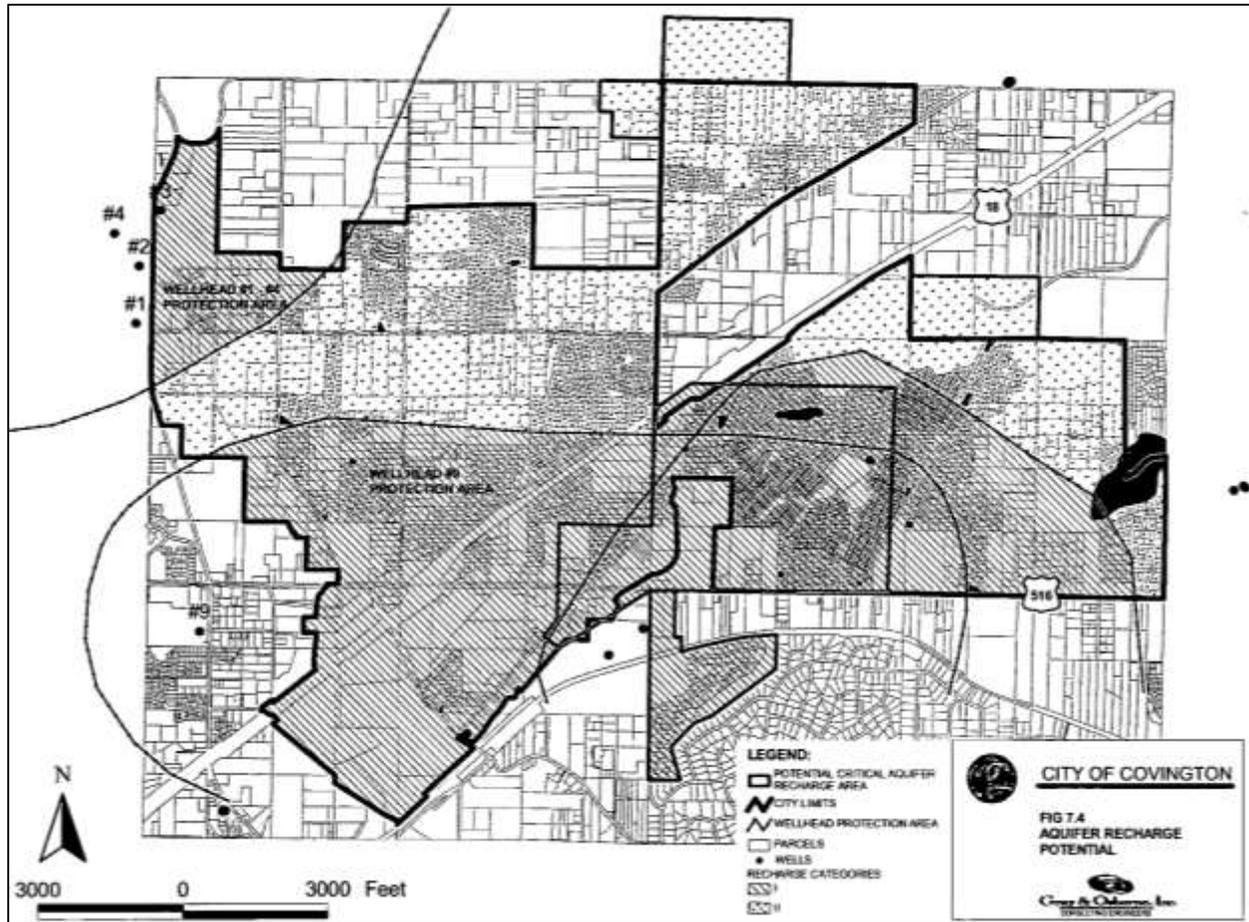
The City's code classifies aquifers as follows:

Critical aquifer recharge areas are categorized as follows:

- (1) Category I critical aquifer recharge areas include those mapped areas that Covington has determined are highly susceptible to ground water contamination and that are located within a sole source aquifer or a wellhead protection area;*
- (2) Category II critical aquifer recharge areas include those mapped areas that Covington has determined:
 - (a) Have a medium susceptibility to ground water contamination and are located in a sole source aquifer or a wellhead protection area; or*
 - (b) Are highly susceptible to ground water contamination and are not located in a sole source aquifer or wellhead protection area; and**
- (3) Category III critical aquifer recharge areas include those mapped areas that Covington has determined have low susceptibility to ground water contamination.*

Only Category I and II areas have been mapped in Covington. The City's mapping of such areas is shown in the Exhibit 6-1 below. Critical aquifer recharge areas have been defined in Covington to protect the City of Kent's (e.g. Armstrong Springs) and other special districts' wellhead protection areas to the south and northwest that may be susceptible to contamination.

Exhibit 6-1. Covington Critical Aquifer Recharge Area Map



Source: City of Covington Ordinance 15-05, 2005

Fish and Wildlife Habitat Conservation Areas

The City of Covington is located within the Green River Watershed (Water Resource Inventory Area 9). Streams generally drain to the south or southwest into Big Soos Creek, which drains into the Green River approximately 4.5 miles southeast of the City of Covington, just east of the City of Auburn.

Little Soos Creek meets Big Soos Creek just north of Highway 18 on the far western edge of the City of Covington. The confluence of Jenkins Creek and Big Soos Creek occurs just south of the city. Cranmar Creek and the North Jenkins Creek Tributary are both tributaries to the mainstem of Jenkins Creek. Cranmar Creek flows west along the southern boundary of the city near the Burlington Santa Fe Railroad. The creek crosses into the city for approximately 0.1 miles before meeting Jenkins Creek in an unincorporated area owned by the City of Kent. The North Jenkins Creek Tributary flows south through a residential community in the northern portion of the City of Covington north of SE Wax Road and meets Jenkins Creek just north of Jenkins Creek Natural Area outside of the City of Covington.

Pipe Lake is the only lake within the City of Covington, although smaller open water areas occur elsewhere in the city. Pipe Lake is situated between Covington and Maple Valley. The lake drains to the east into Lake Lucerne, which eventually drains northward into a tributary of Jenkins Creek. There are no stream inflows into either lake.

Exhibit 6-1 identifies the major streams and lakes in the City of Covington, as well as their status relative to shoreline jurisdiction and known anadromous fish use based on Washington State Department of Fish

and Wildlife’s (WDFW’s) Salmonscape (electronic reference). Note that ‘modeled presence’ in WDFW’s Salmonscape is based on stream slope, but it does not necessarily indicate actual presence of the species.

Exhibit 6-2 Major Streams and Lakes in the City of Covington

Waterbody Name	Shoreline Status	Anadromous Fish Use
Big Soos Creek	Shoreline of the State (downstream from confluence with Little Soos Creek)	Chinook, coho, steelhead, cutthroat, chum (modeled)
Little Soos Creek	Shoreline of the State associated wetland at confluence with Big Soos Creek	Chinook, coho, steelhead, cutthroat, chum (modeled)
Jenkins Creek	Shoreline of the State (downstream from confluence with North Jenkins Tributary)	Chinook, coho, steelhead, cutthroat, chum (modeled)
North Jenkins Tributary		Coho, chum (modeled), Chinook (modeled),
Cranmar Creek		Coho, chum (modeled), Chinook (modeled),
Pipe Lake	Shoreline of the State	

Source: City of Covington, 2008; WDFW, 2015

Among the anadromous fish documented or modeled to use watercourses in the City of Covington, Chinook salmon are federally listed as threatened and listed as a state candidate species, steelhead are federally listed as threatened, and coho salmon are federally designated a species of concern. All of the anadromous fish identified in Exhibit 6-1 are considered priority species by Washington State (WDFW 2008).

Pipe Lake is not known to support any priority or anadromous fish species. The lake likely supports a variety of warm water species in the centrarchid (sunfish) family.

Streams are commonly classified based on flow conditions and fish use. Under the current code, stream typing in Covington is similar to, but slightly distinct from the permanent water typing system recommended by the Washington State Department of Natural Resources (WAC 222-13-030). Exhibit 6-3 provides a comparison between the two stream typing approaches.

Exhibit 6-3. Comparison between Water Typing Approaches

WAC 222-13-030 Water Type	Brief Description	CMC 18.65.355 Water Type	Brief Description
Type S	Shoreline stream	Type S	Consistent with WAC definition
Type F	Fish bearing stream	Type F	Consistent with WAC definition
Type Np	Perennial, non-fish bearing natural stream	Type N	Non-fish bearing stream that is physically connected to a Type S or Type F water by an above-ground connection.
Type Ns	Seasonal, non-fish bearing natural stream	Type O	Non-fish bearing stream that is NOT physically connected to a Type S or Type F water by an above-ground connection.

Source: WAC 222-13-030; Covington Municipal Code (CMC)

Covington Municipal Code 18.65.381 requires protection of an active breeding site of any species with a habitat that is identified as needing protection. The CMC does not specify how to determine whether a species is identified as needing protection. However, policy NE-27 of the Natural Environment Element of the proposed Comprehensive Plan does identify protection and preservation of habitats for endangered, threatened, and sensitive species designated by the federal or state government, as required under WAC

365-190-130(2)(a). Covington Municipal Code 18.65.383 calls for protection along any designated wildlife habitat network adopted by the Comprehensive Plan.

The City of Covington includes habitat types that are known to be used or could potentially be used by species listed as endangered, threatened, or sensitive by state or federal government. These species are listed in Exhibit 6-4 (excluding fish, which are addressed above).

Exhibit 6-4. Endangered, Threatened, and Sensitive species potentially occurring in the City of Covington.

Common Name	Scientific Name	State Status	Federal Status
Birds			
Marbled murrelet	Brachyramphus marmoratus	T	T
Streaked horned lark	Eremophila alpestris strigata	E	T
Bald eagle	Haliaeetus leucocephalus	S	Co
Yellow-billed Cuckoo	Coccyzus americanus	C	T
Mammals			
Gray Wolf	Canis lupus	S	E

S=Sensitive species, C=Candidate species, Co=Species of Concern, T=Threatened, E=Endangered

Source: US Fish and Wildlife Service, 2015; WDFW, 2015

In addition to species listed as endangered, threatened, or sensitive, WDFW also identifies priority habitats and species for conservation and management.

Priority species include species with declining populations, species that are sensitive to habitat alteration, and/or species of recreational, commercial, or tribal importance. Priority habitats are habitat types or elements with unique or significant value to a diverse assemblage of species. Priority habitats and species identified within the City of Covington, not including fish species or species identified in Section 6.1, are identified in Exhibit 6-5. These species and habitats could be considered for protection as species or habitats of local importance. Other priority species may be present within the city, but not mapped.

Exhibit 6-5. Priority Habitats and Species in the City of Covington (not including fish or species identified in Exhibit 6-4)

Species	Description
Great Blue Heron	Breeding Area
Elk	Regular Concentration
Habitats	
Wetlands	Palustrine Lacustrine Littoral

Source: WDFW, 2015

Within the City of Covington, continuous wildlife corridors are focused along riparian areas, particularly along Big Soos Creek and Jenkins Creek, and to a lesser extent along Little Soos Creek and the North Jenkins Creek Tributary. The area west of Pipe Lake also consists of contiguous forest. Narrow forested corridors also remain within the Timberlane development.

Frequently Flooded Areas

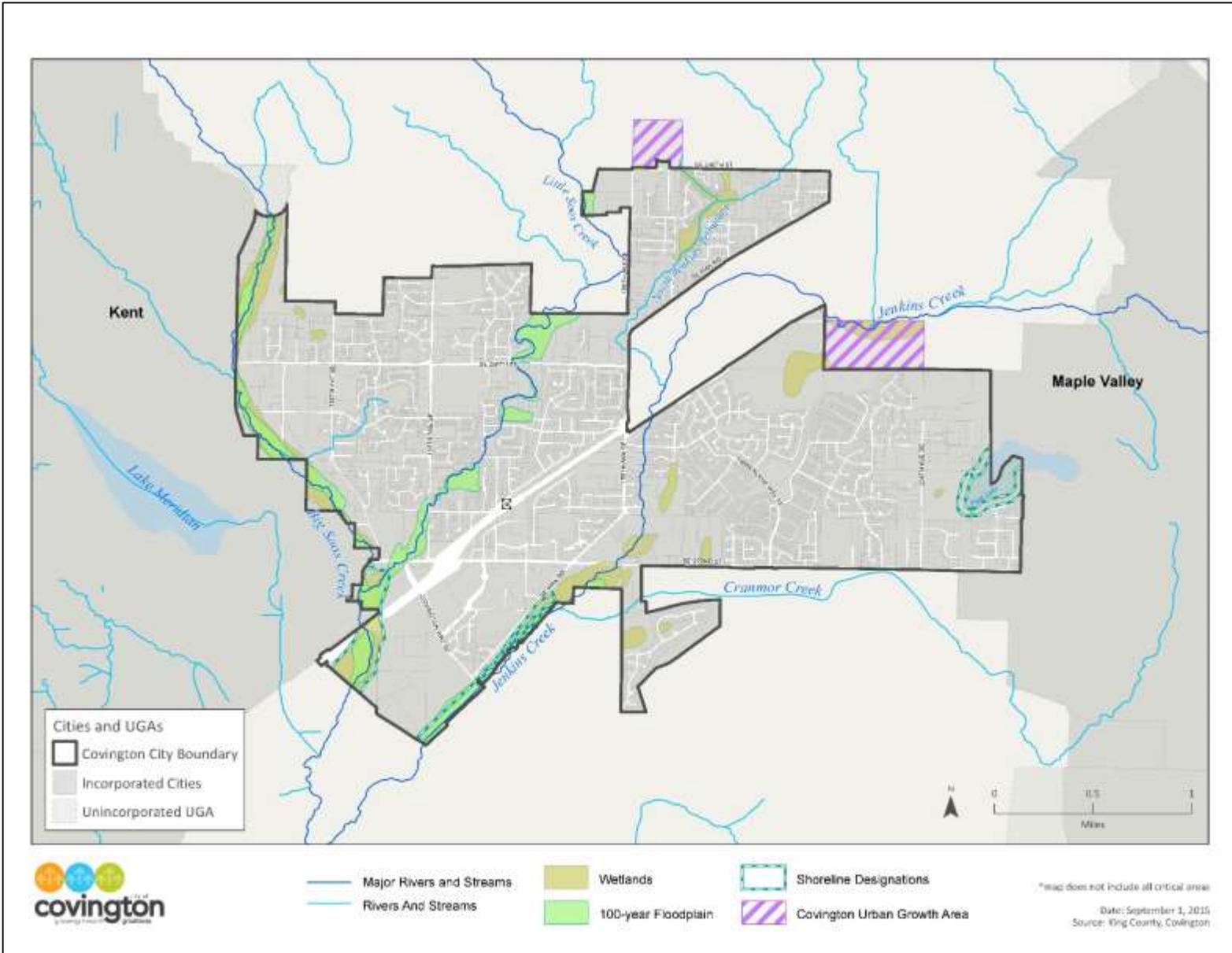
Flood hazard areas are identified by FEMA in a preliminary Flood Insurance Rate Map (FIRM) within the City of Covington; however, the preliminary FIRM has not yet been adopted. The preliminary FIRM

identifies a 100-year floodplain along Big Soos Creek, Little Soos Creek, and the lower reaches of Jenkins Creek, and floodway along Big Soos Creek. Current floodplain and wetland mapping is shown in Exhibit 6-6.

