

APPENDIX E Capital Facility Plans Review and Analysis

Capital facilities and utilities are the basic services which the public sector provides to support land use developments, both as they currently exist and as they are anticipated to develop over the course of the 20-year growth management planning horizon. Capital Facility Plans provide a general summary of how and when these basic services will be provided to support future growth as envisioned by the 20-Year Plan and how they will be funded. Chapter 6 - Capital Facilities and Utilities Element is intended to provide countywide goals and policies to ensure that public services and facilities necessary to support development shall be adequate to the development (RCW36.70A.020) and provide a general assessment of major public services which impact land use issues, rather than a detailed analysis of every service provided by government.

Appendix E provides a technical review of the current status of planning and financing in Clark County for a broad range of services and facilities; both owned by Clark County and those owned by other providers. The development of this Appendix was guided by an integrated set of state and local policies and plans. To ensure effective communication, this section of the document outlines some definitions used in this document.

DEFINITIONS

Growth Management Act and Capital Facilities

While RCW 36.70A provides the requirements for a legally adequate capital facilities plan, the law does not define capital facilities. The definition is left to the Washington Administrative Code (WAC). For purposes of the Growth Management Act (GMA), the WAC provides only guidance rather than regulatory direction. WAC 365-195-315(2)(a) provides guidance by defining capital facilities as: **water, sewer, stormwater, schools, parks and recreational facilities, law enforcement and fire protection.**

One area of possible confusion regarding the CFP is that the financial analysis of the CFP deals only with the cost and funding of the capital facilities themselves and not the operating costs of those capital facilities. Operating costs are only addressed in the financial analysis for the CFP; increased operating costs reduce the funds available for capital expenditures given a fixed or marginally growing revenue stream.

In addition, the CFP is often confused with the 6-year Capital Improvement Plan (CIP). The CIP is a flexible, long range plan containing the planned capital improvement projects and the recommended financing methods for funding the projects in a 6-year window. All funds and departments are brought together in a single consolidated plan for an overall view of capital improvement needs. The Capital Facilities Plan is a summary document required by Growth Management. This plan contains the project lists and sources of the Capital Improvement Plan and considers the impacts on levels of service.

Another area of confusion is the “omission” of transportation facilities from the definition of capital facilities in the WAC. It is not an omission; RCW 36.70A.070(3) defines the required components of the CFP for those facilities the GMA deems to be capital facilities, while a separate section RCW

36.70A.070(6) addresses the transportation element of the comprehensive plan which is required to have those items typically associated with a transportation CFP.

Required Components of a CFP

RCW 36.70A.070(3) defines the required components of the CFP as:

1. An inventory of existing publicly owned capital facilities including location and capacities;
2. A forecast of future capital facility's needs;
3. A listing of the proposed location and capacities of expanded or new capital facilities;
4. At least a 6-year financial plan for funding future capital facilities within projected funding capacities, which identifies the sources of public funds; and
5. A methodology to reassess the land use element if the probable funding falls short of meeting existing needs and to ensure consistency between the land use element, capital facilities element and the financing plan.

Washington State Department of Commerce Procedural Criteria

The Procedural Criteria for Adopting Comprehensive Plans and Development Regulations, 1992, clarify the requirements by saying that the capital facilities element should serve as a check on the practicality of achieving the other elements of the plan. The following steps are recommended in preparing the capital facilities element:

- The forecast of future capital facilities needs is a direct function of the size (both geographic and density) of the urban area to be served, which is set by the land use plan. It is also a function of the level-of-service standard adopted by the jurisdiction for that particular capital facility
- The listing of future capital facilities should be directly tied to the identified needs and, while not explicitly stated, would provide greater understanding if planning-level estimates of cost were tied to that listing of facilities.
- The 6-year financial plan is a requirement that already exists elsewhere in state law. Review of that 6-year financial plan may indicate whether or not a particular urban area is ready to permit development in the expanded urban area – a general lack of programmed capital facilities in the 6-year financial plan to serve the expanded urban area may suggest that providers would not be able to serve that area until after the current 6-year window¹. If it is clear that service providers could not provide facilities to all or some portion of the expanded urban area within the 6-year financial plan window, it may be appropriate to effectively communicate that situation using techniques to phase urban development on those areas.

Transportation Element Requirements

While the transportation element is treated separately from other capital facilities in the act, consideration of the ability of jurisdictions to meet the mobility needs of future population and employers is critical to the growth boundary decision. The transportation element is required to include:

¹ Care should be taken because, in some cases, for some service providers, there may not be a need for additional capital facilities to serve a particular expansion area. In that case, the lack of identified capital facility investment in an area may not indicate an inability to serve in the near term.

1. Land use assumptions used for the transportation demand estimation; and
2. Examination of facilities and service needs, which must itself include:
 - a. Inventory of transportation facilities and services;
 - b. Local facility level-of-service standards;
 - c. State highway level-of-service standards;
 - d. Actions to address existing deficiencies (facilities not meeting level-of-service standards);
 - e. Forecast of traffic conditions for at least ten years based on the land use plan. This is interpreted to be a 20-year forecast since the land use plan includes land supply sufficient for 20 years of growth;
 - f. Listing of state and local system needs to meet forecasted demand, where any state system improvements must be consistent with statewide multimodal transportation plan;
 - g. Finance Plans, including:
 - i. Analysis of funding capability with respect to the listing of facility's needs. It is interpreted that this needs to be a 20-year examination of funding (since the facility needs list is based on a 20-year land use plan);
 - ii. A multi-year financing plan based on the identified needs that serves as the basis for the 6-year transportation improvement program;
 - iii. A discussion of how to address a shortfall of probable funding that includes possible additional funding or adjustments to the land use assumptions;
 - h. Examination of intergovernmental coordination including an assessment of how the county's transportation plan and land use assumptions relate to possible impacts on adjacent jurisdictions; and
 - i. Demand management strategies.

Like other capital facilities, most of these requirements relate to defining the demand on facilities, determining how to meet that demand and determining the short-term financial program for improvements. Transportation is different because multiple jurisdictions and agencies provide the facilities necessary for an individual's transportation demand to be met. Since transportation is not a typical utility where service is provided only upon payment of a connection fee and subsequent regular payments for consumption, travelers are not aware of the various jurisdictions and agencies that provide the capacity necessary for the travelers' mobility; a road is a road is a road, regardless of who built and maintains it. If growth occurs in such a quantity or in locations lacking in the necessary funding capability to provide the identified transportation improvements, the generated transportation demand will not be met or will be met at a lower than anticipated level-of-service. As such, it is very likely that increased regional cooperation and coordination will be needed to ensure that expansion areas do not impose unexpected external transportation impacts that the receiving jurisdiction does not have the ability to mitigate.

FACILITIES AND SERVICES CFP REVIEW

Water Systems

Public water is supplied both by cities and a separate public utility district, Clark Public Utilities (CPU), throughout the urban and rural area. The county does not own nor does it operate a public water system. CPU is the major provider of water service outside municipal areas and for the City of La Center, Town of Yacolt, the Amboy community and the Discovery Corridor area and has interties with the City of Battle Ground and City of Ridgefield. Water service to the other incorporated areas is provided by the Cities of Battle Ground, Camas, Ridgefield, Vancouver and Washougal. Each water purveyor completes a Water System Plan which identifies existing inventories, forecasts future water supply needs and provides revenue sources to fund capital improvements to meet the requirements of the GMA RCW 36.70A.070(3)(a)(b).

At the present time, the entire county falls within a designated water service area. The planned growth of the urban areas can be met based on the water system capital facilities plans reviewed, assuming no delays in approvals or permit by the county or cities. The issue of water supply is not one of there being insufficient water supply but that of obtaining the necessary water rights and the cost of alternative sources once traditional sources are fully tapped.

Clark County Water System Planning

Provisions for adequate water supplies are of considerable concern to the county. The county's role is to coordinate with water purveyors ensuring that their actions are consistent with land use plans, service areas and health regulations. In addition, under the Public Water System Coordination Act (RCW 70.116), Washington State water utilities must coordinate their planning and construction programs with adjacent water purveyors and the Washington State Department of Health (DOH).

Clark County also established a Water Utility Coordinating Committee (WUCC) as a standing committee made up of representatives from each water purveyor, fire protection agencies and DOH. The WUCC updates water utility design standards, establishes procedures in resolving conflicts between water purveyors and updates the Coordinated Water System Plan (CWSP). The CWSP fulfills the regulatory requirements as prescribed in WAC 248-56, Public Water System Coordination Act. The CWSP serves as the Regional Supplement for state approved Clark County water purveyor's individual water system plans, which are on file at WRDE and together with the petition for Reservation of Public Waters, fulfill the requirements under WAC 173-590 relating to the reservation of water for future public water supply. The CWSP also serves as the county's Water General Plan as provided for in the County Services Act, Chapter 36.94 RCW. The CWSP was updated in November 2011. On April 4, 2012 the Office of Drinking Water approved the plan.

Water Service Areas

The boundaries of the service areas are coordinated through the Coordinated Water System Plan in order to provide for the most efficient provision of water service countywide.

Clark County water system purveyor service areas are shown in Appendix B. The Clark County Coordinated Water System Plan Update was last approved in November of 2011. The water service boundaries were set at that time with the realization that city limits may expand past the water service boundaries. With proper planning the water purveyors can each serve within their designated water service areas.

Water Resource

Clark County relies almost entirely on groundwater aquifers for public and private water use; including residential, commercial, industrial and agricultural uses. In the past, the location and development of productive groundwater sources has been a significant problem for the water purveyors. As a result, Salmon-Washougal and Lewis Watershed Management Plan WRIAS 27-28 was adopted in July 21, 2006 which addressed the need for an adequate water supply to meet the projected growth of the county.