The city is affected by both riverine flooding and urban flooding, with low-lying areas particularly susceptible. Flood events are most common from November through April, typically occurring when storms move in from the Pacific, dropping heavy precipitation in the region. Properties in and near the floodplains of Covington are subject to flooding almost annually, and urban portions of the city annually experience nuisance flooding related to drainage issues. Large floods that can cause property damage typically occur every three to five years, and are usually the result of heavy rains of two-day to five-day durations augmented by snowmelt at a time when the soil is near saturation from previous rains. Approximately 10 to 20 percent of all flood-related damage from past floods in Covington has been located along small creeks and drainage areas susceptible to manmade flooding, which are outside of the FEMA-mapped flood hazard areas (Tetra Tech 2014).

Flooding in the city's natural drainage basins becomes a problem when human activities infringe on the natural floodplain. According to the City's Hazard Mitigation Plan (Tetra Tech 2014), 25 structures lie within the city's 100-year floodplain and 26 lie within the 500-year floodplain. In the 100-year floodplain, 84 percent are residential and 16 percent are commercial. Approximately 32 percent of parcels in the 100-year floodplain are currently vacant or public park spaces, but the vast majority are zoned as urban separator or medium density residential and allow for future development.

Exhibit 6-6. Wetlands and Floodplains



Source: King County GIS Center, 2015; City of Covington, 2015

Wetlands

Wetlands in Covington were mapped as part of the King County Wetlands Inventory, which focused on the larger wetlands in the County. In 2002, an additional inventory of wetland and stream resources within the city was completed, and 32 additional wetland areas were identified. Most wetlands in Covington are freshwater forested/shrub or freshwater emergent, and are generally associated with major streams and tributaries and Pipe Lake. Larger wetland areas occur along Big Soos Creek on the west side of the city; along Jenkins Creek adjacent to Wax Road just south of Kent-Kangley; and along the upper portions of Jenkins Creek in the north part of the city. See Exhibit 6-6.

Primary sources of water for Covington's lakes and wetlands are direct precipitation, surface water runoff, flows from rivers and streams, and subsurface groundwater flows. Water leaves the city's wetlands and lakes primarily through direct evaporation, surface outflows, and seepage into groundwater. During flood conditions, water overflows stream banks and enters wetland soils, which act like groundwater reservoirs and store surplus groundwater during wet periods, discharging this stored water into streams later to augment base stream flows.

Wetlands in Covington are currently buffered according to the city's critical areas regulations, which assign buffers depending on wetland category, type, and/or habitat score. Existing buffers are shown in Exhibit 6-7 below.

Exhibit 6-7 Wetland buffers under Existing Critical Areas Regulations

Wetland category	Characteristics	Buffer width (feet)
Category I	Bog	215
	Habitat score 29-36 points	225
	Habitat score 20-28 points	150
	All others	125
Category II	Habitat score 29-36 points	200
	Habitat score 20-28 points	125
	All others	100
Category III	Habitat score 20-28 points	125
	All others	75
Category IV		50

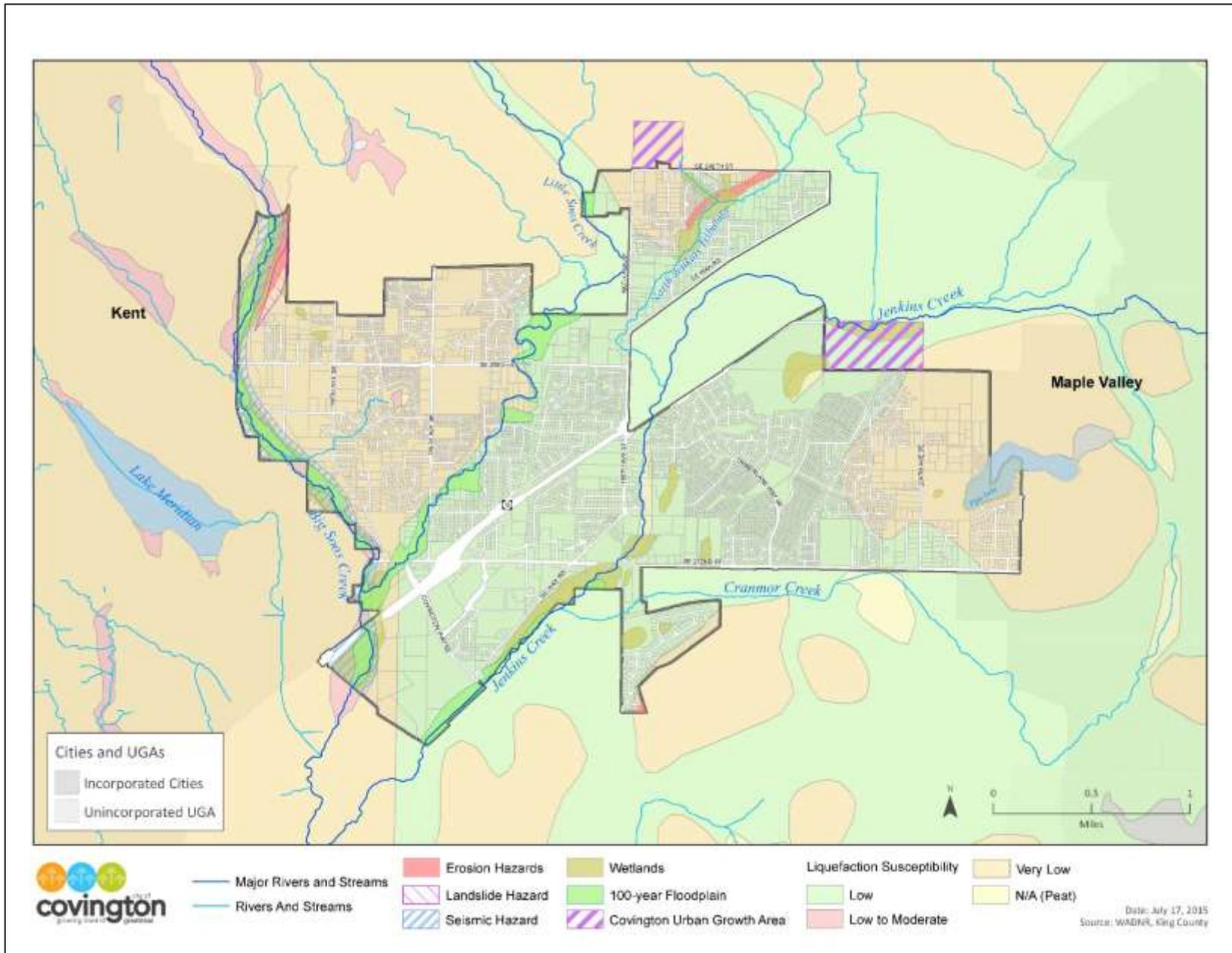
Source: Covington Municipal Code (CMC) 18.65.320

Geologically Hazardous Areas

Geologically Hazardous Areas include areas of erosion hazard, landslide hazard, seismic hazard, and volcanic hazard. Unlike most other critical areas, the goal of regulating geologically hazardous areas is to reduce the risk of harm to people or property that are associated with such areas, rather than to protect those areas from being harmed or degraded.

A general map of landslide, erosion, and liquefaction potential is shown Exhibit 6-8.

Exhibit 6-8. Geologic Hazards



Source: King County GIS Center, 2015; City of Covington, 2015

The City of Covington Hazard Mitigation Plan (HMP) (Tetra Tech 2014) includes analyses and mapping of earthquake and liquefaction, landslides, and volcanic hazards in the city. As noted in this plan:

- The City of Covington is in an area of King County that is less vulnerable than surrounding areas to extensive damage from earthquakes and most of the city is on soils (Alderwood and Everett series) with low to very low susceptibility to liquefaction (King County Soil Maps). Known peat deposits and areas of deep organic soils are generally protected in wetlands. Seismic hazards are shown in the HMP. Covington is about 35 miles from the Seattle Fault (Blakely and Johnson, 2002) and is not likely to experience ground ruptures from a seismic event along the fault (Keefer, 1983).
- Except for slopes along a northeast reach of upper Big Soos Creek, Covington has few areas prone to landslides. Ninety-Six percent (96%) of landslide risk areas in Covington are in public parks or nonresidential areas (Figures 10-5, 10-6. HMP).
- Covington is outside the probable zones of lava and pyroclastic flows, as well as lahars, from potential eruption of the nearest volcano (Mt. Rainier, about 40 miles SE of the city). The city could be affected by ash fall.

6.4 WATER AND AIR QUALITY

Water Quality

Water quality is characterized by several physical and biological factors, including suspended sediment, nutrients, metals, pathogens, and other pollutants. Water quality characteristics are controlled by upslope, as well as riparian conditions. Water temperature is also a component of water quality, which will be addressed separately.

When development results in reduced infiltration and increased surface flows, sediment and contaminants are transported more directly to receiving bodies without interfacing with natural soil filtration processes. Because of this, urban areas tend to contribute a disproportionate amount of sediment and contaminants to receiving waters relative to the percentage of urbanized area within the watershed (Sorrano et al. 1996).

Surface water quality is impaired in several waterbodies in Covington. See Exhibit 6-9. As a result of the impairments in Little Soos Creek, Big Soos Creek and Jenkins Creek, in 2006 Ecology initiated a total maximum daily load, or TMDL, for temperature and dissolved oxygen in the Soos Creek watershed. In the TMDL study Ecology identified the pollution problems and specified how much pollution needs to be reduced to achieve clean water. (Washington State Department of Ecology, 2015)

An implementation plan is pending. Agencies involved to date include: Muckleshoot Indian Tribe; King County; and the cities of Auburn, Black Diamond, Covington, Kent, Maple Valley, and Renton; implementation groups, such as Middle Green River Coalition and Midsound Fisheries Enhancement Group; Washington Department of Transportation; water purveyors such as Seattle Public Utilities, Covington Water, and King County Water District #111; watershed residents; and local businesses.

The City also employs stormwater manuals to minimize the impacts of development on water quality as well as water quantity. New development is conditioned to meet water quality, runoff control, and erosion control requirements. Low impact development is promoted in City manuals, and refers to a series of techniques that help retain natural hydrologic functions and promote healthy soils and native vegetation retention. This can reduce the need for constructed stormwater systems.

Exhibit 6-9. 2010 Water Quality Data from Ecology

Category	Description	Waterbodies	Parameters	Possible Sources	Possible Solutions
5	Polluted waters that require a TMDL.	Little Soos Creek, Big Soos Creek, Jenkins Creek.	Fecal Coliform, temperature.	Areas are not served by sewer systems. Fecal coliform could be associated with septic tank drainfields. For Big Soos Creek, domesticated animals are allowed near the stream, and the stream backs up into pasture areas.	Prohibit access to streams by domesticated animals. Restrict domesticated animals to fenced off-leash areas at parks; provide fenced areas as needed. Provide public education and outreach to inform citizens on water quality impacts from uncollected waste from domesticated animals. Confirm if there are permitted or unpermitted domesticated animal farms within the City in areas adjacent to streams; coordinate with property owners to make sure that farms are in conformance with the CMC. Sewer service agencies should review feasibility of extending sewer service.
4C	Is impaired by a non-pollutant.	Pipe Lake, Lake Lucerne.	Invasive exotic species: hydrilla and Eurasian water-milfoil.	Typically transported by boats that have been in other similarly impaired waterbodies.	Continue participating in King County's Regional Eurasian Milfoil Control Plan.
4B	Has a pollution control program.	None listed.	None listed.	Not applicable.	Not applicable.
4A	Has a TMDL.	None listed.	None listed.	Not applicable.	Not applicable.
2	Waters of concern.	Little Soos Creek, Big Soos Creek.	Dissolved oxygen, pH.	Low dissolved oxygen could be impacted by fecal coliform levels. pH could be impacted to nearby construction projects with discharges from uncured concrete surfaces.	See Category 5 for discussion regarding fecal coliform. Inspect construction sites to determine that TESC measures are implemented during concrete placement and curing.
1	Meets tested standards is for clean waters.	Little Soos Creek, Big Soos Creek, Jenkins Creek, Pipe Lake, Lake Lucerne.	pH, Ammonia-N, total phosphorus.	Not applicable.	Not applicable.

Source: City of Covington, Comprehensive Stormwater Plan Update, Parametrix 2010

Air Quality

Air quality in Covington and in much of the Puget Sound area is tied to controlling emissions from all sources, including: internal combustion engines, industrial operations, and indoor and outdoor burning. In the Puget Sound region, vehicle emissions are the primary source of air pollution.

Based on monitoring information collected over a period of years, the U.S. Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) designate regions as being attainment or nonattainment areas for regulated air pollutants. Attainment status indicates that air quality in an area meets the National Ambient Air Quality Standards (NAAQS), and nonattainment status indicates that air quality in an area does not meet those standards. If the measured concentrations in a nonattainment area improve so they are consistently below the NAAQS, Ecology and EPA can reclassify the nonattainment area to a maintenance area. Covington is currently designated as a maintenance area

for carbon monoxide (CO) and ozone and an attainment area for all other criteria air pollutants (particulate matter (PM) 10, PM2.5, lead, sulfur dioxide [SO₂], and nitrogen dioxide (NO₂)).

GHGs are a group of gases that, when present in the atmosphere, absorb or reflect heat that normally would radiate away from the earth, and thereby increases global temperature. Several GHG constituents are commonly evaluated: carbon dioxide (CO₂), methane, nitrous oxide, water vapor, O₃, and halocarbons. CO₂ is the individual constituent that is normally emitted in the greatest amount and generally contributes the most to climate change. Each individual constituent has its own global warming potential. To express the average emission rate and global warming potential of the combined constituents, GHG emission rates are commonly expressed as the equivalent amount of carbon dioxide (CO₂e).

Climate models project annual temperature increases totaling 2.0 degrees Fahrenheit by 2020 and 3.2 degrees Fahrenheit by the 2040s (Mote and Salathe 2010). Global climate change is projected to impact climatic variation and natural resources in the Pacific Northwest. A reduction in regional snowpack, a subsequent reduction in summer water supply, and hardships for salmon and forests are expected to pose a challenge to natural resource management (Mote et al. 2003). Seasonal changes in the Pacific Northwest are projected to entail wetter autumns and winters and drier summers (Mote and Salathe 2010). Increased precipitation in autumn and winter may result in more frequent flood events. (The Watershed Company 2015)

The Hawk Property Planned Action EIS identified the potential for increasing GHG as a result of new growth, but also identified a number of mitigation measures that could reduce GHG. These measures include encouraging future developers to implement additional trip-reduction measures and energy conservation measures. GHG emissions reductions could be provided by using building design and construction methods to use recycled construction materials, reduce space heating and electricity usage, incorporate renewable energy sources and reduce water consumption and waste generation. These measures would also be beneficial to encourage citywide than only to the Lakepointe Urban Village.

6.5 SUMMARY OF CONDITIONS AND KEY ISSUES

Within the City's six square miles, Covington has an array of natural environment features.

- The City's urban forest is still extensive and can be increased based on the City's urban forestry strategy. Tree cover assists with maintaining clean air and water and managing runoff.
- Covington features several creeks, including Big Soos Creek, Little Soos Creek, Jenkins Creek, Cranmar Creek and North Jenkins Creek tributary.
- Pipe Lake is the only lake within Covington; however, smaller open water areas occur elsewhere in the City, such as Spring Pond in Jenkins Creek Park.
- Wetlands are generally associated with creeks and Pipe Lake as well as groundwater seeps.
- Critical aquifer recharge areas have been defined in Covington to protect the City of Kent's (e.g. Armstrong Springs) and other special districts' wellhead protection areas that may be susceptible to contamination.
- Many animals can be found in Covington, including deer, elk, beaver, bald eagle, and great blue heron.
- The City includes habitat types that are known to be used or could potentially be used by species listed as endangered, threatened, or sensitive by state or federal government, including Chinook salmon and steelhead.
- Continuous wildlife corridors are found along riparian areas.

- According to the Hazard Mitigation Plan, several natural hazards have some probability of occurring in the City. Natural hazards with high probability include drought, flood, landslides, and severe weather. Natural hazards with medium probability include earthquakes and fires. Natural hazards with low probability include dam failure and volcanic activity.
- Climate change is generally expected to impact the occurrence and severity of natural hazards. Current modeling efforts are unable to assess the likelihood of specific impacts for Covington; however, in the Pacific Northwest, projected changes include a rise in annual average temperature in all seasons and a likely increase in the frequency in extreme heat events, as well as small changes in annual precipitation, with more frequent heavy rainfall events.

Draft

7.0 CAPITAL FACILITIES AND UTILITIES

7.1 CAPITAL FACILITIES OVERVIEW

This section provides information on capital facilities that serve Covington including those owned and operated by the City of Covington (City) and other service providers such as the Kent Regional Fire Authority, the Kent School District, the Covington Water District, the Soos Creek Water and Sewer District, and King County Water District 111. For each capital facility type, an inventory of existing facilities and the current and future level of service (LOS) are provided based on anticipated growth during the planning period. Additionally, proposed capital projects and funding sources are addressed based on growth and demand for services.

7.2 CAPITAL FACILITIES PLANNING FRAMEWORK

The GMA requires all comprehensive plans to include a capital facilities plan element, which analyzes the need for future capital improvements to support the development goals and growth projections stated in the Land Use Element, as well as the funding mechanisms available for implementation. The CFP element must include an inventory of existing facilities, the demand for capital needs considering level of service (LOS) standards, and capital facilities improvements for the 6-year and 20-year planning periods, including a financing plan for the six-year capital improvement program (CIP). (RCW 36.70a.070 (3)) Broad funding is identified for the 20-year CFP.

7.3 CAPITAL FACILITIES INVENTORY

The City of Covington provides limited public services and associated capital facility planning within the City and relies on special district providers for many public services. Exhibit 7-1 lists the service providers in the City. The City has an obligation to coordinate with the service providers to ensure that public services can be provided to support new growth and maintain established LOS standards.

Exhibit 7-1. Public Service Providers

Public Service	Provider	Relevant Plans and Documents
Municipal Buildings	City of Covington	Public Works Maintenance Facility Study 2013 New City Hall Feasibility Study 2012
Police	King County Sheriff (contracted service)	City Council Police LOS 2007 Resolution (RES 07-42)
Fire and Emergency Services	Kent Regional Fire Authority, Maple Valley Fire District (Mutual Aid)	Kent Fire RFA: Kent Regional Fire Authority Capital Facilities and Equipment Plan, 2014-33
Schools	Kent School District	Kent School District: Kent School District, Capital Facilities Plan, 2015-16
Parks and Recreation	City of Covington	Covington Parks and Recreation, and Open Space (PROS) Plan, 2010
Stormwater	City of Covington	Stormwater: City of Covington 2010 Comprehensive Stormwater Plan and 2015 Stormwater Management Plan
Streets	City of Covington	
Water	Covington Water District, King Co. Water District 111, Ham Water Co.	Covington Water District District: Covington Water System Plan Update, 2007
Sewer	Soos Creek Water and Sewer District	Soos Creek: 2014 Soos Creek Water and Sewer District Sewer Comprehensive Plan; King County Wastewater: King County Regional Wastewater Services Plan, 2013 Comprehensive Review

Source: BERK2015

Municipal Buildings

The City has minimal municipal buildings including leased City Hall and a Public Works maintenance facility. Municipal buildings and locations are listed on Exhibit 7-2 and illustrated on Exhibit 7-4.



the

Covington City Hall, Source: www.choicehomes4sale.com

Exhibit 7-2. Municipal Buildings Inventory

Municipal Facilities	Location	Size (SF)
<i>City Offices</i>		
City Hall	16720 SE 271st Street Covington, WA 98042	17,079
Total City Offices		17,079
<i>City Maintenance Shops</i>		
City Maintenance Facility (Maintenance and Office Building)	17852 SE 256th Street Covington, WA 98042	2,304
Total City Maintenance Shops		2,304

Source: City of Covington, 2015; BERK, 2015

Police Services

The City of Covington contracts with the King County Sheriff's Office to provide police services in the City. Currently, the existing office space for the department is 958 square feet (SF) and accommodates 14 existing police officers. Covington's Police Department consists of 2 individual offices in City Hall (1 for the Chief and 1 for the Detective) and shared space for the rest of the department. The address of the police department and current officers are shown in Exhibit 7-3.



Covington Police Officer
Source: City of Covington

Exhibit 7-3. City of Covington Police Service Inventory

Facility/ Officers	Location	Size (SF)/ Number
Covington Police Department SF	16720 SE 271st St., Ste. 100, Covington, WA 98042	958
Total Covington Police Department SF		958
Covington Police Officers		14
Total Covington Police Officers		14

Source: City of Covington, 2015

Fire and Emergency Services

The Kent Fire Department Regional Fire Authority (KDRFA) provides fire services to the citizens of Kent, Covington, SeaTac, and unincorporated areas of King County. The KDRFA covers approximately 50 square miles and a population of 140,000 people. Fire stations that provide services to the City of Covington are shown in **Error! Reference source not found.** and include stations outside the City limits. Three fire stations from Maple Valley Fire and Life Safety also provide fire services to citizens of the City of Covington by an automatic mutual aid agreement. Additional assistance is provided upon request from Mountain View Fire Stations 92 and 98 that are part of King County Fire District #44. Fire Stations that may be dispatched to provide fire services for the City of Covington include the following: 72, 74, 75, 77, 78, 80, 81, 83, 92, and 98.

Exhibit 7-5 shows the fire district boundaries and the fire stations that serve the City of Covington.

Exhibit 7-5. KDRFA Fire Services

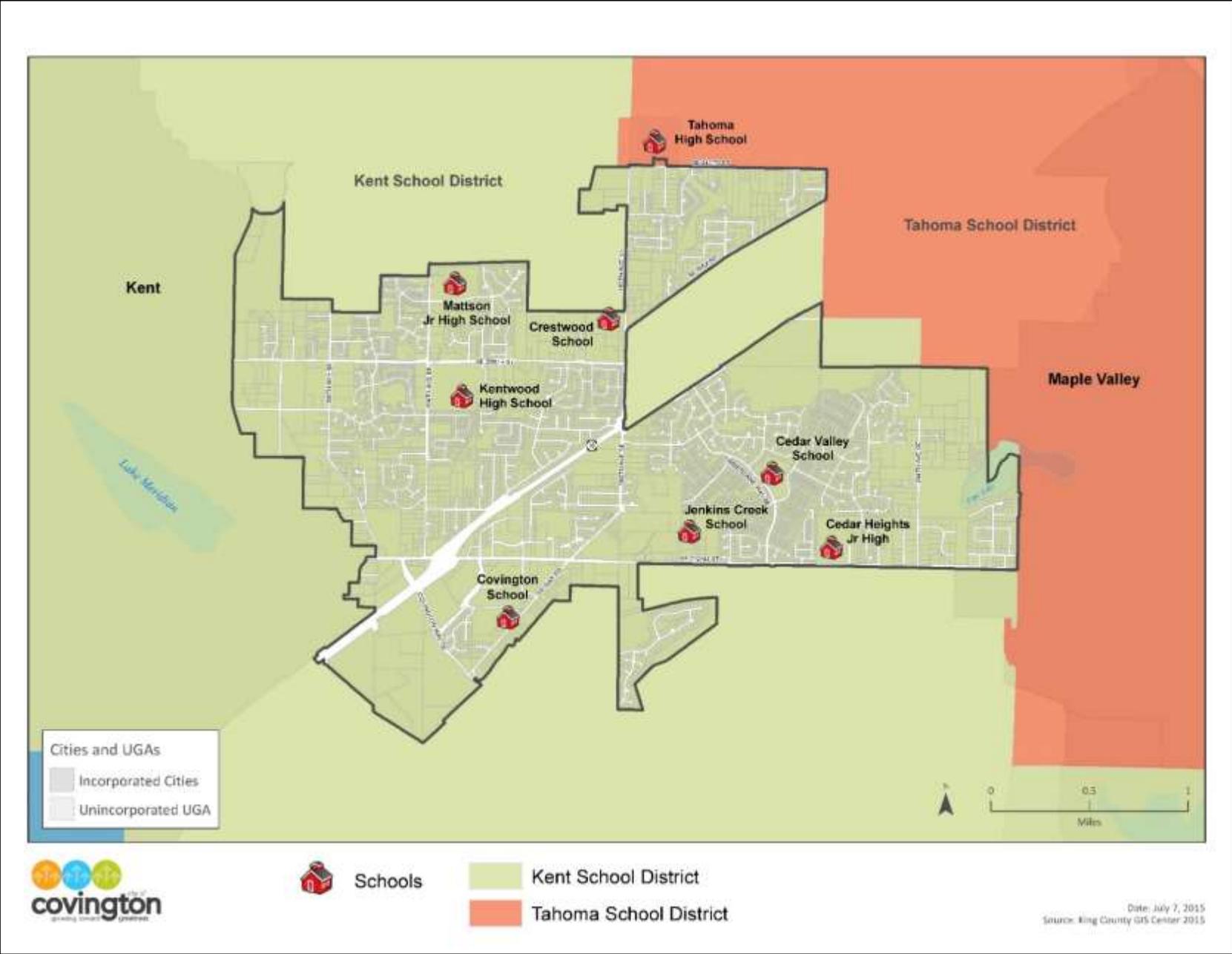
Facility	Location	Apparatus	Building Size (SF)
<i>Kent Fire Department Regional Fire Authority</i>			
Station 72	25620 140 Ave SE, Kent, WA 98042	Mobile Air Rig, Engine	9,000
Station 74	24611 116 Avenue SE Kent, WA 98030	Ladder, Engine, Aid Car, Command Vehicle, Engine (Training Engine), Reserve Command	16,600
Station 75	15635 SE 272 St., Kent, WA 98042	SkyBoom, Engine	12,650
Station 77	20717 132 Ave SE Kent, WA 98031	Engine, Lance Engine	15,500
Station 78	17820 SE 256 St, Covington, WA 98042	Quantum Engine, Smeal Ladder (reserve), Lance Engine, Zone 3 Mass Casualty Incident Unit	17,385
Total King County Fire District 37			71,135
<i>Maple Valley Fire and Life Safety</i>			
Station 80	23775 SE 246th Street Maple Valley, WA 98038	Engine, Aid Vehicle	8,985
Station 81	22225 SE 231st Street Maple Valley, WA 98038	2 Engines, Aid Vehicle, Tender Vehicle, and Brush Vehicle	11,500
Station 83	27250 216th Ave SE, Maple Valley, WA 98038	Engine	3,000
<i>King County Fire District 44 Mountain View Fire and Rescue</i>			
Station 92	31709 Kent Black Diamond Road Auburn, WA 98092	Pumper Engine, Aid Vehicle, and Brush Truck	6,280
Station 98	22015 SE 296th Street Black Diamond, WA 98010	Engine, Aid Vehicle, and Brush Truck	4,915
Total Maple Valley Fire and Life Safety 43			34,680
Total All Types			105,815