Washington State law also requires all water service providers to contact the Department of Ecology before constructing a well or withdrawing any groundwater from a well and to obtain a water right permit. Unfortunately, processing of applications for additional water rights by DOE has been extremely limited since 1991. Those rights obtained have required considerable effort by the service purveyors. Each purveyor has made extensive investment in watershed management programs both to document the impact of groundwater withdrawals on stream flows and to provide a basis for evaluation by DOE of additional water right applications.

CPU and the City of Vancouver have jointly explored the Vancouver Lake lowlands water source. It has been determined that a sufficient groundwater supply can be sustained with the expected growth in demand while continuing to reduce drawdown in watersheds considered essential to endangered salmon species. This water source is forecasted to serve the countywide water needs beyond 2035.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers and which are incorporated by reference in the Resource Document section of this Appendix.

1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?

The water system plans of Clark Public Utilities, Battle Ground, Camas, Ridgefield, Vancouver and Washougal contain a detailed inventory of publicly-owned facilities, including location and capacities. A summary of current facilities and their associated capacity is listed below.

Table E.1 | Inventory of Existing Water Systems in Clark County

Provider	Population Served	Water Rights*	Number of Sources	Storage Capacity (gal)	Average Daily Demand (MGD)
Battle Ground	19,250	2,912	8	3,500,000	1.29
Camas**	23,881	11,090	11	8,450,000	5.93
CPU includes					
Satellite Water Systems	86,674	24,142	66	23,600,000	10.5
Ridgefield	4,975	962	4	1,117,000	0.644
Vancouver	233,119	75,000	40	24,150,000	26.19
Washougal	14,095	6,000	6	4,880,000	1.91

Note: *acre-feet/year. ** Camas also draws water from Jones Creek and Boulder Creek.

2. ***A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.***

Clark Public Utilities Water System Plan calculates the demand for water supply in terms of equivalent residential units (ERU). In the CPU WSP, the revised 2000 Washington State Office of Financial Management (OFM) low, medium and high projections were used to estimate overall water demand for residential uses while non-residential uses were estimated based on the high population growth projections. CPU used an overall 2 percent growth rate to calculate system demand.

Based on the projected February 23, 2016 plan estimates that utilize a 1.26 percent growth rate, CPU has provided for more capital investment than is currently estimated. CPU identified a list of needed facilities to support the Comprehensive Plan for 6- and 20-year planning periods. CPU has also identified that the City of Ridgefield and the City of Battle Ground may require additional aid during the expansion of their water districts and is able to assist with their water needs.

CPU recently completed two reservoirs located in their Hazel Dell and Meadow Glade pressure zones to support the Battle Ground and Vancouver UGA expansions. CPU's investment in the Carol J. Curtis Well Field in the Vancouver Lake lowlands will help supplement the 20-year water needs of the southern portion of Clark Public Utilities Water System. In addition, CPU has identified another water source for northern Clark County area at the confluence of the North Fork and East Fork of the Lewis Rivers, referred as the Paradise Point Well Field, which will supply water to the Paradise Point Water Supply System, that would supplement the 20-year water needs of the cities of La Center, Battle Ground and Ridgefield, along with the Discovery Corridor area, down to NE 159th Street.

The City of Battle Ground water service area provides water within most of the city limits and has an interconnection or intertie with CPU. CPU serves water to customers outside of the current Battle Ground water service area and provides water to the city during the peak summer demands. Water system needs were assessed based on projected EDU as outlined by the DOH. System improvements in the 6-year CFP and 20-year are consistent with the land use plan identified on February 23, 2016. It was noted that additional projects totaling approximately \$3.3 million dollars will be needed to serve the new areas. In addition, the city has enough water rights to meet the demand until 2019 when a new source of water in the 20-year planning period is needed. Drilling new wells in the city, however, is not going to supply all of the city's demands over this planning period. A wholesale water agreement with CPU and/or the City of Vancouver will be needed to meet the city's long-term water needs. Future recruitment of industrial development is not expected until Battle Ground obtains a large source of water.

The City of Camas water service area extends north of the city's urban growth area and is linked to CPU on the north, the City of Vancouver's system on the west and the City of Washougal's system on the east. Over 50 percent of the water service area is located outside of the UGA. The proposed expansion area is currently within the city's water service area and is anticipated to require an additional \$14.04 million dollars in improvements to the city's water system plan.

The **City of Ridgefield** provides water to their water service area and has 3 interconnections with CPU east of Interstate-5. The city has identified that they have sufficient water source over the 6-year period to supply the needs of their current water system boundary. If growth occurs in the expanded UGA, Ridgefield will need to develop additional water sources in the 6-year period and/or rely on additional water supply from CPU.

The **City of Vancouver** provides water service to portions of the unincorporated Vancouver UGA which is outside of the Clark Public Utilities District designated water service boundary. Clark

Public Utilities' is the designated water service provider in the northeastern section of the Vancouver UGA which is adjacent to the City of Vancouver's existing water service boundaries.

The increased demand on the Vancouver water system to support the new UGA additions is not significant, as Vancouver's existing water supply capacity is in place to immediately serve the new areas. As noted above, the City of Vancouver has explored the development of the Vancouver Lake lowland area. Water distribution for the new areas can be accomplished without city capital improvements but rather by means of developer connection to existing facilities and extension to and throughout the new additional properties.

Vancouver will formally incorporate these areas into the Water System Comprehensive Plan and submit these updates to the Washington State Department of Health and Washington State Department of Ecology. These submittals will be made after final adoption of the UGA additions is complete.

The **City of Washougal** serves the Washougal Urban Growth Area and designated urban reserve. The city's water service area boundary is bordered by the City of Camas to the west and Skamania County on the east. The northern boundary line connects with CPU. The city has an interlocal agreement with the City of Camas for delivery of emergency water through two interties. The 20-year demand on Washougal's water system to support the new growth projections will result in 18.8 million dollars of new projects.

The **Town of Yacolt** has had a public water system since 1910. In 2000 the town transferred the ownership and operation of its water system to Clark Public Utilities. A thorough description of the water system that serves Yacolt is contained in *Clark Public Utilities Water System Plan Amendment for the Yacolt Water System*, July 2002. The plan amendment calls for improvements to the general plant, source of water supply, meters, water storage and booster pumps and water distribution—an estimated \$670,000 in facility improvements. Clark will use revenue generated from water rates and system development charges to cover the cost of some of these improvements. The utility will also seek loans under the Washington State Public Works Trust Fund program and grants and loans under the HUD Community Development Block Grant program to support the cost of improving the water system.

3. ***A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.***

Table E.2 below identifies the list of needed facilities to support the Comprehensive Plan for a 20-year planning period. Funding for the capital improvements is accomplished by means of user fees, developer connection to existing facilities and extension to and throughout the new additional properties.

Table E.2 | Forecast of 20-Year Water System Needs

Provider	Projected Need
Battle Ground	\$6,425,000
Camas	14,044,800
CPU includes Yacolt & La Center	195,860,000
Ridgefield	11,709,400
Vancouver	68,930,000
Washougal	7,028,400
Total	\$303,997,600

4. *A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).*

Clark Public Utilities' CFP outlines the facilities needed in the first 6 years of the Comprehensive Plan.

Table E.3 | Clark Public Utilities 6-Year CFP Water Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
General Plant	18	\$670,000	\$670,000
Reservoirs & Boosters	28	7,970,000	7,970,000
Main Extensions/Upgrades	65	29,500,000	29,500,000
Source of Supply	14	9,200,000	9,200,000
Meters/Meter Installation		2,750,000	2,750,000
TOTAL	125	\$50,090,000	Water rates, bonds & connection fees

City of Battle Ground Water CFP contains a 6-year program of water system improvements and source development projects. The City of Battle Ground water service area includes the new expansion area and the projects contained in the 6-year program provide for improvements to the water service system to support the new areas.

Table E.4 | Battle Ground 6-Year CFP Water Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
General Plant	-	-	-
Reservoirs & Boosters	-	-	-
Main Extensions/Upgrades	2	\$865,000	\$865,000
Source of Supply	3	5,560,000	5,560,000
TOTAL	5	\$6,425,000	Water rates, connection fees

City of Camas Water CFP contains a 6-year program of water system improvement and source development projects. The City of Camas water service area includes the new expansion area.

The City of Camas water system is part of a water-sewer utility that is accounted for as one utility. The program identifies funding from new water connection system development charges and user fees. It is projected that the city will be able to finance all capital improvements and maintain adequate financial reserves.

Table E.5 | Camas 6-Year CFP Water Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
General Plant	4	\$260,000	\$260,000
Reservoirs & Boosters	7	3,600,800	3,600,800
Main Extensions/Upgrades	7	8,389,000	8,389,000
Source of Supply	4	1,795,000	1,795,000
TOTAL	22	\$14,044,800	Water rates, connection fees

City of Ridgefield CFP contains a 6-year program of water system improvements and source development projects. The City of Ridgefield water service area includes the new expansion area and the projects contained in the 6-year program provide for improvements to the water service system to support the new areas.

Table E.6 | Ridgefield 6-Year CFP Water Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
General Plant	2	\$390,000	\$390,000
Reservoirs & Boosters	1	2,127,000	2,127,000
Main Extensions/Upgrades	9	1,777,500	1,777,500
Source of Supply	5	7,415,000	7,415,000
TOTAL	17	\$11,709,500	Water rates, connection fees

City of Vancouver Water CFP contains a short list of projects for the 6-year period. Based on discussion with city staff, these capital projects are related to serving the existing urban area. No additional capital investment by the city will be needed to serve the Urban Growth Area. Any required water distribution system expansion to serve the urban areas will be provided by the developers as they extend service to reach their urban developments.