Source: Kent Fire Department Regional Fire Authority, 2015; BERK, 2015

Schools

The City of Covington is served by the Kent School District, the fourth largest school district in the state, which also serves residents of the cities of Auburn, Black Diamond, Covington, Kent, Renton, and SeaTac as well as portions of unincorporated King County. The Kent School District boundaries and schools within the Covington city limits are shown in Exhibit 7-6. The list of Kent School District schools in Covington and each school's student capacity is shown in Exhibit 7-7.

Exhibit 7-6. School Districts



Source: King County GIS Center, 2015

Exhibit 7-7. Kent School District Schools in the City of Covington

Facility	Location	Capacity (Students)
<i>Elementary Schools</i>		
Cedar Valley Elementary	26500 Timberlane Way SE, Covington, WA 98042	364
Covington Elementary	17070 SE Wax Road, Kent, WA 98042	488
Crestwood Elementary	25225 180th Ave SE, Covington, WA 98042	432
Grass Lake Elementary School	28700 191st Place SE, Kent, WA 98042	438
Horizon Elementary School	27641 144th Avenue SE, Kent, WA 98042	477
Jenkins Creek Elementary	26915 186th Ave SE, Covington, WA 98042	459
Lake Youngs Elementary School	19660 142nd Avenue SE, Kent, WA 98042	510
Meridian Elementary School	25621 140th Avenue SE, Kent, WA 98042	524
Sawyer Woods Elementary School	31135 228th Avenue SE, Black Diamond, WA 98010	486
Sunrise Elementary School	22300 132nd Avenue SE, Kent, WA 98042	543
Total Elementary Schools		4,721
<i>Middle Schools</i>		
Cedar Heights Middle School	19640 SE 272nd Street, Covington, WA 98042	895
Mattson Middle School	16400 SE 251st Street, Covington, WA 98042	787
Total Middle Schools		1,682
<i>High Schools</i>		
Kentlake Senior High School	21401 SE 300th Street, Kent, WA 98042	1,957
Kentwood Senior High School	25800 164th Ave SE, Covington, WA 98042	2,159
Total High Schools		4,116
Total Kent School District		10,519

Source: Kent School District, Capital Facilities Plan, 2014-15

Stormwater

The City lies in the Soos Creek drainage basin, addressed for stormwater management purposes in the Covington Master Drainage Planning Area designated by King County.

The City's existing stormwater conveyance system consists of several components such as curb inlets, catch basins, piping, open ditches, natural streams, wetlands, detention ponds, infiltration facilities, and water quality ponds as shown in in Exhibit 7-8 ((Parametrix, 2010) City of Covington 2015).

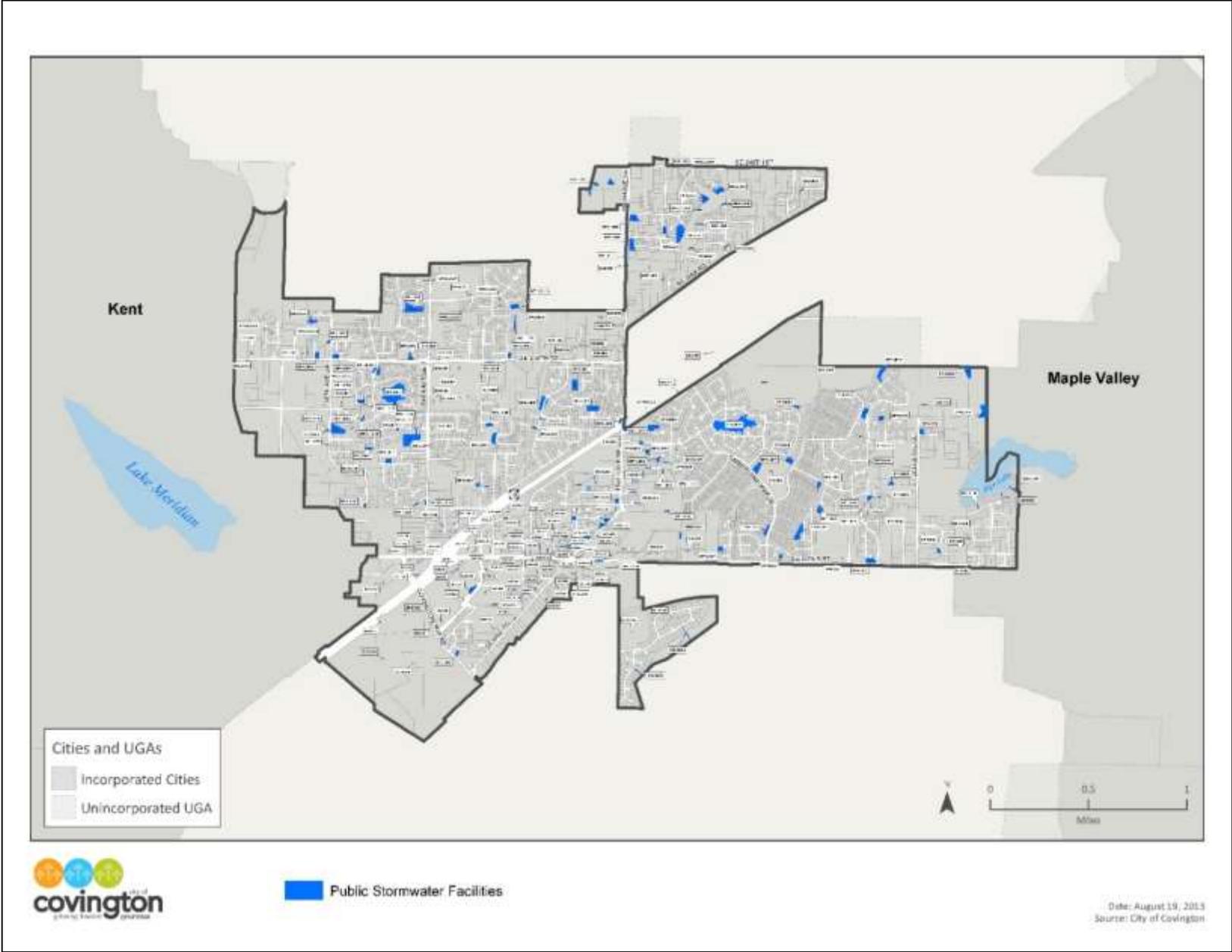
Exhibit 7-8. Current Facilities Inventory – Surface Water Management (2015)

Facility	Size/Amount (Miles, Number)
<i>Conveyance Pipe/Channel:</i>	
Closed Pipe	71.6
Ditch	12.7
Swale	4.1
Perforated Pipe	2
Total Conveyance Pipe/Channel	90.4
<i>Stormwater Controls:</i>	
Ponds	67
Vaults/Tanks	26
Conveyance	12
Swale	7
Total Stormwater Controls	112
Collection/Conveyance Structures (Catch basins, Manholes, etc.)	3,316

Source: Covington Surface Water Management Program Coordinator, 2015

In accordance with the NPDES Western Washington Phase II Municipal Stormwater Permit the City requires development to provide on-site stormwater management to mitigate these impacts. The City has also adopted the Department of Ecology's Stormwater Manual for Western Washington, allowing the most recent manual and amendments to apply. The City has also adopted the Puget Sound Partnership Low Impact Development Technical Guidance Manual for Puget Sound (CMC 13.25.020)

Exhibit 7-9. Stormwater System



Source: City of Covington, 2015; BERK, 2015

Streets

Transportation facilities within the City of Covington include road and street segments, rights of way, sidewalks, and bike lanes. Exhibit 7-10 shows the miles for each transportation facility. These transportation facilities are owned by the City of Covington. See Section 4 for additional information about streets and other transportation facilities including LOS and capital projects.

Exhibit 7-10. Transportation Facility Capacity

Facility/ Designation	Capacity (Miles)
Centerline Miles	69.5
Lane Miles	150
Sidewalks	67.1
Bike Lanes	5

Source: City of Covington, 2015; BERK, 2015

Exhibit 7-11 shows the bridges and culverts owned by the City of Covington.

Exhibit 7-11. Bridges and Culverts Inventory

Facility Name/ Designation	Location	Date Acquired
Bridges		
Rainier Vista Bridge	0.2 S SE 240th Street	2007
Wingfield Bridge	0.5 W 180th Avenue SE	2006
Culverts		
164th Avenue SE Bridge	0.25 N SR 516	1969
SE 262nd Place Bridge	SE 262nd Place	1963

Source: City of Covington, 2015; BERK, 2015

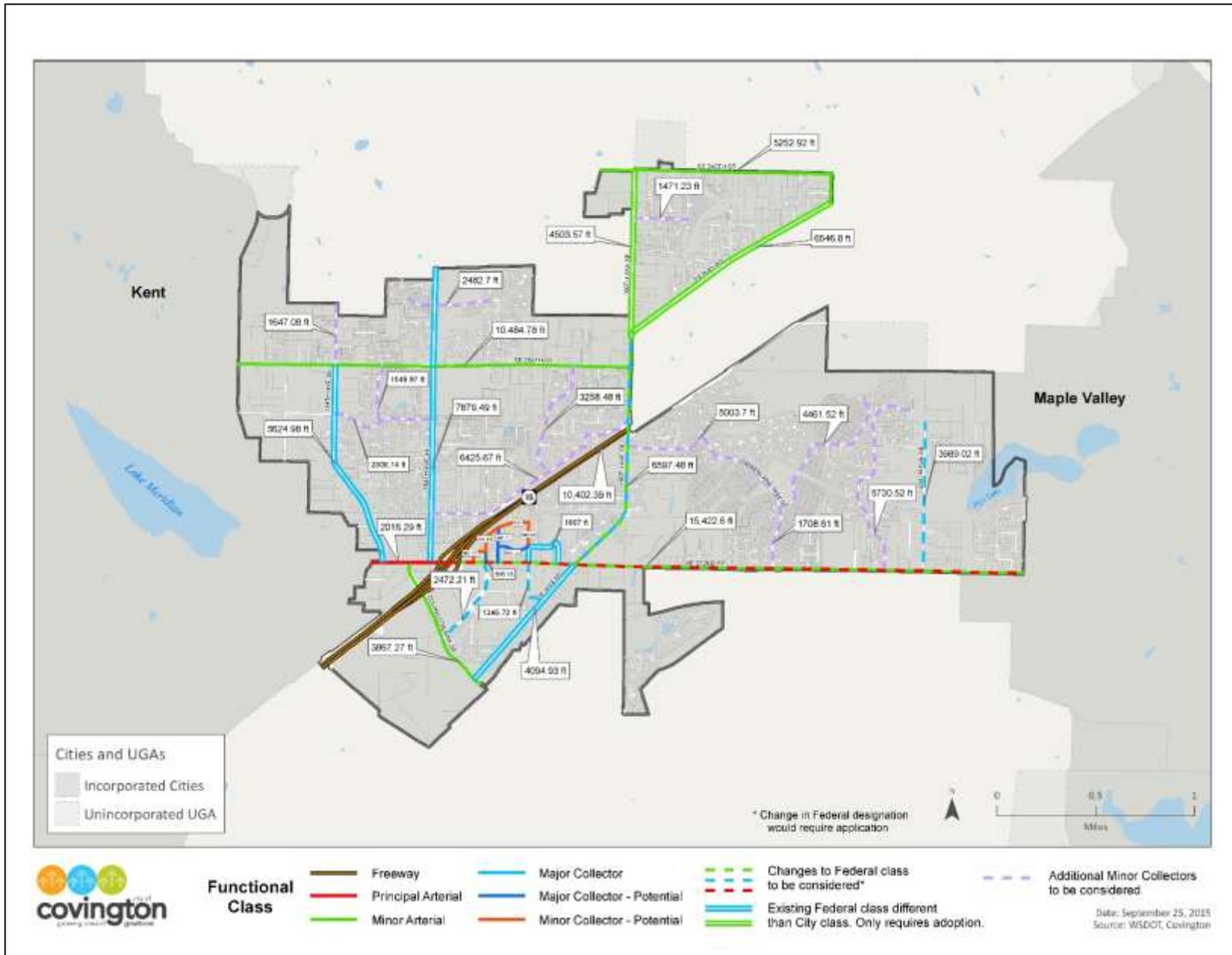
Exhibit 7-12 shows the street light inventory for the City of Covington, which is broken down by the street lights owned by INTOLIGHT and the City of Covington. INTOLIGHT is a street and area light installation and maintenance company.