Table E.7 | Vancouver 2016-2021 6-Year CFP Water Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
Water Production Projects	31	49,340,000	49,340,000
Water Distribution Projects	37	19,340,000	19,340,000
TOTAL	68	\$68,680,000	Water rates, connection fees

City of Washougal Water CFP contains a short list of projects for the 6-year period. Revenue to finance the 6-year capital improvement program is uncertain. The city depends on water system development fees to fund improvements.

**Table E.8 | Washougal
6-Year CFP Water
Summary**

Capital Facility Project Type	Number of Projects	Cost	Funding
General Plant	--	--	--
Reservoirs & Boosters	6	\$4,570,000	\$4,570,000
Main Extensions/Upgrades	4	2,408,400	2,408,400
Source of Supply	1	50,000	50,000
TOTAL	11	\$7,028,400	Water rates, connection fees

Regional Issue of Water Supply

Clark County relies almost entirely on groundwater aquifers for public and private use. The relevant components of the physical environment include topography, groundwater, climate, surface water, site sensitive areas, geology and soils and are tied to the physical environment within each service provider. Each component within a service provider's area dictates the complexity of providing water service. In addition, DOE must process and provide additional water rights.

The location of the proposed expansion areas are currently served by a water purveyor. To support the forecasted growth, new water supply areas would need to be developed and water rights either issued or transferred from other wells regardless of who provides the water. Each water system plan reviewed discusses the need to obtain new water sources and water rights within the next 6 years.

Level-of-service

The Coordinated Water System Plan coordinates the policies and goals of the GMA. Each purveyor as part of their individual water system plans is required under WAC 246-290-100 to identify their standards and support the minimum design and performance standards for the county. Water demands include average day demand, maximum daily demand, peak hourly demand and fire protection demands. Each water purveyor uses the equivalent residential units (ERU) methodology to summarize water demand for non-residential users and historic records are primarily used for residential users. The development of ERUs for the CFPs is based on guidelines prepared by DOH.

Fire protection is considered an indirect concurrency service. The county has developed fire protection standards based on land use. The countywide minimum general water service provision to provide fire protection is shown below in Table E-9.

**Table E.9
Countywide Fire
Protection Flow
Requirements**

Types of Land Use	Fire Flow Requirements (gpm)	
	Minimum	Maximum
Commercial	1,000	2,500
Agriculture to Suburban Residential	500	1,000
Single-Family to Duplex	1,000	-----
Apartments to High Density Residential	1,500	3,000
Large Commercial and Industrial	2,000	-----

All water purveyors meet or exceed the minimum standards for water demand, storage demands, service pressures and reliability either through their own system or the procurement of water through interconnections with adjacent purveyors. An ongoing upgrade of water distribution facilities that improve the water needs over the next 20 years will be monitored and adjusted by area as growth occurs.

Sanitary Sewer Systems

In a similar fashion to water, sewer service to the urban areas is generally provided by the jurisdiction associated with each urban area with the exceptions of Vancouver, Battle Ground, and Ridgefield. Sewer capital facilities plans provide for sewage collection and treatment to meet the expected needs of the future population. The provision of treatment capacity in some areas may represent a constraint in the timing of urban development, as major expansions to treatment capacity are necessary to accommodate the growth. Some of these constraints have been relieved through regional cooperation between sewer system providers.

Sewer Service Areas

Sewer service is confined to the urban areas as shown in Appendix B except where sewer was extended to address declared health emergencies or regional public facilities. For the most part, the jurisdictions associated with particular urban areas are the providers of sewer service.

Clark Regional Wastewater District (District) provides sewer service to the unincorporated section of the Vancouver Urban Growth Area and the Ridgefield Urban Growth Area. Treatment for service within the District is provided at the Discovery Clean Water Alliance (Alliance) Salmon Creek and Ridgefield Sewage Treatment Plants and the City of Vancouver's Westside Treatment Plant. The City of Battle Ground conveys all of its wastewater through Alliance transmission system to the Salmon Creek Wastewater Treatment Plant and treatment system. The City of Ridgefield transferred the ownership and operation of its collection system to the District effective January 1, 2014 and the Ridgefield Treatment Plant to the Alliance effective January 1, 2015.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers which are incorporated by reference in the Resource Document section of this Appendix.

- 1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?**

The sewer system plans of Clark Regional Wastewater District, Battle Ground, Camas, La Center, Discovery Clean Water Alliance, Vancouver and Washougal contain a detailed inventory of publicly-owned facilities, including location and capacities. A summary of current facilities and their associated capacity is listed below.

Table E.10 | Wastewater Treatment Facilities Inventory

Agency	Type of Treatment	Design Flow Maximum Calendar Month (MGD)	Actual Flow Average Calendar Month 2015 (MGD)	Actual Flow Minimum Calendar Month 2015 (MGD)	Actual Flow Maximum Calendar Month 2015 (MGD)	Sludge Disposal Method
Discovery Clean Water Alliance						
Salmon Creek Treatment Plant	Secondary Activated sludge treatment	14.95	7.31	6.24	10.73	Land Application
Ridgefield Treatment Plant	Secondary Activated sludge treatment	0.70	0.33	0.23	0.60	Transferred to Salmon Creek Treatment Plant
City of Camas	Secondary Activated sludge treatment	8.42	2.3	1.9	3.1	Land Application
City of La Center	Secondary Activated sludge treatment	0.56	0.27	0.21	0.32	Land Application and Silviculture
City of Vancouver						
Westside	Secondary Activated sludge treatment	28.3	10.4	8.3	14.5	Incineration at the Westside Plant. Ash disposed at the Boardman Landfill
Marine Park	Secondary Activated sludge treatment	16.0	10.7	8.5	14.9	
Industrial Pretreatment	Secondary Lagoons Facultative treatment	3.2	1.52	0.8	2.6	
City of Washougal	Secondary Activated sludge treatment	2.24	1.2	1.06	1.49	Land Application

- A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.***

The cities of **Battle Ground, Camas, La Center, Vancouver and Washougal, Clark Regional Wastewater District and the Discovery Clean Water Alliance** have completed forecasts of future needs for wastewater capital facilities. These plans were based on assumptions of future households and ERUs equal to or greater than the future needs that would result from the Comprehensive Land Use map.

The **Town of Yacolt** does not have a public sanitary sewer system. Residents use individual onsite wastewater treatment and disposal systems—septic systems. There are 395 septic systems within the community. Septic system discharge risks contaminating groundwater—the drinking water supply for the town. Use of septic systems has stymied development at urban densities in the community. In 2012 the Town completed a Facility Plan for the future public sanitary sewer system and received approval from the Department of Ecology on August 1, 2012. This facility plan was incorporated into the Town's Comprehensive Plan in 2013 and is consistent with the land use plan the Board identified on February 23, 2016.

3. ***A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.***

Discovery Clean Water Alliance Capital Facilities Plan (2014) has provided a 20-year list of proposed capital projects that are capable of providing for the needs identified in the forecast. The total program cost is identified at \$100,560,000 in 2014 dollars. Salmon Creek Wastewater Treatment Plant (SCWTP) Phase 5 and 6 improvements, line extensions and pump stations necessary to serve the urban expansion areas are identified and costs for providing these facilities have been estimated.

Clark Regional Wastewater District has provided a 20-year list of proposed capital facilities that are capable of providing for the needs identified in the forecast. The total program cost is \$122,989,428 within the unincorporated Vancouver urban growth area and \$36,890,000 in the Ridgefield Urban Growth Area. Line extensions and pump stations necessary to serve the urban expansion areas within its service district are identified and costs for providing these facilities have been estimated.

City of Battle Ground's Plan includes a list of proposed projects totaling \$19,170,000 in 2015 dollars, to accommodate 20-year growth projections. The city may also share in the costs of SCWTP capacity improvements for Phases 5 and 6, since their growth is dependent upon plant expansion.

City of Camas's Plan includes a \$24.2 million list of expansions and new wastewater capital projects proposed as part of the city's 20-year CFP. The listing does not address any major expansion of capacity for the wastewater treatment plant, which is expected to reach capacity in 2015. Currently, Camas is working on preliminary engineering for the wastewater facility upgrade that will provide capacity for at least the next 20 years. The city is in the process of securing a public work trust fund loan to build the expansion.

City of La Center's Plan contains a list of 20-year system improvements and capacity upgrades that total \$34,697,000 to accommodate La Center's 2036 population growth. The city is planning for future commercial and industrial development at the La Center I-5 Junction. The city has the treatment capacity to serve the Junction but does not have the collection system in place.

City of Vancouver's Comprehensive Plan shows planned sewer improvements through 2021. The city's Comprehensive Plan indicates existing sewer system meets all federal and state standards

and has adequate capacity for existing and future demands. The city's sanitary sewer capital programs and projects consist of \$73 million of public projects of the next 20 years.

City of Washougal's CFP has collection system improvements and treatment facilities totals equaling \$39,267,000 to accommodate additional growth over the next 20 years.

Town of Yacolt's Comprehensive Growth Management Plan contains a 20-year list of wastewater management projects including the estimated costs and financing methods to be used. Long-term costs for Yacolt's wastewater management program were estimated to be \$4,752,000 - \$5,017,000 through year 2029.