Exhibit 7-12. Street Light Unit Inventory

Type of Street Light Unit	Number of Units	Unit Cost	Total Cost
<i>INTOLIGHT-Owned Street Lights</i>			
Cobraheads on Power Poles	36	\$ 300	\$ 10,800
Green Fiberglass Lamposts with Cobraheads	290	\$ 3,500	\$ 1,015,000
Acorn Style Lamposts	109	\$ 3,000	\$ 327,000
<i>City-Owned Street Lights</i>			
SR 516 Steel Pole Style Lights	56	\$ 6,000	\$ 336,000
Total Street Light Units	491		\$ 1,688,800

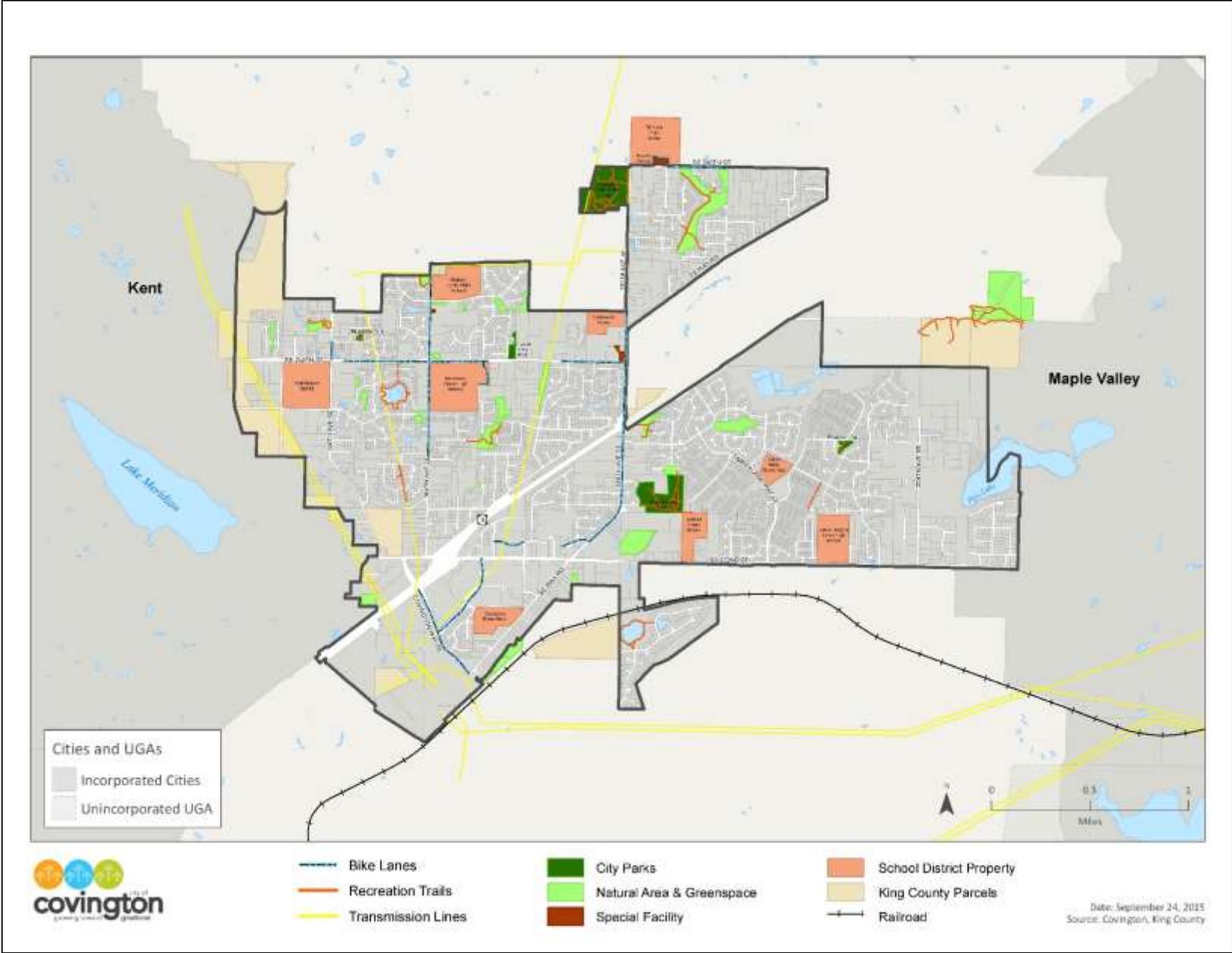
Source: City of Covington, 2015; BERK, 2015

Exhibit 7-13. Street Network by Functional Class



Source: WSDOT, 2015

Exhibit 7-14. Existing Non-Motorized Transportation Network



Source: King County GIS Center, 2015

Water

Water service is provided primarily by the Covington Water District, an independent non-municipal service provider. The District has 11 production wells and interties to receive water from neighboring water purveyors, 20.5 million gallons of water storage in steel water tanks at seven locations throughout the District, and approximately 267 miles of pipeline. Exhibit 7-15 shows the District's wells and associated capacity measured in million gallons per day (mgd).

King County Water District #111 and the Ham Water Company also provide limited water service in the western portion of the City. King County Water District #111 covers approximately 4,000 acres around Lake Meridian in Kent, WA. Water District #111 has three storage tanks, 150,000 gallons elevated, a 2 million gallon standpipe, and a 2 million gallon concrete reservoir. In the City, the District #111 overlays the Soos Creek Trail and Parkland and serves few homes. Approximately 80 single family homes in the City are within the King County Water District #111 boundaries. The Ham Water Company is a small privately-held water district serving a few lots.

Exhibit 7-15. Covington Water District Inventory

Facility	Location	Number of Wells	Capacity (mgd)
<i>Covington Water District Water Supply</i>			
222nd Wellfield	222nd Place	5	4.9
Witte Wellfield	Witte Road	4	1.84
264th Street Well	264th Street		0.37
City of Auburn (Purchase)			0.75
City of Tacoma (Purchase)			18.47
Total Covington Water District Capacity (mgd)			26.33

Legend: million gallons per day (mgd)

Source: Covington Water System Plan Update, 2007; BERK, 2015

In 2007, the Covington Water System Plan update identified the level of demand as shown in Exhibit 7-16. The factors used to determine the water demand forecast included demographic projections, non-revenue water, historical water use patterns, and effects of conservation.

Exhibit 7-16. Covington Water District's Average Annual Demand and Maximum Demand Forecast by Millions of Gallons per Day for 2005, 2011, and 2025

	2005	2011	2025
Average Annual Day (mgd)	4.49	5.22	6.92
Maximum Day (mgd)	8.85	10.29	13.64

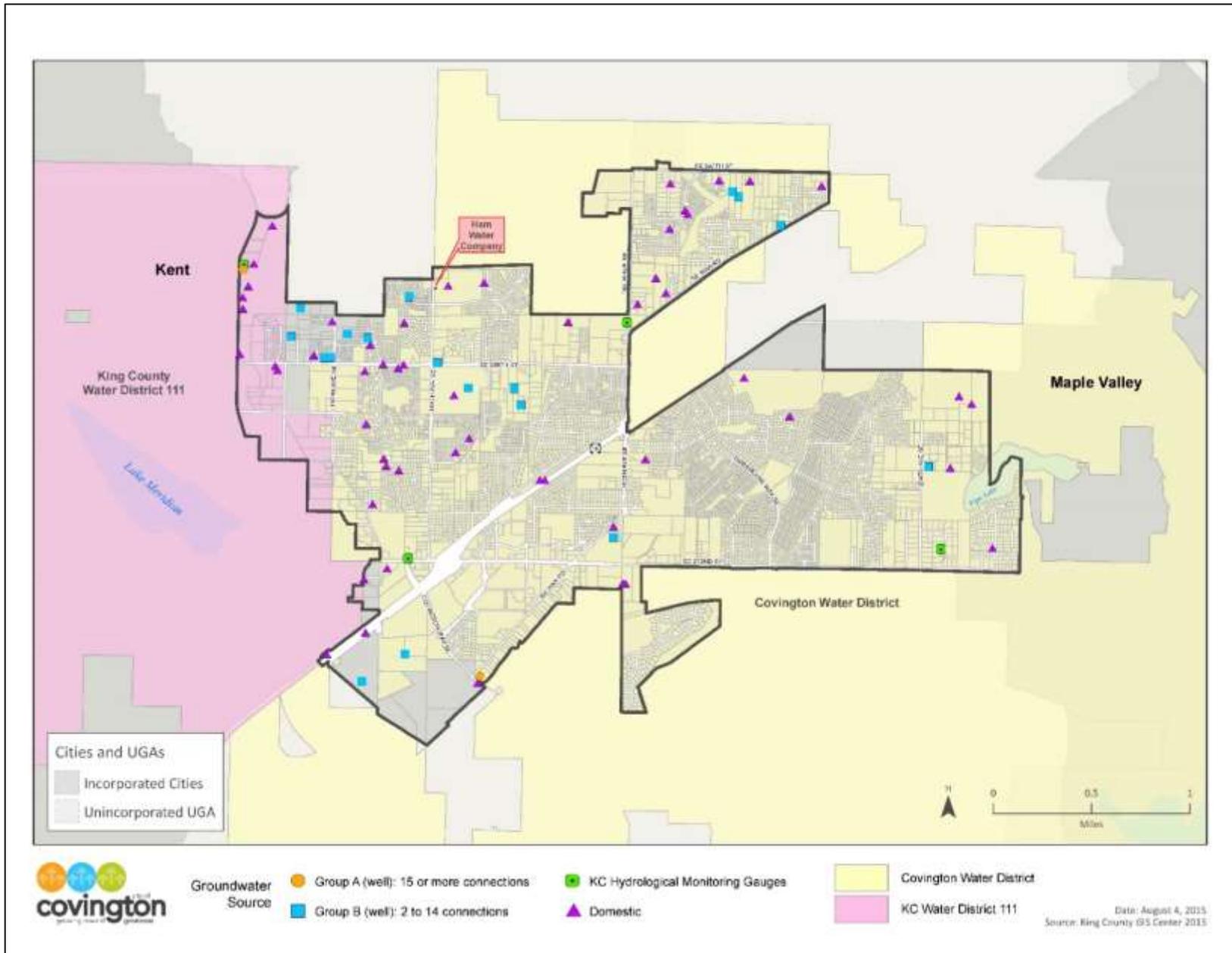
Source: Covington Water System Plan Update, 2007; BERK, 2015.

Exhibit 7-17. Covington Water District Annual Average Daily Water Usage by Customer Category, 1999 - 2004

Customer Category	Water Usage Factor (gpd)
Single Family Households	222
Multifamily Households	133
Employees (Commercial Non-Irrigation Customers)	89

Source: Covington Water System Plan Update, 2007; BERK, 2015

Exhibit 7-18. Water Service Areas



Source: King County GIS Center, 2015

Sewer

Soos Creek Water and Sewer District

Soos Creek Water and Sewer District (District) is located in southeastern King County and serves more than 91,800 people over an area of approximately 35 square miles. The City of Covington is located completely within the sewer planning area of the District, however the City of Covington is only a small portion of the District's service area.

The District's wastewater is treated by King County Wastewater Treatment Division's (formerly known as METRO) treatment plant in Renton. Some of this flow is delivered through conveyance facilities of other utilities. Wastewater leaves the District at 19 locations with 11 discharge connections to the Cedar River Water & Sewer District, three to the City of Renton, one to the City of Kent, and four directly to King County trunk lines.