4. ***A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).***

Clark Regional Wastewater District 2016 adopted-Budget contains a 6-year program of system improvements for the period of 2016-2021. The District service area includes the unincorporated Vancouver Urban Growth area and the Ridgefield Urban Growth Area. A listing of capital improvement projects to provide for service to each urban growth area is included. The 2013 Amended General Sewer Plan (GSP) shows improvements and estimated costs. System components needed to support the proposed growth include: interceptor sewers, trunk sewers, 8" and smaller service lines, pump stations, and related appurtenances. Table E.11 shows the 6-yr Capital Improvement program costs. The district's funding sources for capital improvements include but are not limited to the following: revenue bonds, utility local improvement districts, connection charges, developer contributions and extensions, grants and loans.

Table E.11 | Clark Regional Wastewater District 2016-2021 6-Year Capital Program Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
General Facilities	19	\$18,089,100	\$18,089,100
District Installed Infrastructure	1	\$1,000,000	\$1,000,000
Septic Elimination Program	1	\$750,000	\$750,000
Developer Reimbursement	13	\$9,460,000	\$9,460,000
CIP – Fleet & Facilities	2	\$220,000	\$220,000
R&R – Gravity	8	\$5,366,500	\$5,366,500
R&R – Pump Stations & Force Mains	9	\$2,440,100	\$2,440,100
R&R – Fleet & Facilities	13	\$1,922,000	\$1,922,000
Total	66	\$39,247,700	\$39,247,700

City of Battle Ground has identified capital facility needs, costs and funding sources for the proposed expansion areas shown in the Comprehensive Plan Land Use map. Several funding sources exist in addition to those listed in Table E.12 below such as local improvement district, connection charges, revolving loan fund program, developer funding and State/Federal funding programs.

**Table E.12 | Battle Ground
2016-2021
6-Year CFP Sewer Summary**

Capital Facility Project Type	Number of Projects	Cost	Funding
Mainline Repairs	7	\$1,270,000	\$1,270,000
Pump Stations Rehabilitation or Replacements	2	350,000	350,000
General Facilities	4	670,000	670,000
TOTAL	13	\$2,290,000	Revenue Bonds and Public Works Trust Fund

City of Camas has indicated in their adopted March 2004 capital facilities plan sewer facility costs. Table E. 13 lists capital needs, costs and funding sources for their projects. The last line item in table below shows costs associated with the October 24, 2006 expansion.

**Table E.13 | Camas
2004-2010
6-Year CFP Sewer Summary**

Capital Facility Project Type	Number of Projects	Cost	Funding
Main Lift Station Upgrade	1	\$1,352,000	\$1,352,000
Step System	3	3,767,000	4,217,000
Sewer Main Repair & Replacement	3	225,000	225,000
Joy Street Sewer Main Extension	1	1,338,480	1,338,480
Treatment, pumping, trunk collection lines	N/A	12,700,000	12,700,000
TOTAL	8	\$19,382,480	System Development and Developer Financing

City of La Center has assumed responsibility from Clark Public Utilities for their sewer system. The city has proposed system improvements to accommodate proposed growth in the February 23, 2016 map. La Center has several funding options for capital improvements such as local improvement districts, bonds, connection charges, revolving loan fund program, developer financing and state and federal funding programs. Table E.14 displays capital needs and costs. At this time, financing system projects will require La Center to acquire debt.

**Table E.14 |
La Center 2013-
2018 6-Year
CFP Sewer
Summary**

Capital Facility Project Type	Number of Projects	Cost	Funding
Treatment plant design, general sewer plan	2	\$15,880,000	\$5,880,000
New pump stations and sewer lines	12	\$11,051,000	\$11,051,000
Construct treatment plant	1	\$6,850,000	\$6,850,000
TOTAL	15	\$33,781,000	General obligation

City of Vancouver sanitary sewer capital programs and projects are listed in Table E.15 below. Conversations with city staff indicate that identified capital programs and projects can provide service for the proposed growth in the Comprehensive Plan Land Use map. The table below shows capital needs from 2016 to 2021.

**Table E.15 | Vancouver
2016-2021
6-Year CFP Sewer
Summary**

Capital Facility Project Type	Cost	Funding
Westside Sewer Treatment	\$4,735,000	\$4,735,000
Marine Park Sewer Treatment	620,000	620,000
Both Westside and Marine Park Sewer Treatment	3,480,000	3,480,000
Sewer Collection	13,672,000	13,672,000
TOTAL	\$22,507,000	System Development and Developer Financing

City of Washougal's July Sewer System Capital Facility Plan lists improvements that can serve the proposed growth in October 24, 2006 map. Table E.16 below shows the city's capital needs. Washougal estimates that they will have to finance approximately \$19 million over the next six years.

**Table E.16
Washougal 2006-
2012 6-Year CFP
Sewer Summary**

Capital Facility Project Type	Number of Projects	Cost	Funding
Pump station upgrade and force main	2	\$2,063,000	\$2,063,000
Trunk sewer	1	838,000	838,000
Relief sewer	1	1,116,000	1,116,000
Stiles Road interceptor	1	1,916,000	1,916,000
Interceptor upgrades	1	326,000	326,000
Treatment plant expansion	3	23,490,000	23,490,000
TOTAL	9	\$29,749,000	System Development and Developer Financing

Town of Yacolt lists capital expenses for 2013-2018 in their 2013 Comprehensive Growth Management Plan. Yacolt has proposed adding Urban Reserve to the February 23, 2016 map. According to the GMA, sewer service must be provided in urban areas. Therefore, GMA regulations do not apply for this proposed urban reserve area.

**Table E.17
Yacolt
2013-2018
6-Year CFP
SEPTIC
Summary**

Capital Facility Project Type	Cost	Funding
Applications for wastewater management program funding	\$26,000	\$26,000
Collection system engineering report	24,000	24,000
Treatment plan facility plan	88,000	88,000
Install septic tank inspection ports	217,500	217,500
Septic Tank Inspection Study	21,600	21,600
TOTAL	\$377,100	Grants and Loans

Discovery Clean Water Alliance lists the projected 6-year capital improvements required for the regional treatment plants and transmission system in their Capital Plan. The Alliance provides services to the District and City of Battle Ground at the Salmon Creek and Ridgefield Treatment Plants.

Table E.118
Discovery
Clean Water
Alliance 2016-
2021
Capital Plan
Summary

Capital Facility Project Type	Cost	Funding
Regional Treatment	\$17,700,000	\$17,700,000
Regional Conveyance	\$2,590,000	\$2,590,000
TOTAL	\$20,290,000	\$20,290,000

Stormwater Facilities

Traditionally, stormwater management has primarily been a function of development activity. Longer term, Clark County will be required to retrofit existing development that does not meet current standards for flow control and treatment. The level of retrofitting will depend on National Pollutant Discharge Elimination System (NPDES) permit requirements that currently mandate a retrofit program but do not specify a level of effort.

Background

The stormwater capital infrastructure is addressed by developers when they develop property. The response has been an engineering solution to address water quantity, that is, to deal with the volume of water that could conceivably run off from the developed portion of the site.

The county and its cities are responsible for addressing the water quantity and water quality impacts of development. The need to address water runoff issues comes from a provision in the county's NPDES permit, which is issued by the Washington Department of Ecology. Water runoff is addressed through the use of stormwater facilities, which are manmade structures, such as temporary water holding ponds, dry wells, pipes and low impact development practices that help reduce runoff to levels similar to a forested condition and help clean contaminants from water.

The NPDES permit requires that the county have "a program to control runoff from new development, redevelopment and construction sites that discharge to the municipal storm sewers owned or operated by the permittee. The program must include: ordinances, minimum requirements and best management practices (BMPs) equivalent to those found in the Ecology's Stormwater Management Manual for Western Washington permits, inspections and enforcement capability." Clark County implements development regulations under Title 40 to control stormwater's adverse impacts on streams, wetlands, lakes, ground water and wildlife habitat:

- Stormwater and Erosion Control
- Critical Aquifer Recharge Areas
- Habitat Conservation
- Wetland Protection

The Clark County Public Works Department issues and enforces permits for utility construction in county right-of-ways. The NPDES permit also requires that the county have "operation and maintenance programs for new and existing stormwater facilities owned or operated by the

permittee and an ordinance requiring and establishing responsibility for operation and maintenance of other stormwater facilities that discharge into municipal storm sewers owned or operated by the permittee.

Stormwater Service Areas

Each jurisdiction is responsible for planning stormwater facilities within its jurisdiction, as shown in the Existing Inventories.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers which are incorporated by reference in the Resource Document section of this Appendix.

1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?

Clark County has an extensive inventory of publicly-owned stormwater facilities. This information is available in the county's geographic information system (GIS).

The Cities of Battle Ground, Camas, La Center, Ridgefield and Vancouver provided an inventory of publicly-owned stormwater facilities and can be viewed in their respective storm drainage system maps. **Woodland** provided both 6-year and 20-year CFP project list but did not include a list of publicly-owned facilities. **Washougal** did not address stormwater in their capital facilities plan. The **Town of Yacolt** did not include a list of publicly owned stormwater facilities, but does briefly mention existing facilities.

2. A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.

Clark County Clark County maintains a six year stormwater capital improvement plan that meets the requirement of the NPDES permit. Clark County also completes watershed scale stormwater plans as required by the NPDES permit. A plan will be completed for Whipple Creek Watershed in 2017. The next NPDES permit expected in 2018 will probably include planning in another urbanizing watershed. The **Cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, Woodland and the Town of Yacolt** rely on individual developments to be responsible for managing stormwater in accordance with stormwater management practices. It is expected that stormwater will be managed by collection and retention systems, percolation into the ground and controlled discharge to the drainage system. The cities will own and manage any stormwater facilities located within the public right-of-ways. However, the need for regional publicly-owned facilities still exists. The cities of Battle Ground, Vancouver and Woodland have prepared a forecast of the need for regional stormwater facilities based on the planned land use and population projections for the 20-year planning period.