King County Wastewater Treatment Division (WTD)

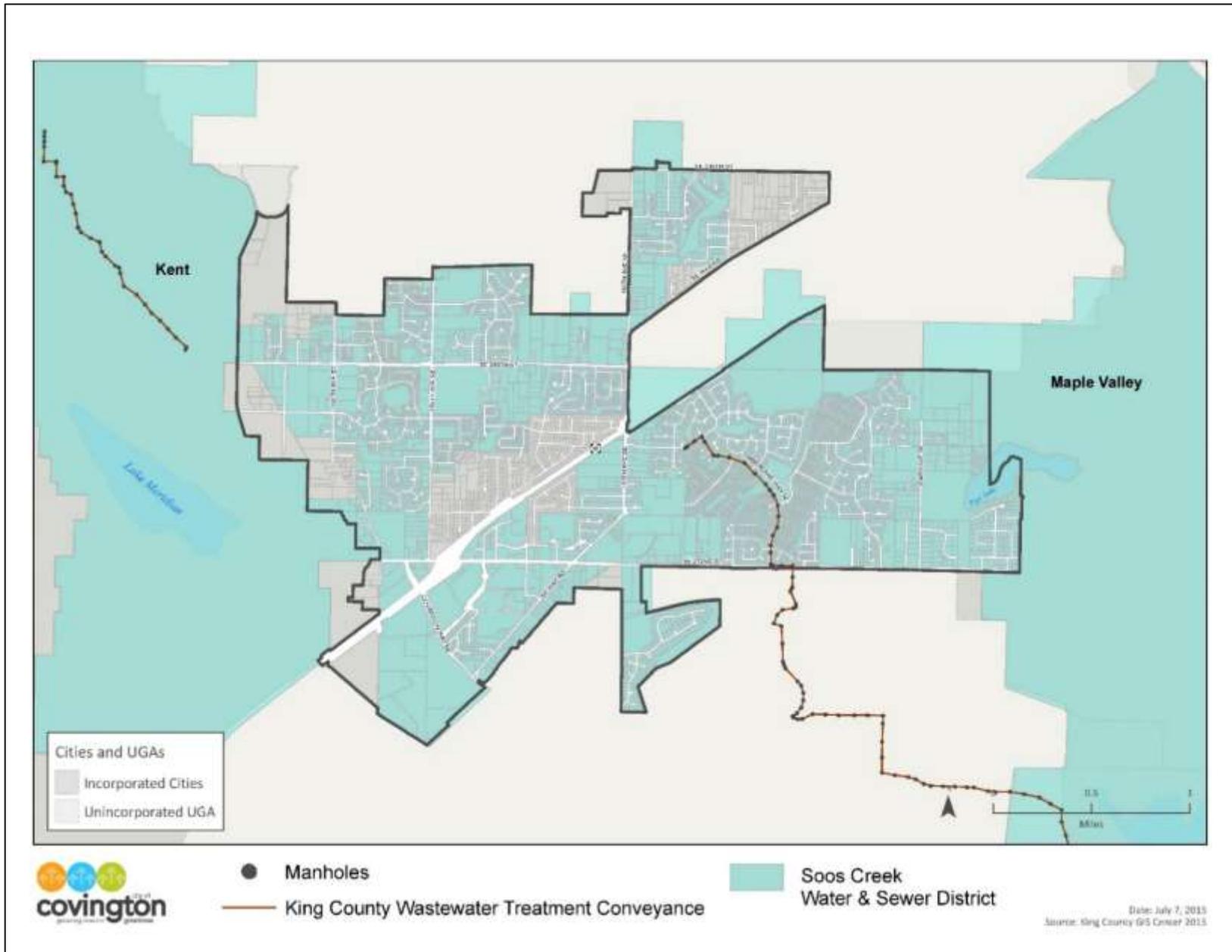
King County protects water quality and public health in the central Puget Sound region by providing high-quality and effective treatment of wastewater collected from 17 cities, 16 local sewer utilities, and one Indian Tribe. The County's WTD serves about 1.5 million people, including most urban areas of King County and parts of south Snohomish County and northeast Pierce County. Exhibit 7-19 shows WTD's existing facilities.

Exhibit 7-19. Current Facilities Inventory – System Wide

Facility	Size/Amount
Soos Creek Water and Sewer District	
Gravity Sewer Pipe	483 miles
Force Main Pipe	32 miles
Lift Stations	29
King County Wastewater Treatment Division	
Large Wastewater Treatment Plants	3
Small Wastewater Treatment Plants	1
Reclaimed Water Treatment Plant	1
CSO Treatment Facilities	4
Force Main and Gravity Pipe	360 miles
Regulator Stations	19
Pump Stations	43
CSO Outfalls	38

Source: 2014 Soos Creek Water and Sewer District Sewer Comprehensive Plan; King County Regional Wastewater Services Plan, 2013 Comprehensive Review

Exhibit 7-20. Soos Creek Sewer District Service Area



Source: King County GIS Center, 2015

7.4 UTILITIES

Overview

This section provides information on the current state of utility services available in Covington and the surrounding vicinity and will support development of the updated Utilities Element as part of the 2015 Comprehensive Plan Update.

Regulatory Context

The Growth Management Act (GMA) requires all Comprehensive Plans to include a Utilities Element that provides goals and policies to guide provision of electrical, natural gas, and telecommunications services in the City. Utilities elements are required to provide an inventory of utility facilities, as well as a discussion of capacity at proposed locations.

Existing Conditions

Electricity, natural gas, solid waste, telecommunications services are utilities that are generally available in the City, and the City's assigned Potential Annexation Areas within the King County Urban Growth Area (UGA) Boundary.

Puget Sound Energy

Puget Sound Energy (PSE) owns and maintains the existing power distribution system within the city limits. Overhead power lines may be required to be undergrounded as development progresses. Underground conduits generally supply secondary power to existing structures in study area.

Covington is currently served by the Soos Creek and Pipe Lake Substation. To increase capacity and reliability in Covington, PSE is planning to develop a new substation within city limits called the Jenkins Substation. (PSE, 2015).

Bonneville Power Administration

Bonneville Power Administration (BPA) owns and operates most of the higher voltage transmission lines and substations in the Pacific Northwest. In 2009, to improve system reliability, a new 230 KV transmission line was installed to replace the existing 115 kv line between the PSE Berrydale Substation and the Bonneville Power Administration (BPA) Covington Substation within the city. According to the 2014 BPA 10-Year Plan, no projects are currently planned at the Covington substation or involving the transmission lines in Covington.

However, BPA is planning stormwater facility upgrades and planning for new buildings and parking along Covington Way within 5 years.



BP Land, Covington, Source: Komonews.com

Natural Gas

PSE provides natural gas service to Covington and the surrounding areas. The location, capacity and timing of system improvements depend greatly on opportunities for expansion and on how quickly the study area and surrounding areas grow. Natural gas is supplied to the City of Covington from Canada via the Williams Northwest Pipeline through the Covington Gate Station. PSE natural gas supply mains transport gas from the gate stations to District Regulators.

Williams Pipeline is proposing an upgrade on the pipeline over a 3-4 year period following 2015 and requesting a staging area they will need for the project in Evergreen Park. The City anticipates that by granting them an area for staging, they will level it for future installation of a play area.

Solid Waste

Solid waste for residential customers is provided by Republic Services, which operates under a contract with the City. Republic Services provides service for both solid waste disposal and recycling. Commercial solid waste providers are responsible for contracting for their own services. Solid waste transfer stations are provided by King County; the nearest station serving Covington is the Algona Transfer Station, which is scheduled to be replaced soon and is currently undergoing the site selection process for the new facility. The Cedar Hills Regional Landfill is the only regional landfill in King County. The Cedar Hills Regional Landfill is located in Maple Valley and operated by King County.

Telecommunications

The City of Covington is served by Comcast, Century Link, and WAVE. Comcast provides high speed internet, phone, and television services while Century Link provides telephone and high speed internet services. WAVE provides high speed internet services. Service is available throughout the city. In addition, some customers may choose to go wireless and utilize service through a mobile phone provider.

Key Issues for Comprehensive Plan Update

Coordinated Growth

Power, telecommunication, and solid waste services are provided by privately owned state regulated utilities. To ensure that services are provided concurrent with growth, the City coordinates with utilities and provides growth estimates. The City also administers development regulations and permitting services pertaining utility projects.

Sustainability and Conservation

Related to utility services, sustainability can be achieved by development that is compact in areas with existing utility infrastructure, but also through energy conservation and waste recycling.

The Washington State Energy Independence Act requires electric utilities to pursue conservation. Electric utilities are required to offer their customers a voluntary option to buy green power (RCW 19.29A.090). (WUTC 2015)

Solid waste disposal and recycling is coordinated through a King County Comprehensive Solid Waste Management Plan, most recently drafted in 2013. The plan includes solid waste reduction and recycling goals.

8.0 PARKS, RECREATION, AND OPEN SPACE

8.1 OVERVIEW

This section provides information on existing parks, recreation, and open space facilities to support Comprehensive Plan Update and associated Capital Facilities Plan. Information in this section includes the type of facility, location, size, and existing level of service. The City is in the process of updating its Parks, Recreation, and Open Space (PROS) Plan in 2015, and this section is based on the latest information available from that plan update.

8.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

Washington State Growth Management Act

This Parks and Recreation Element is being updated as part of the 2015 Comprehensive Plan Update in accordance with RCW 36.70A.070 of the Growth Management Act (GMA). Parks and Recreation are addressed in Goal 9 of the GMA:

(9) Open space and recreation. Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.

The GMA requires all Comprehensive Plans to include a Parks and Recreation Element which includes a facility inventory and existing level of service, estimates facility and service needs based on anticipated future growth, and provides an evaluation of intergovernmental coordination opportunities to provide regional approaches for meeting park and recreation demand. The Parks and Recreation Element is required when funding is provided by the State of Washington. The City is currently updating the 2010 PROS Plan.

King County Countywide Planning Policies

There are King County Countywide Planning Policies that address Parks, Recreation, and Open Space and that have guided this assessment of Parks, Recreation, and Open Space conditions:

DP-32 Adopt a map and housing and employment growth targets in city comprehensive plans for each Urban Center, and adopt policies to promote and maintain quality of life in the Center through:

- A broad mix of land uses that foster both daytime and nighttime activities and opportunities for social interaction;
- A range of affordable and healthy housing choices;
- Historic preservation and adaptive reuse of historic places;
- Parks and public open spaces that are accessible and beneficial to all residents in the Urban Center;
- Strategies to increase tree canopy within the Urban Center and incorporate low impact development measures to minimize stormwater runoff;
- Facilities to meet human service needs;
- Superior urban design which reflects the local community vision for compact urban development;
- Pedestrian and bicycle mobility, transit use, and linkages between these modes;
- Planning for complete streets to provide safe and inviting access to multiple travel modes, especially bicycle and pedestrian travel; and
- Parking management and other strategies that minimize trips made by single occupant vehicle, especially during peak commute periods.

DP-42 Design new development to create and protect systems of green infrastructure, such as urban forests, parks, green roofs, and natural drainage systems, in order to reduce climate altering pollution and increase resilience of communities to climate change impacts.

8.3 PARKS, RECREATION, AND OPEN SPACE FACILITIES

Exhibit 8-1 lists the Parks, Recreation, and Open Space facilities owned by the City of Covington including the facility type and acreage.

Draft

Exhibit 8-1. City of Covington Parks, Recreation, and Open Space Facilities

Facility	Size (Acres)
Community Parks	
Covington Community Park	29.90
Jenkins Creek Park	20.30
Total Community Parks	50.20
Neighborhood Parks	
Crystal View Park	1.90
Evergreen Park	1.70
Friendship Park	0.60
Total Neighborhood Parks	4.20
Greenspace	
Cedar Valley Park	6.75
Covington Legacy Greenspace	10.15
Emerald Downs Open Space	4.00
Foss Open Space	1.10
Foxwood Greenspace	3.40
Jenkins Creek Greenspace	1.10
Mattson Open Space	0.60
Meridian Trace Open Space	1.20
Morgans Creek	1.70
N. Jenkins Creek Park Greenspace	1.88
North Wingfield Open Space	3.60
S. Jenkins Creek Open Space	9.70
S. Soos Creek	3.30
Total Greenspace	48.48
Natural Areas	
Cedar Creek Park	31.50
Jenkins Creek Trail Park	3.40
Rainier Vista Open Space	21.50
South Wingfield Open Space	5.50
West Gateway	0.10
Total Natural Areas	62.00
Special Facility	
Covington Aquatic Center	1.45
Gerry Crick Skate Park	0.30
Total Special Facility	1.75
Total All Types	166.63

Source: City of Covington, 2015

Exhibit 8-2 lists City and non-city owned recreational facilities that serve Covington.

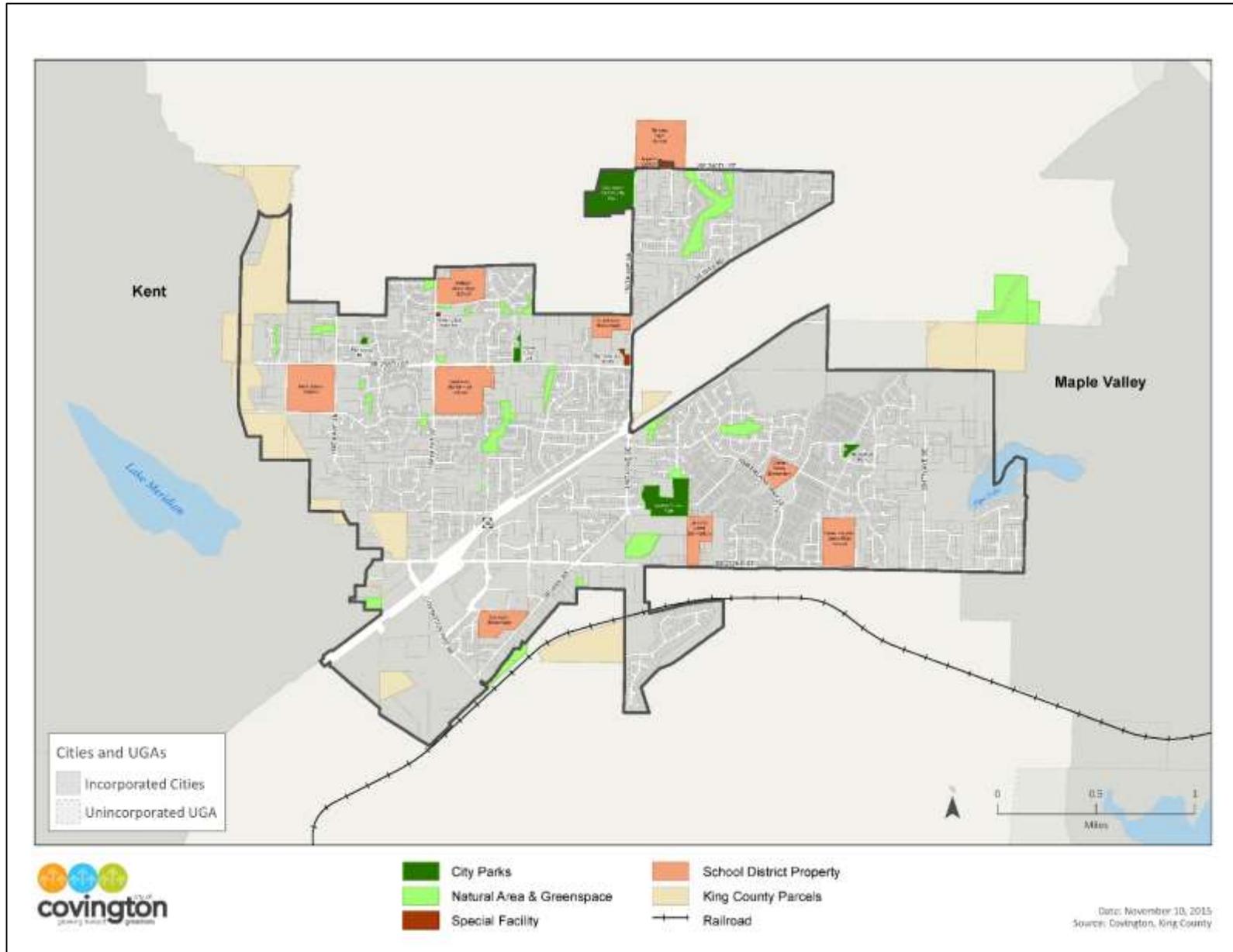
Exhibit 8-2. Combined City and Non-City Sites by Type