3. A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.

Clark County maintains a 6 year stormwater capital improvement plan that meets the requirement of the NPDES permit. Clark County also completes watershed scale stormwater plans as required by the NPDES permit.

Please refer to question #2 response for the **Cities of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, Woodland and Town of Yacolt.**

4. ***A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).***

Clark County collects a stormwater fee on every developed parcel in unincorporated areas. A portion of this revenue is dedicated toward capital improvement projects. The county has a program to construct stormwater capital improvements primarily to control and treat stormwater from areas of existing development with inadequate stormwater controls. In addition, the county may take opportunities to expand the treatment and flow control capacity of existing facilities when making repairs. These activities all are part of the county's stormwater capital improvement program. Stormwater capital improvements for county construction projects such as roads are funded by those projects.

The following table provides a summary of Clark County's 6-year stormwater capital program.

Table E.19 Clark County 6-Year CFP Stormwater Summary	Capital Facility Project Type	Number of Projects	Cost	Funding
	Retrofit / Repair	13	\$4,543,000	\$4,543,000
	Capital Projects	1	2,200,000	2,200,000
	Acquisition	4	2,860,000	2,860,000
	TOTAL		\$9,603,000	Clean Water Fee Available for Capital Projects

Source: 2016 Clark County Stormwater Management Plan

Battle Ground has identified over \$2.3 million dollars of project improvements to the regional stormwater basins of Woodin Creek, Mill Creek and Railroad Basin.

Vancouver has identified over \$14 million dollars of projects through 2012. Many of the projects (\$5.5 million) are not watershed specific but are related to citywide programs and projects. Burnt Bridge Creek watershed projects within the city are \$6 million and Columbia Slope projects total \$2.5 million.

Woodland has identified that improvements to Dike Road and Insel Road are projected to cost \$800,000.

Schools

School District Service Areas

The Clark County School District boundaries as shown in Appendix B reflect the current adopted boundaries. Clark County has adopted the Battle Ground, Camas, Evergreen, Green Mountain, Hockinson, La Center, Ridgefield, Vancouver, Washougal and Woodland School Districts' (together the "School Districts") 6-year Capital Facilities Plans for 2015 to 2021 concurrent with the Comprehensive Plan adoption. The adopted Capital Facilities Plans (CFPs) relate to the adopted 2007

Growth Management Comprehensive Plan Map and the proposed Board of Councilors' Recommended Comprehensive Plan Map (Preferred Alternative) dated February 23, 2016. Supplemental data was not provided to project new student population derived from the Preferred Alternative because the population the school districts are planning for drops under the preferred alternative. If there is an increase in parcelization in rural areas, there may be impacts on schools, primarily associated with transporting students from the rural area. The extent of the impact on schools is too speculative to address in supplemental data.

In 2007, each school district (except Woodland) submitted a 20-year student projection and the estimated number of new schools needed to serve the twenty-year student projection. The Battle Ground, Camas, Green Mountain, Ridgefield and Washougal school districts used the following methodology to derive the forecasted 20-year student projection and needs estimate. The student population for the 20-year planning horizon was determined by multiplying each districts' current student generation rate (the average number of elementary, middle and high school students that reside in single family and multi-family dwelling units in each district) from Clark County by the potential number of single family and multi-family households identified in each school district. An estimated student projection at build-out (students generated from houses at build-out plus the existing enrollment) is listed by elementary, middle and high schools. An estimate for new capital facilities was determined by subtracting the school facility capacity that is forecast in 2012 or 2013, (when the 6-year facility improvements have been built), depending on school district, from the student projection at build-out. Both the number of students and schools projected in these estimates are based on a number of assumptions. Specifically, it is assumed that growth will occur to the maximum extent allowable under the current land use planning scheme in the next twenty years, that growth will occur at a consistent rate and that the number of students generated from new development will remain consistent with current student generation rates. These estimates are not based on enrollment of students from existing housing, nor do the enrollment projections and facility needs take into account cohort survival, grade progression, population demographic changes, or local housing trends.

The Evergreen school district used the above method with some modifications for demographic changes over time. The Vancouver school district used its own 20-year enrollment forecast by ED Hovee & Company (consistent with its 2007 CFP), which takes into consideration the demographic changes expected in its urban environment over the twenty-year period.

Funding

Because the preferred alternative is based on a lower twenty-year population forecast, the analysis done in 2007 is as reliable as analysis that could be done using similar assumptions (student factor multiplied by housing units at build-out with equal consistent growth over 20 years). The funding of school facilities is typically secured through three sources including voter-approved bonds, state matching funds and impact fees. Bonds are used and are the principal source of revenue to fund site acquisition, construction of new schools and other capital improvement projects. State matching funds can be secured for school construction projects only and is generally only awarded to districts with a sufficient number of un-housed students (e.g. temporary portable buildings). School impact fees supplement the traditional funding sources for construction and expansion of school facilities needed to accommodate new development.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers and these are incorporated by reference in the Resource Document section of this Appendix.

1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?

The School District's CFPs contain a detailed inventory of publicly-owned facilities, including location and capacities. A summary of current facilities and their associated capacity is listed in the following table.

Table E.20
Summary of
Current Clark
County School
District Facilities

School District	Number of Public Schools		
	Elementary	Middle School	High School
Battle Ground	67	68	2
Camas	56	2	12
Evergreen	2022	6	47
Green Mountain	1	1	Students attend La Center High School
Hockinson	21	1	1
La Center	12 ¹	1	1
Ridgefield	2	1	1
Vancouver	21	6	67
Washougal	3	2	1

Note: Does not include schools that are used for alternative programs or leased facilities.

¹Primary enrollment is split between two buildings

Table E.21 highlights forecasted school district enrollment during the 6-year planning period 2015-2021.

**Table E.21 | Total
School Enrollments
for Clark County
School Districts 2014
Projected Enrollment
2021**

School District	2014	2021 Forecast	% change
Battle Ground	12,483	13,141	+5.2
Camas	6,566	7,614	+15.9
Evergreen	26,343	27,042	+2.7
Green Mountain	143	151	++5.0
Hockinson	1,841	1,992	+8.2
La Center	1,575	1,712	+8.7
Ridgefield	2,291	3,633	+58.6
Vancouver	22,480	23,236	+3.4
Washougal	3,104	3,389	+10.6
Woodland	2,295	2,526	+10.1
Total Enrollment	79,121	84,436	+3.7

5

Source: 2015-2021 School Districts' Capital Facility Plans

2. A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.

Please note that School Districts are required to update their Capital Facility Plans (CFPs) at least once every 4 years.

Battle Ground The improvements listed in this section are improvements needed in addition to the planned improvements through 2021. To accommodate the preferred alternative over the next twenty years in Battle Ground, two (2) new K-8 schools, expansions at the existing high schools and portables would be required. Please note that in the Battle Ground School District, elementary schools (K-5) and middle schools (6-8) are built on one site, as one campus. For the next six years, two (2) new K-8 schools and one (1) new high school will be required. The cost of these six year improvements is estimated to be \$97,547.500.

Camas The improvements listed are in addition to the planned improvements through 2021. To accommodate the preferred alternative over the next twenty years in Camas, two (2) new elementary schools, two (2) new middle schools and expansion of an existing high school will be required. In addition, eleven (11) portables will be needed. For the next six years, however, the CFP indicates the need for a replacement and expansion at the elementary school, a new 900-student middle school and expansion of the existing high school. These six-year costs will be \$ 139,516,464.

Evergreen To accommodate the preferred alternative (in addition to improvements through 2012) over the next twenty years for the Evergreen school district, five (5) new elementary schools, one (1) new middle school, one (1) new high school and forty-nine (49) portables will be required. For the next six years, one (1) new elementary school, one (1) replacement middle school and expansion at the high school will be needed. These six-year costs will be \$ 87,013,680.

Green Mountain The twenty-year forecast to accommodate the preferred alternative (in addition to improvements through 2021) requires the construction of one (1) new elementary school. In addition, the six year plan indicates the need for expansions to the existing schools at a cost of \$560,000.

Hockinson To accommodate the preferred alternative over the 20-year planning horizon (in addition to improvements through 2021), the Hockinson School District estimates the need for an expansion to the existing high school and eight (8) portables. For the next six years, an expansion at the elementary school and a new middle school will be constructed. These six-year improvements will cost \$ 48,310,720 and will be funded through a voted school bond, impact fees and state match.

La Center To accommodate the preferred alternative over the 20-year horizon (in addition to improvements through 2021), the following improvements will be required: one (1) additional elementary school, one (1) new middle school (the old middle school facility will be used to house additional students from the original elementary school listed in the current facilities inventory) and expansion of the high school. For the next six years, one (1) new elementary school will be constructed and improvements and expansion will occur at the high school. This six-year improvement will cost \$ 28,296,886.

Ridgefield To accommodate the preferred alternative over the next 20 years (in addition to improvements through 2021), the following improvements will be required: four (4) new elementary schools, one (1) new middle school, one (1) new high school and four (4) portables. For the next six years the following will be constructed: an expansion and renovation of the present high school and new schools to serve 1,200 K-8 students. It will cost \$ 74,917,816.