Type	Number of Sites	Acreage
Community Parks	2	50.2
Neighborhood Parks	11	61.12
<i>Public, City-owned</i>	3	4.2
<i>Private</i>	8	56.92
Natural Areas and Greenspace	33	206.97
<i>Public, City-owned</i>	17	110.48
<i>Private</i>	16	96.49
Special Facilities	3	39.9
<i>Public, City-owned</i>	2	1.75
<i>Private</i>	1	38.15
County	5	276.5
Schools	8	77.9
	Total Acreage:	662.39

Source: City of Covington, 2015

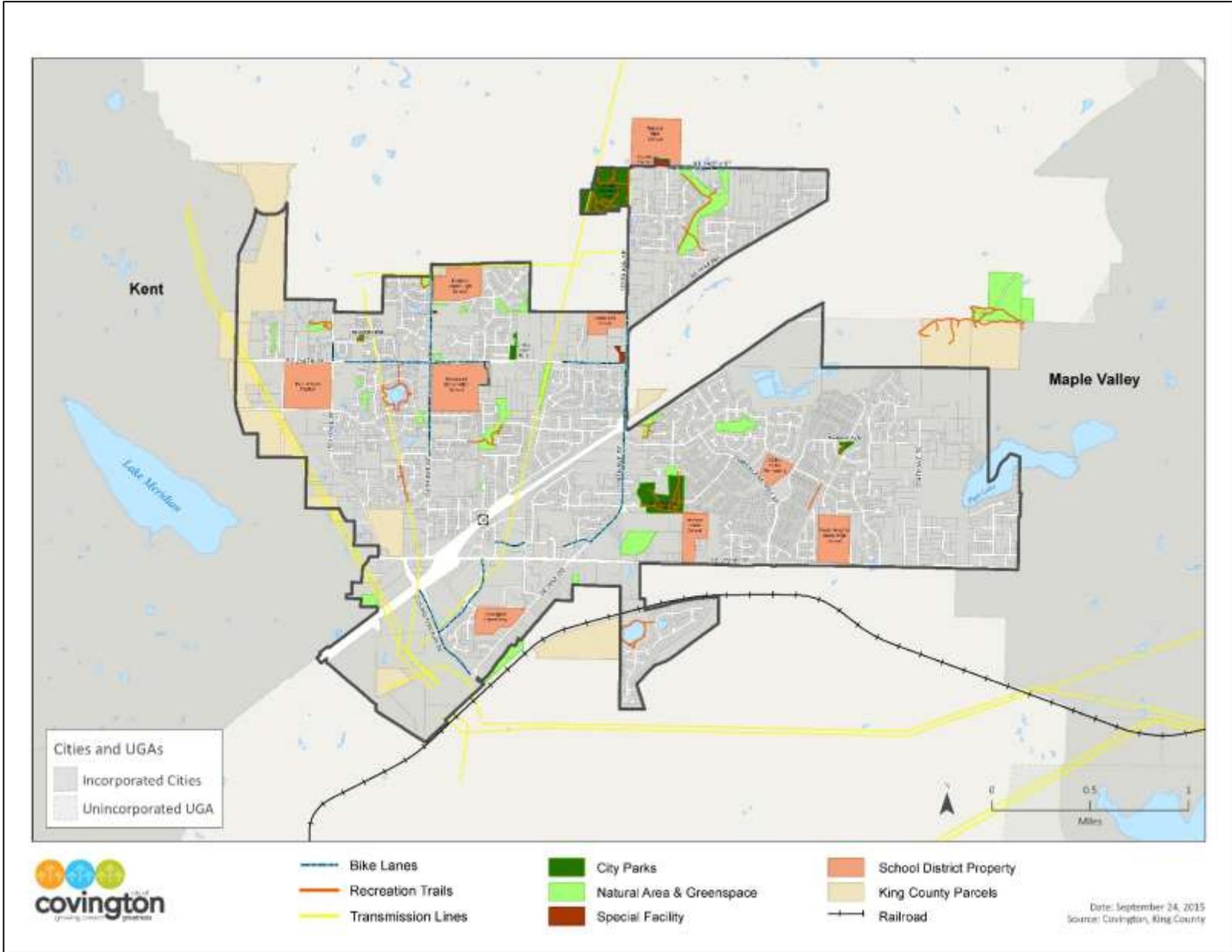
Existing parks and trails are shown in Exhibit 8-3 and Exhibit 8-4. Existing and planned bikeway and trail facilities are a focus of City plans and are shown in Exhibit 8-4 and Exhibit 8-6.

Exhibit 8-3. Inventory of Current Park Facilities, 2015



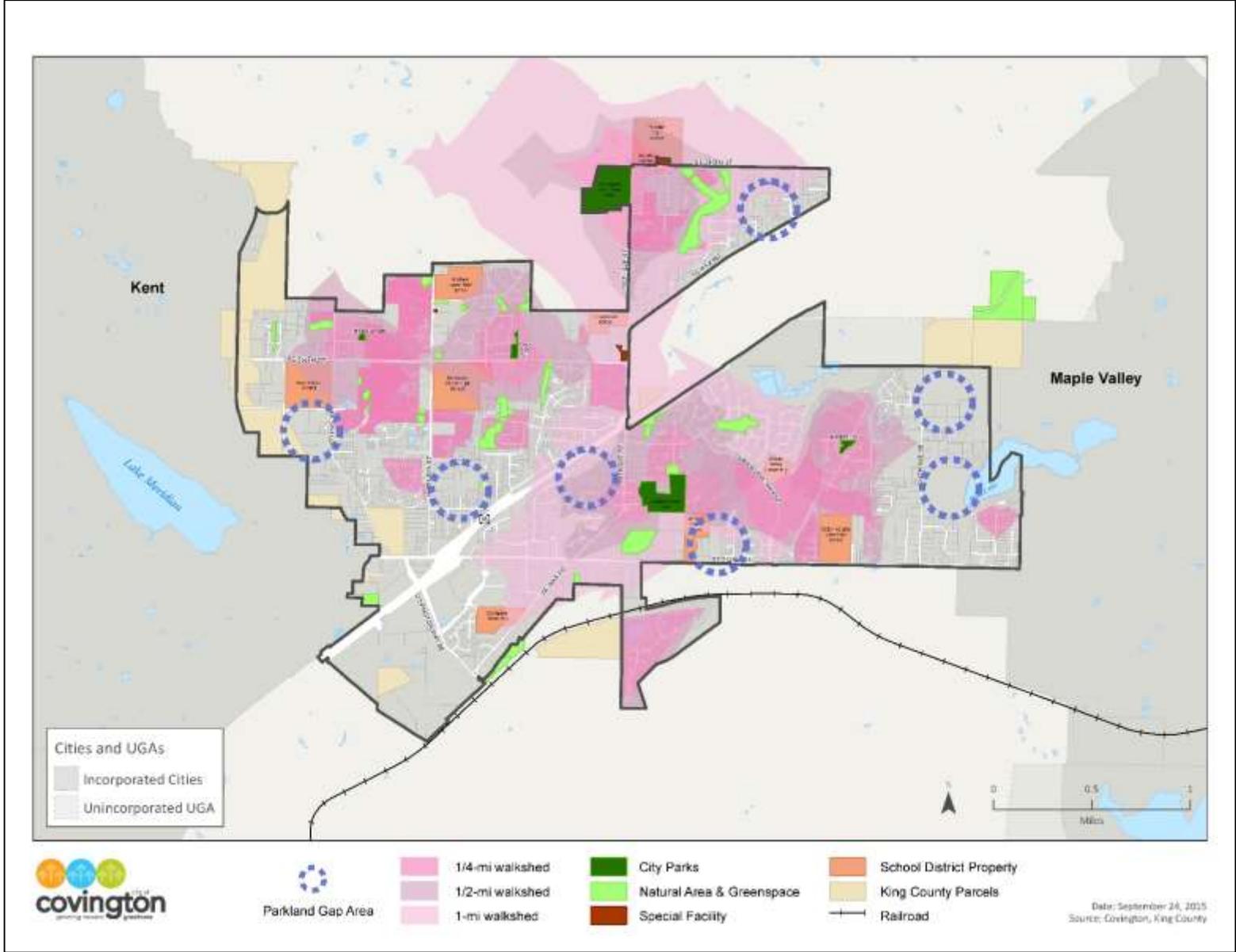
Source: King County GIS Center, 2015; City of Covington, 2015

Exhibit 8-4. Inventory of Trails and Bikeways, 2015



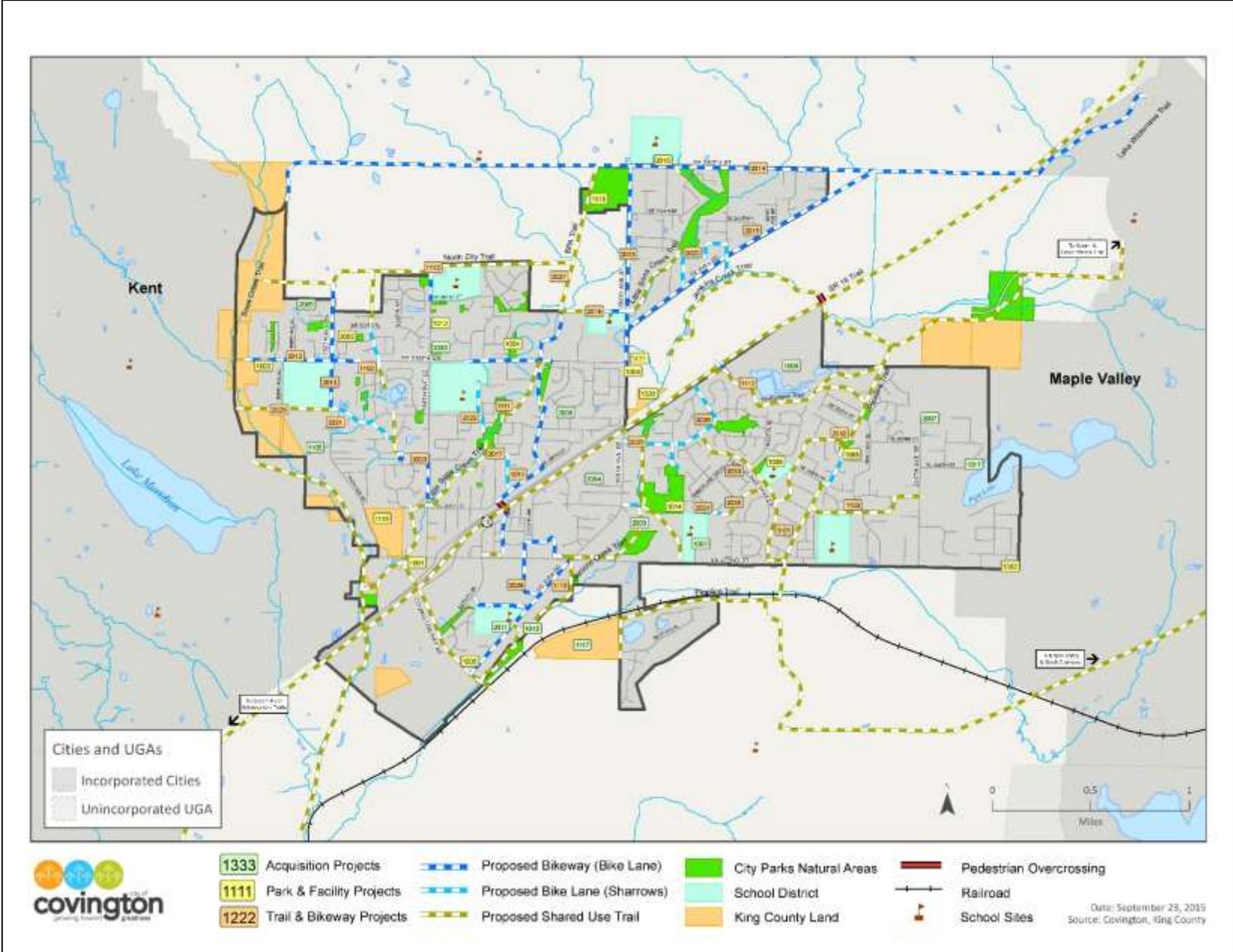
Source: King County GIS Center, 2015; City of Covington, 2015

Exhibit 8-5. Parkland Target Acquisition Areas



Source: King County GIS Center, 2015; City of Covington, 2015

Exhibit 8-6. Proposed Capital Facilities – Capital Improvement Plan



Source: King County GIS Center, 2015; City of Covington, 2015

8.4 LEVEL OF SERVICE

The City has established service standards for parks and recreation facilities, which helps the City plan facilities to serve expected population growth. The standards based on the City’s PROS Plan (draft 2015) are:

- Community Park (City-owned): 5 acres per 1,000 people
- Neighborhood Parks (public and private owned): 3 acres per 1,000 people
- Natural Areas and Greenspace (public and private): 6 acres per 1,000 people
- Trails (public and private): 0.75 miles per 1,000 people
- Bikeways (city owned and maintained): 0.75 miles per 1,000 people

Today Covington has a deficit of parks and recreation facilities to meet community demand; meeting service standards today would require approximately 42 additional acres of parks and 16 additional miles of trails and bikeways. See Exhibit 8-7.