Vancouver The majority of the Vancouver School District's boundary is in a fairly urban, built-out environment. Enrollment growth in the future is dependent on infill, redevelopment, densification and neighborhood turnover. No new facilities are necessary for the overall twenty-year projected enrollment. The district's enrollment is projected to increase to a peak between 2014 and 2017 and then decline somewhat to 2025, due to an aging population and the district's more urban nature. To serve new growth, for the 6-year horizon, the Vancouver School District will require either a new and/or existing elementary expansion/replacement at a cost of \$ 56,810,120.

The most likely avenue for new school funding will be a future bond measure and associated state and local matches and school impact fees. The District's capital facilities efforts may include not only adding capacity, but providing space for special programs and building modernization. Funding for added capacity has been separated for purposes of impact fee calculations.

Washougal To accommodate the preferred alternative over the next 20 years (in addition to the improvements through 2021), the following improvements will be required: three (3) new elementary schools, one (1) new middle school, one (1) new high school and five (5) portables. For the next six years, one (1) new elementary school, one (1) new middle school and high school expansion will be constructed. These six-year improvements will cost \$ 52,501,191.

Woodland The 20-year forecast to accommodate the preferred alternative does not require improvements. For the next six years, the district needs to construct additional capacity at the elementary school.

3. *A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.*

Each school district provided a 20-year listing of facility needs. The following Table E.23 below illustrates the necessary facility needs beyond the 6-year CFP.

School District	Number of Public Schools		
	Elementary	Middle School	High School
Battle Ground	3	3	Expansion
Camas	3	2	Expansion
Evergreen	7	1	1
Green Mountain	1	0	0
Hockinson	0	0	Expansion
La Center	1	1	Expansion
Ridgefield	4	1	1
Vancouver	Various replacements	Various replacements	Addition
Washougal	3	1	1

4. *A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).*

Table E.23 below indicates the 6-year capital facility needs and costs for each School District according to the District's current 6-year Capital Facility Plans. Please note that School Districts are required to update their Capital Facility Plans (CFPs) every two years, therefore the CFPs that were received for this document may reflect different planning periods.

Table E.23 Clark County School Districts' 6-Year CFP Summary

School District	Number of Public Schools			
	Elementary	Middle School	High School	Funding
Battle Ground	2	2	Expansion	\$97,547,500
Camas	10	0	Expansion	139,516,464
Evergreen	1	1	Expansion	87,013,680
Green Mountain	0	0	0	560,000
Hockinson	Expansion	1	0	48,310,720
La Center	1	0	Expansion	28,296,886
Ridgefield	4	1	Expansion	74,917,816
Vancouver	1	0	0	56,810,120
Washougal	1	1	1	52,506,191
Total				\$585,479,377

Parks and Recreational Facilities

Parks and recreational facilities for urban development are typically provided by the cities associated with the urban areas. As with most other capital facilities, the notable exception to that pattern of capital facility provision exists for the Vancouver Urban Area. Most jurisdictions have identified parks and recreational facilities to serve their entire urban area.

Parks and Recreational Facility Service Areas

Clark County is responsible for a system of parks, trails, natural lands and recreation facilities that extend across the county, as a regional provider and within the Vancouver Urban Growth Area (or urban unincorporated area – UUA) as an urban-based park and recreation facility provider. The county park system, in both the regional and urban area, is identified by classifications for each type of facility to help manage the public land inventory; guide operations and maintenance; and direct acquisitions, design and development of additional facilities.

Provision of Parks in the Unincorporated Urban Area

The provision of parks in the unincorporated portion of the Vancouver Urban Area has been a challenge for Clark County. The nature of the challenge is not in the acquisition of land for new parks or the development of parkland into what citizens typically associate with the term “park”, but with the maintenance of developed parks. The primary source of funding for parkland acquisition and development has been impact fees. These fees carry a legal requirement to spend them within six years of receipt on eligible projects or return them to property owners who paid the fee. Generally, the county has been able to meet that legal requirement and the additional one to meet the public share of the impact fee program. Acquisition is also funded by the Greater Clark Parks District, a metropolitan parks district, which has taxing authority of \$6.25 per \$1,000.00 of assessed value.

The challenge lies in what happens after an urban park is developed; it requires regular maintenance. The county does not have the financial capability to meet the costs of on-going maintenance. For that reason, much of the undeveloped urban parkland remains undeveloped. Recently, the county has entered into maintenance agreements for specific urban parks with local neighborhood groups in the hope that direct billing of citizens for maintenance of a specific local park would clearly demonstrate the value of having developed and maintained urban parks in the unincorporated area.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers which are incorporated by reference in the Resource Document section of this Appendix.

1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?

The following table provides a summary of all park facilities in Clark County.

**Table E.24 |
Existing Clark
County Park
Facilities**

Park Type	Developed (acres)	Undeveloped (acres)
Neighborhood Parks	126	69
Community Parks	37	16
Regional Parks	361	2242
Conservation and Greenway	NA	2417
Open Space	NA	331
Regional Trails	46*	217*

Note: Includes School and Drainage Land
*-trails reported in mileage, not acreage

2. A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.

Clark County Parks adopted their Parks, Recreation and Open Space Plan in September 2015. The Clark County Parks system is comprised of neighborhood, community and regional parks; urban and regional open space; and varied levels of services based on existing inventory and current population. The acquisition and development of parks has not been able to catch up to the growing population to meet the park system's targeted service standards. As Clark County grows, the estimated 2020 and 2035 populations will expand the gap in the level of service for the park systems and increase the demand and need for more park land and developed facilities.

The **City of Battle Ground** has completed a forecast of future need that is consistent with the February 23, 2016 preferred alternative map.

The **City of Camas** has adopted a Parks, Recreation and Open Space Plan update in December of 2014 to accommodate growth within the Urban Growth Area. The updated plan includes evaluation of capital needs and planned projects within the growth area. A 6-year Capital Improvement Plan is updated bi-annually.

The **City of La Center** has reviewed the February 23, 2016 map, and the City has forecasted the need for 12 acres of new neighborhood parks and 51 acres of new community park land consistent with the preferred alternative.

The **City of Ridgefield** has reviewed the proposed Urban Growth Area detailed on the February 23, 2016 map. The City has forecasted future park needs for Urban Growth Area as part of its 2014 Parks & Recreation Comprehensive Plan, which covered all but 110 acres of the Urban Growth Area and in its 2016 Parks Capital Facilities Plan which identifies needs of the entire area.

The **City of Vancouver** adopted an updated Vancouver Comprehensive Parks, Recreation and Natural Area Plan in 2014. The plan includes a 6-year Capital Facilities Plan for park facilities to serve protected future park needs.

The **City of Washougal** has reviewed the February 23, 2016 map, but has not submitted additional information. Based on the adopted Washougal Comprehensive Parks and Recreation plan the City has forecasted for future needs that will be consistent with the February 23, 2016 map.

The **Town of Yacolt** has reviewed the February 23, 2016 map, but has not submitted additional information beyond the adopted 2013 Capital Facilities Plan.

3. ***A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.***

The **Clark County Parks Department** recently adopted a 2015 Parks, Recreation & Open Space Plan that identifies the acquisition and development of 4,700 acres for parkland at cost of approximately \$70 million. The February 23, 2016 preferred alternative map will require additional monitoring to assure compatibility with the adopted Parks plan.

As part of the Board's preferred alternative, the **City of Battle Ground** was granted an additional 80 acres for an urban growth boundary expansion. This area will be primarily for job growth, however its Employment Mixed Use designation will allow for limited residential development, thereby creating a need for recreation. This area will be accommodated in the City's 2015-2035 Comprehensive Parks, Recreation & Open Space Plan, under the "Special Study Area 4." For this area, the Plan states, "The City should monitor conditions in this area as growth occurs over time to determine the need for neighborhood parks, facilities and pocket parks."

The **City of Camas** has provided a forecast based on the Urban Growth Area that shows additional parks and open space needs for the 20 year planning horizon.

The recently completed **City of La Center** final Environmental Impact Statement lists a total of 70 additional acres of parks and trails would be needed to be consistent with the February 23, 2016 map.

City of Ridgefield provided a listing of projected needs for the next 20 years in its 2014 Parks & Recreation Comprehensive Plan, including 13 neighborhood parks, three community parks and trails and greenways to connect facilities totaling over \$40 million. The 2016 Parks Capital Facilities Plan identifies parks and trail facilities needed through 2021, totaling \$16 million.

City of Vancouver Comprehensive Parks, Recreation and Natural Areas Plan identifies projected park needs through 2020.

City of Washougal Comprehensive Parks and Recreation Plan identifies needs for the City through 2035.

The **Town of Yacolt** does not expect to add additional parks based on the February 23, 2016 map. The expected population does not necessitate development of new parks within the Town.

4. ***A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).***

The **Clark County Parks Department** has reviewed the February 23, 2016 map and Clark County Parks adopted their Parks, Recreation and Open Space Plan in September 2015. The plan identifies high priority projects in the 6-year Capital Facilities Plan for Parks and it has identified \$110,639,231 in total costs for all projects. Known funding sources include the following: Parks Impact Fees (PIF), Metro Parks District, Real Estate Excise Tax (REET) fees, Conservation Futures Tax (CFT), grants and donations.

The **City of Battle Ground** parks capital facilities plan contains a 6-year and 20-year program of park improvement and other projects. The program identifies funding from impact fees, real estate excise taxes, the city's general fund, bonding and private partnership funding as being sufficient to support the program.

The **City of Camas** parks capital facilities plan contains a 6-year program of park improvement and other projects. The program identifies funding from impact fees, real estate excise taxes, the city's general fund, grants, costs paid by utility funds, bonding and private partnership funding as being sufficient to support the program. The available funding sources are listed in the following table:

Table E.25 | City of Camas 2014-2021 Proposed Financing Strategy

Funding Source	Annualized Amount	6-Year Total
General Fund	\$25,000	\$150,000
Impact Fees	900,000	5,400,000
REET	400,000	2,400,000
Grants	1,000,000	6,000,000
Capital Measure	4,000,000	24,000,000
Other	108,300	650,000
Total	\$6,433,300	\$38,600,000

The **City of La Center** parks capital facilities plan contains a 6-year program of park improvement and other projects. The program identifies funding from impact fees, real estate excise taxes, the city's general fund, bonding and private partnership funding as being sufficient to support the program. The City is currently working on updating its parks CFP and information is not available.

The **City of Ridgefield** parks capital facilities plan contains a 6-year program of park improvement and other projects. The program identifies funding from impact fees, real estate excise taxes, the city's general fund and grants as being sufficient to support the program. The total cost for projects in the City's CFP is \$16,051,500. A total of \$14,096,895 in funding from various sources is identified, with additional grants anticipated to cover the shortfall.

The **City of Vancouver** parks capital facilities plan contains a 6-year park project list for the planning period. The plan identifies projected funding revenues from impact fees, grants, Conservation Futures and General Fund. The total estimated cost for all acquisition, development, improvement repair, planning and park maintenance costs for the six-year period are approximately \$95 Million, with an estimated \$54 Million shortfall if all projects were completed. It is important to note that the capital facilities plan must anticipate potential opportunities and future needs to qualify for grant programs and therefore includes project that exceed available committed funding. Projects will not move forward until committed funding sources are identified and approved through the budget process.

The **City of Washougal** parks capital facilities plan contains a 6-year program of parks projects. The plan identifies funding from impact fees, grants, donations and general fund dollars as being sufficient to the program.

The **Town of Yacolt** parks capital facilities plan contains a 6-year program of parks projects. The plan identifies funding from, real estate excise taxes, grants and city's street fund as being sufficient to support the program.

Levels-of-Service

Parks and Recreational facilities are one of the quantifiable services provided by a jurisdiction. National and jurisdictional standards have been set for the provision of 5.0 acres of different types of parks for every 1000 citizens. Many area jurisdictions have disclosed the need for parks based upon projected population increases and have provided reference to the funding types that will pay for them. However, little work has been done by some jurisdictions to forecast the long-term viability of these funding strategies.

Table E.26 Park Standards for Each Jurisdiction

Jurisdiction	Parks and Open Space Standard (acre/1,000 population)			
	Neighborhood	Community	Urban	Regional
Battle Ground	5.0	--	--	N/A
Camas	2.5*	2.5*	*Open Space/30.0	N/A
La Center	1.5	6.5	Trails/.75	N/A
Ridgefield	1.6	6.0	Greenway/9.5 Trails/.75 miles Baseball fields/.33 fields Soccer fields/.5 fields	N/A
Vancouver	2.0 & ½ mi Distribution	3.0 & ½ mi Distribution	Urban Natural Areas 1.0	N/A
Washougal	.61	2.68	Special Use Areas/ Waterfront /Natural Open Space Areas – 3.12 Ac.	N/A
Yacolt	1.0	3.0	1.0	N/A
Clark County	2.0	2.25	1.69	5.98

Source: Clark County Parks: Parks, Recreation, & Open Space Plan (2015); Camas Parks and Recreation Master Plan; Battle Ground Parks and Recreation Plan; Washougal Comprehensive Park and Recreation Plan; La Center Urban Area Capital Facilities Plan (2004); 2014 Ridgefield Park & Recreation Comprehensive Plan; and Vancouver Comprehensive Parks, Recreation and Natural Areas Plan (2014). * The City of Camas uses a distance calculation to determine level of service. The numbers listed above represent the calculation the City uses for Park Impact Fees.

Law Enforcement

Based on a review of the CFP's of the various cities, most Law Enforcement Capital Facilities needs for the next 20 years have been, or are in the process of being met with funded projects underway. The major exceptions include a large County jail expansion and the possibility of a second expansion, the replacement of existing obsolete facilities, such as the County's Central Precinct, the Marine Patrol Facility and the Jail/Records Management System.

Law Enforcement Service Areas

Each city in Clark County provides police protection for its citizens as shown in Appendix B. Yacolt provides police services through a contract with the Sheriff. Clark County provides police protection for the citizens in unincorporated Clark County. In addition, all jurisdictions have interlocal mutual assistance agreements.

Each jurisdiction provides police station facilities. Several jurisdictions have added additional stations, precincts or expansions to existing facilities to accommodate their needs over the next twenty years.

Some jurisdictions identified additional facilities, such as a \$1.5 million expansion/remodel of a Camas Police Station after 2017. Vancouver indicates the need for a new 20,000 square foot Central Precinct within the twenty year planning period. The cities rely on Clark County for jail facilities, both short and long term.

The Washington State Patrol has police jurisdiction on state routes in the county, is largely responsible for state facilities and provides backup for the Clark County Sheriff's Department and local jurisdictions.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers which are incorporated by reference in the Resource Document section of this Appendix.

1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?

Table E.27 | Existing Police Service Providers

Jurisdiction	Facilities
Clark County Sheriff	Clark County Law Enforcement Center – Sheriff's Office Law Enforcement Center – Jail Property Evidence Building at 906 Harney Medical Examiners Office Jail Work Center Marine Patrol Boat House at Port of Vancouver West Precinct at 179 th Street Central Precinct at 149 th Street Public Works Facility (owned by PW) Munitions Bunker at Shops at 78 th Street Public Works facility Narcotics Task Force Facility Child Abuse Intervention Center Shooting Range
Battle Ground	Police Department office at 507 SW 1 st Street
Camas	Camas Police Department offices at 2100 NE 3 rd Avenue Holding facility with three cells
La Center	Police department offices at 105 W 5 th Street
Ridgefield	Police department offices at 116 N Main Street
Vancouver	Headquarters at 605 E Evergreen Street Central Precinct at 2800 NE Stapleton Road East Precinct at 520 SE 155 th Avenue Investigations/Evidence at 2120 E 13 th Street
Washougal	Washougal Police Department offices at 1320 A Street Two holding facilities

2. ***A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.***

The **Clark County Sheriff's** forecast of future needs was provided that is consistent with the land use plan that the Board identified on February 23, 2016. The Sheriff's Office reviewed the Capital Facilities Plan for the last Comprehensive Plan update to determine how it might be affected by the Preferred Alternative map and related assumptions. The elevated growth assumptions and elapsed time caused the Sheriff's office to reexamine the appropriate size of specific capital expansion plans and update their Capital Facility Plans as shown in Table E.28.

The **City of Battle Ground** has reviewed the February 23, 2016 map and determined that it will have no impact on future police capital facility needs.

The **City of Camas** has reviewed the February 23, 2016 map and determined the need for a remodel/expansion of the existing Police Department building.

The **City of La Center** has reviewed the February 23, 2016 map and has no plans for new or expanded law enforcement facilities during the planning period.

The **City of Ridgefield** has reviewed the February 23, 2016 map and as indicated in their 2016 Comprehensive plan, will need a new facility for police services to accommodate future growth.

The **City of Vancouver** has reviewed the February 23, 2016 map. A new Central Precinct is in the planning stage at this point. Part of this project will also include a new evidence warehouse.

The **City of Washougal** does not have a Capital Facilities Plan specifically for Police. The City is not proposing to accommodate significant additional growth at this time. Existing facilities are expected to be adequate.

Clark County Sheriff deputies respond to requests for law enforcement within the **Town of Yacolt** but their basic charge is to patrol only within the surrounding unincorporated area. The town contracts with the sheriff for additional security patrols within the town. Under this agreement the town receives all the law enforcement services required under state statutes for at least an average of 6.5 hours per week, in addition to the level-of-service and time customarily devoted to an unincorporated area, also statutorily required.

Given the increase in the population of Yacolt and the corresponding increase in crimes and calls for police protection, the town will need to modify its contract with the sheriff to obtain additional security patrols. A sheriff deputy dispatch office should be established in Yacolt, which would serve as an outpost of the central precinct headquarters in Brush Prairie.

3. ***A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.***

The **Clark County Sheriff's** office has submitted information including the possible need to complete a second jail expansion within the twenty-year Comprehensive Plan period. The need for a second expansion, as well as its timing and size, will depend on when the first jail expansion is completed, how many beds it adds and the accuracy of the population forecast for the twenty year period.

The **City of Battle Ground** has determined that there will be no need for additional Police facilities in the twenty-year period. This is due to the fact that they have recently completed construction of a new 18,000 square foot law enforcement building that should accommodate the city as the population increases.

The **City of Camas** has provided a proposed forecast based on the preferred alternative map. It includes a \$1.5 million remodel/expansion of the existing Police Department building.

The **City of La Center** does not have a Capital Facilities Plan specifically for law enforcement. At this time, they are not forecasting a need for expansions to capital facilities or new capital facilities within the 20-year planning period.

The **City of Ridgefield** has reviewed the February 23, 2016 map and as indicated in their 2005 Comprehensive plan, will need a new facility for police services to accommodate future growth.