Exhibit 8-7. Parks Level of Service 2015

Facility Type	Service Standard	Existing Inventory	Observed LOS: 2015	Surplus/ (Deficit) 2015 with Service Standard
Community Park	5 acres/1,000	50.2	2.71	(42.40)
Neighborhood and Pocket Parks	3 acres/1,000	61.1	3.30	5.56
Natural Areas & Greenspace	6 acres/1,000	206.97	11.18	95.85
Trails	0.75 miles/1000	5.94	0.32	(7.95)
Bikeways	0.75 miles/1000	5.03	0.27	(8.86)

Source: City of Covington, 2015; BERK, 2015

9.0 SHORELINES

9.1 OVERVIEW

Segments of Big Soos Creek, Jenkins Creek, and Pipe Lake are shorelines of the state in Covington.

9.2 REGULATORY CONTEXT AND PLANNING FRAMEWORK

Washington's Shoreline Management Act (SMA) was adopted by the public in a 1972 referendum "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." The Act has three broad policies:

1. Encourage water-dependent uses: "uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the states' shorelines..."
2. Protect shoreline natural resources, including "...the land and its vegetation and wildlife, and the water of the state and their aquatic life..."
3. Promote public access: "the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally."

"Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes. (RCW 90.58.030 (2) (e))

The SMA recognizes that "shorelines are among the most valuable and fragile" of the state's resources. The SMA, and the City of Covington, recognize and protect private property rights along the shoreline, while aiming to preserve the quality of this unique resource for all state residents.

In July 2007, the City of Covington obtained a grant from Ecology to conduct a comprehensive Shoreline Master Program (SMP) update. As a result, the City inventoried the city's shorelines and developed goals, policies and regulations for any new development along city's shorelines. The goals and policies were developed with the help of an Ad Hoc Advisory Committee that included property owners along Jenkins Creek, Soos Creek, and

Pipe Lake, members of the Planning Commission and Parks and Recreation Commission, a representative from Soos Creek Water & Sewer District, an area homeowner association member, and a member of the business community.

In March 2011, the City Council forwarded the finalized draft of the SMP to Ecology for their approval (Ordinance No. 05-11). In April 2011, Ecology adopted the City of Covington's Final SMP.

9.3 EXISTING CONDITIONS

The City's shorelines include Big Soos Creek, Jenkins Creek, Pipe Lake, and their associated shorelands. The total area subject to the City's updated SMP is approximately 104 acres, and encompasses 12,934 lineal feet (2.45 miles) of stream and lakeshore.

Big Soos Creek is surrounded largely by very low-density residential uses and undeveloped lands. Other land uses include a small strip of industrial lands along the eastern edge of the shoreline management area and SR 18 bisecting the area roughly in half from northeast to southwest. The two SR 18 bridge spans and associated embankment fill, armoring, footings, and pilings are the only known shoreline modifications in the Big Soos Creek shoreline area within City limits. Public access opportunities exist on public lands inside and outside of shoreline jurisdiction, such as the adjacent Soos Creek Park. Floodplains and wetlands make up much of the shoreline jurisdiction along Big Soos Creek. The stream is used by chinook and coho salmon, as well as steelhead and cutthroat trout. (The Watershed Company, November 2010)

Along Jenkins Creek over half of the shoreland area is in low density residential uses. Much of the rest of the land is in public utility use by the Bonneville Power Administration's Covington substation or is undeveloped. Covington Way SE crosses shoreline jurisdiction of Jenkins Creek just southeast of SE Wax Rd outside the City limits (King County jurisdiction), while SE Wax Road runs parallel to Jenkins Creek just outside the shoreline jurisdiction to the north. The Jenkins Creek channel bordering the Bonneville Power Administration (BPA) substation has been straightened. Just upstream of the Bonneville Power Administration site, the stream passes through a three-bay concrete box culvert under Covington Way SE. Public shoreline access to Jenkins Creek exists currently within Jenkins Creek Park and Jenkins Creek trail, both of which are located further upstream outside of the shoreline jurisdictional area. Floodplains and wetlands are found along the Jenkins Creek shoreline. Fish species include chinook and coho salmon, steelhead, and resident cutthroat trout. (The Watershed Company, November 2010)

Pipe Lake is approximately 52 acres and has a maximum depth of approximately 65 feet and a mean depth of 27 feet. Pipe Lake feeds into Lake Lucerne, which eventually feeds into a tributary of Jenkins Creek approximately one-half mile to the north of Lake Lucerne. There are no visible inflows into either lake. Currently, over half of the shorelands surrounding Pipe Lake are in low-density residential uses. Camp McCullough, owned by the Presbyterian Church, comprises another third of the shoreline frontage, while the remaining is undeveloped. There are a number of docks that are owned and maintained by private homeowners associations located along the lake. There is also a boat launch and dock along the western shore of the lake that is associated with Camp McCullough. This parcel has some natural shoreline. Motorized boats on Pipe Lake are prohibited. While there are some wooded areas, there are minimal mapped critical areas. The lake may support cutthroat trout and possibly rainbow trout when stocked by lake residents. (The Watershed Company, November 2010)



Pipe Lake, King County

The SMP includes Environment Designations that function as an overlay zone on top of the City's underlying zoning. The Environment Designations control land use, building placement, height and other aspects of shoreline development. A map showing shoreline jurisdiction and environment designations is provided in Exhibit 9-1.

10.0 REFERENCES

- Aller, L., T. Bennet, J.H. Lehr, and R.J. Petty. 1987. DRASTIC: a standardized system for evaluating groundwater pollution potential using hydrogeologic settings. U.S. EPA Report 600-2-85-018.
- Arbor Day Foundation. 2015. Tree City USA. Available: <http://www.arborday.org/programs/TreeCityUSA/about.cfm>.
- BERK and Associates. 2012. City of Covington Northern Gateway Area Study: Buildable Lands Capacity and Build-Out Analysis and Market Analysis. Seattle, WA: BERK and Associates.
- BERK Consulting. 2014. Corrected Land Capacity Results – City of Covington. Seattle: BERK Consulting.
- Blakely, R. J., R. E. Wells, C. S. Weaver, and S. Y. Johnson. 2002. Location, structure, and seismicity of the Seattle fault zone, Washington: Evidence from aeromagnetic anomalies, geologic mapping, and seismic-reflection data. Geological Society of America Bulletin 114 (2): 169–177, doi:10.1130/0016-7606(2002)114<0169:LSASOT>2.0.CO;2.
- City of Covington. 2008. Shoreline Analysis Report: Including Shoreline Inventory and Characterization for City of Covington’s Shorelines: Big Soos Creek, Jenkins Creek and Pipe Lake Available: http://www.ecy.wa.gov/programs/sea/shorelines/smp/mycomments/covington/final_shoreline_analysis.pdf.
- City of Covington. 2010. Covington Parks, Recreation & Open Space Plan: Promoting Community Fitness & Active Living. Available: http://www.covingtonwa.gov/covington/2010_Covington_Prosp_Plan_Final.pdf. Prepared by Alta Planning and Design et al.
- City of Covington. 2011. City of Covington Shoreline Master Plan. Available: http://www.covingtonwa.gov/city_departments/communitydevelopment/shorelinemasterplan/index.html. Covington, WA.
- City of Covington. 2013. Hawk Property Planned Action Environmental Impact Statement (Final EIS), November 14, 2013. Prepared by BERK Consulting et al. for the City of Covington.
- City of Covington. 2013, April. Urban Forestry Strategic Plan For Publicly-Managed Trees. Available: http://www.covingtonwa.gov/docs/urbanforestrystrategicplan_adopted04_23_13.pdf. Covington, WA.
- Cook, K., 2000. Guidance Document for the Establishment of Critical Aquifer Recharge Area Ordinances. Washington State Department of Ecology Publication 97-030.
- David A. Clark Architects, P. 2013. Covington Public Works Maintenance Facility Study. Covington.
- Driscoll, Fletcher G. Groundwater and Wells. Second edition. Johnson Division. St. Paul, MN. 1986
- ECONorthwest. 2014, November 6. Draft Covington Comprehensive Plan Economic Development Element: Current Conditions and Trends. Memo to Bill Grimes, Studio Cascade, from Erik Rundell and Morgan Shook.
- Fetter, C.W., 1980. Applied Hydrogeology, Charles E. Merrill Publishing Company, 488pp.
- Interjurisdictional Staff Team, G. M. 2013. DRAFT Technical Memo on Growth Targets. Seattle: King County, Growth Management Planning Council.

Keefer, D. K., 1983, Landslides, soil liquefaction, and related ground failures in Puget Sound earthquakes. In Yount J. C.; Crosson, R. S., editors, 1983, *Proceedings of Conference XIV, Earthquake hazards of the Puget Sound region*, Washington: U.S. Geological Survey Open-File Report 83-19, p. 280-299.

Kershner, K. 2013, February 26. Covington Thumbnail History. Retrieved from HistoryLink.org Online Encyclopedia of Washington State History: www.historylink.org

King County. 1995. Mapping Aquifer Susceptibility to Contamination in King County. King County Dept. of Development and Environmental Services, Seattle, WA. King County. 1993.

King County, 2004. Executive Report – Best Available Science, Volume 1, Chapter 6 Critical Aquifer Recharge Areas, – February 2004, <http://www.metrokc.gov/dces/cao/PDFs04ExecProp/BAS-Chap6-04.pdf>

King County Metro. 2015. Draft Long Range Plan, Map: Service Emphasis 2: Express.

King County. 2012. 2012 King County Countywide Planning Policies. Available: <http://www.kingcounty.gov/property/permits/codes/growth/GMPC/CPPs.aspx>. Seattle, WA.

King County. 2014. King County Buildable Lands Report 2014. Seattle: King County.

King County Growth Management Planning Council. 2015. Climate Change Panel Discussion. Available: <http://www.kingcounty.gov/property/permits/codes/growth/GMPC/MeetingInfo/2015.aspx>. Seattle, WA.

Morgan, David S. and Jones, Joseph L. 1999. Numerical Model Analysis of the Effects of Ground-Water Withdrawals on Discharge to Streams and Springs in Small Basins Typical of the Puget Sound Lowland, Washington. U.S. Geological Survey Professional Paper 2492. Reston, VA.

Mote, P. and Salathe, E. 2010. Future climate in the Pacific Northwest. *Climatic Change*, 102:29-50.

Muckleshoot Indian Tribe. 2015, July 3. Overview: History of the Muckleshoot Indian Tribe and its Reservation. Retrieved from Muckleshoot Indian Tribe: <http://www.muckleshoot.nsn.us/about-us/overview.aspx>.

Parametrix. 2010. Comprehensive Stormwater Plan Update. Bellevue, WA.

Puget Sound Regional Council (PSRC). 2014. 2010 Census Journey-to-Work Data from 2010 Census.

Puget Sound Regional Council (PSRC). 2008. VISION 2040. Available: <http://www.psrc.org/growth/vision2040/pub/vision2040-document/>. Seattle, WA.

Puget Sound Regional Council (PSRC). 2015. Transportation 2040. Originally adopted in 2010, updated June 25, 2015.

Tetra Tech. 2014. City of Covington Hazard Mitigation Plan. Prepared for City of Covington Public Works Department. Tetra Tech. Project 103S2602. Public Review Draft. San Diego, CA.

The Waterhsed Company. 2015. City of Covington Comprehensive Plan Update: 2015 Review Of Best Available Science. Prepared for City of Covington. November 2015.

Transportation Research Board. 2010. Highway Capacity Manual, Special Report 209.

Washington State Department of Ecology. 2015, October. Water Quality Improvement Project: Soos Creek Area: Multi-parameter. Retrieved from <http://www.ecy.wa.gov/>: <http://www.ecy.wa.gov/programs/wq/tmdl/SoosCrTMDL.html>.

Washington State Department of Transportation (WSDOT). 2013a. Guidelines for Amending Functional Classification in Washington State. October.

Washington State Department of Transportation (WSDOT). 2015. Freight and Goods Transportation System Map.

Washington State Department of Transportation. 2015. Crest Airpark: Airport Facilities and Services Report: Aviation System Plan Database. Tumwater, WA: Washington State Department of Transportation.

Winter, T.C., Harvey, J.W., Franke, O.L., and Alley, W.M. 1998. Ground Water and Surface Water a Single Resource. U.S. Geological Survey Circular 1139. Denver, CO.

Draft