The **City of Vancouver** has reviewed the February 23, 2016 map and has revised their Capital Facility Plans. A new central precinct is in the planning stage at this point. The new central precinct will be roughly 20,000 square feet and be part of a public works center to be built by redeveloping the current city shops area at Fourth Plain and General Anderson. Also, as part of the redevelopment, a new evidence warehouse will be built to house Vancouver Police Department evidence. This facility will be on the east side of General Anderson and will take the place of the current evidence warehouse at 13th and C Streets. Except for these details, long term CFP plans remain the same as described in the 2004 Comprehensive Plan. The City's 2004 Comprehensive Plan projects the need for an evidence facility, new headquarters site and building and a new west precinct site and building.

The **City of Washougal** does not have a Capital Facilities Plan for law enforcement and are not proposing to accommodate additional growth at this time. Existing facilities are expected to be adequate.

Clark County Sheriff deputies respond to requests for law enforcement within **Town of Yacolt** but their basic charge is to patrol only within the surrounding unincorporated area. The town contracts with the sheriff for additional security patrols within the town. Under this agreement the town receives all the law enforcement services required under state statutes for at least an average of 6.5 hours per week, in addition to the level-of-service and time customarily devoted to an unincorporated area, also statutorily required.

Given the increase in the population of Yacolt and the corresponding increase in crimes and calls for police protection, the town will need to modify its contract with the sheriff to obtain additional security patrols. A sheriff deputy dispatch office should be established in Yacolt, which would serve as an outpost of the central precinct headquarters in Brush Prairie.

4. ***A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).***

Clark County Sheriff's CFP contains a list of projects for the 6-year period. These projects will be financed with a variety of funding sources.

Table E.28 Clark County Sheriff's 6-year Capital Facilities Plan Summary

Capital Facility	Description	Cost	Funding
Jail Expansion (New)	600-700 bed maximum security facility with administrative offices, office for Property and Evidence and parking	\$100,000,000	Bonds, levy or sales tax
Central Precinct Replacement	8,600 sq. ft. building, space for public meetings and parking. Joint project with Public Works	2,000,000	Bonds, Road Fund Diversion or General Fund Allocation
Marine Patrol Facilities Replacement	1,300 sq. ft. boathouse and 720 sq. ft. boat storage garage	100,000	General Fund
Jail/Records Management Replacement	Building remodel/expansion to house inmate and criminal records, related information.	2,100,000	Information Technology Reserve Funds
East Precinct	8,000-9,000 sq. ft.. Precinct – including space for public meetings and parking	3,000,000	Bonds, General Fund or Levy
Shooting Range	Classrooms, ~ 40 lanes, storage, tactical training facilities (including EIS for new site and decommissioning of old site)	1,000,000	Bonds, General Fund or Levy
TOTAL		\$108,200,000	

Battle Ground will not require additional law enforcement facilities, as they have just completed construction of a new 18,000 square foot building that should accommodate the city as the population increases.

Camas does not have any projects proposed for the 6-year period.

La Center will not require additional law enforcement facilities within this 6-year period.

The City of Ridgefield's CFP contains one project for the 6-year period. The city intends to acquire a police operations center at \$175,000 using Real Estate Excise Tax.

Vancouver's CFP contains a list of projects for the 6-year period. These projects will be possible through a variety of funding sources.

Table E.29 City of Vancouver Capital Program

Capital Facility	Description	Cost	Funding
Central Precinct Building	Construction of new Central Precinct Building	\$7,200,000	General Fund
Evidence Facility	Construction of new evidence facility	3,800,000	Bond
Headquarter	Acquisition and construction of new headquarters building	5,500,000	General Fund
Training Center	Construction of a training center/firing range	8,000,000	unknown
TOTAL		\$24,500,000	

Washougal does not have a Capital Facilities Program for law enforcement. Current facilities are expected to adequately serve the future population.

Fire Protection

Fire protection is provided throughout the county in both urban and rural areas by a variety of cities and districts. The large number of providers has made summarizing the capital facilities plans challenging, as many districts have not submitted plans for review containing a 20-year list of capital needs. Most of the city fire departments have completed fully compliant capital facilities plans that demonstrate the ability to provide fire protection services to their service areas at their response time standard. 20-year capital facilities plans are not typically produced by small, rural fire districts. Though this does constitute a shortcoming of this analysis, it is not as critical a matter as others addressed for this capital facilities summary.

Fire Protection Service Areas

Fire protection is provided through both city fire departments and fire districts that cover both urban and rural unincorporated areas. For some urban areas, there is not a city fire department within the incorporated area and fire protection is provided by a fire district. Appendix B, Figure 34 illustrates the boundaries of the fire protection providers in Clark County. Fire protection service for Fire District 5 is provided by the Vancouver Fire Department.

It should be noted that some districts are entirely rural, even under the proposed expansions to the urban areas. As such, the capital facilities plans for those districts and the ability to maintain response times do not directly affect the urban growth boundary decision.

Analysis

The following analysis reviews the required components under RCW 36.70A.070(3). The county completed a comprehensive review of the resource documents submitted by the service providers which are incorporated by reference in the Resource Document section of this Appendix.

1. Does the CFP contain an inventory of existing publicly owned facilities, with location and capacities?

A complete review of fire provider's CFPs contains a detailed inventory of publicly-owned facilities, including location and capacities. A summary of current facilities and their associated capacity are listed below.

Table E.30 Fire Protection Providers

District	Population Served 2005	Current Facilities	Area (sq. mi.)	No. Stations	Avg. Response Time, 2005 (minutes)	WSRB Rating
Municipal						
Battle Ground	19,250	1	4.2	1	5	4
Camas-Washougal	65,000	3	80	3	4	5
Vancouver	170,400	10	50.7	10	0:05:33 Priority 1&2 calls 0:05:50 Priority 3&4 calls 0:07:08 Priority 5 Non-Medical	4
Fire Districts						
Clark County Clark County Fire & Rescue (Ridgefield/La Center)	27,120	6	124	5 + 1 joint	5.5 fire	4
East County Fire & Rescue						
CCFD No. 2 (Woodland)	2,137	3	35	1	8.5	8
CCFD No. 3 (Brush Prairie/Battlegrou nd)	20,000+	4	83	4	6	4
CCFD No. 5* (Orchards Area)	89,140		39.2	Combined with City of Vancouver		
Fire Districts						
Clark County Fire & Rescue (Ridgefield/La Center)	27,120	6	124	5+1 joint	5.5 fire	4
CCFD No. 2 (Woodland)	2,137	3	35	1	8.5	8
CCFD No. 3 (Brush Prairie/Battlegrou nd)	20,000+	4	83	4	6	4
CCFD No. 5* (Orchards)	89,140		39.2	Combined with City of Vancouver		
CCFD No. 6	65,000	4	37	3 + 1 joint	3:41	3
CCFD No. 10 (Amboy Area)	8,880	6	68	6	6.3	6
CCFD No. 13 (Yacolt Area)	5,380	2	36	2	6.3	8 (6 Yacolt)

Note: *CCFD #5 contracts with the City of Vancouver to provide service.

2. A forecast of future needs is provided that is consistent with the land use plan that the Board identified on February 23, 2016.

Each service provider reviewed the forecast of future need that is consistent with the February 23, 2016 preferred alternative map. Table E.31 illustrates each provider has a 6-year CFP forecast consistent with the preferred map. Rural fire districts 3 through 13 did not foresee any difficulty providing.

**Table E.31
Future Fire
Needs**

Service Provider	6-Year forecast	20-year forecast
Camas/Washougal	Yes	Yes
Vancouver	Yes	No
Clark County Fire & Rescue (Ridgefield/LaCenter)	Yes	Yes
East County Fire & Rescue	No	No
CCFD No. 2 (Woodland)	Yes	Yes
CCFD No. 3 (Brush Prairie/Battleground Hockinson)	Yes	No
CCFD No. 5* (Orchards Area)	Yes	No
CCFD No. 6 (Hazel Dell Area)	Yes	No
CCFD No. 10 (Amboy Area)	Yes	No
CCFD No. 13 (Yacolt Area)	No	No

Note: *CCFD #5 contracts with the City of Vancouver to provide service.

3. **A listing is provided of proposed expansions to capital facilities or new capital facilities that are capable of providing for the needs identified in the forecast. This should be a "20-year listing" since the land use plan covers a 20-year period.**

City of Battle Ground's CFP has an estimated 20-year expenditure totaling \$6,050,000. It includes replacing Station 35 and purchasing fire apparatus and equipment. The city contracts for fire services from Fire District #3.

City of Camas/Washougal's CFP indicates that for the proposed expansion area in the February 23, 2016 map will cost an additional \$3.5 million over the next 20 years to provide fire service and require an additional fire station and fire and EMS apparatus. The total 20-year cost is \$5.8 million.

Fire District #2's CFP has an estimated 20-year expenditure totaling \$1,150,000. It includes a fire station and the purchase of a fire engine and water tender.

Fire Districts 3, 6, 10 did not foresee any difficulty providing service in the 20-year timeframe and did not prepare an updated 20-year forecast at this time since the preferred growth map focused growth in the urban areas.

The **City of Vancouver and Fire District 5** forecast CFP on call type, location and response time within the population served rather than only on population. Expansion, station location and additional resources are based on data sets and service level for emergency response received rather than by population served.

Fire District #13 did not submit an updated six and 20-year capital facility needs.

Clark County Fire & Rescue has an estimated 20-year expenditure totaling \$12,970,000. It includes a new fire station, remodeling a fire station and purchasing new fire and EMS apparatus and equipment.

4. **A 6-year financial plan is developed for funding those expansions or new capital facilities that are expected to be needed within the first 6-years of the plan. That financial plan must be fully balanced. The identified needs must have known funding sources (even if those funding sources may require voter approval).**

City of Battle Ground's 6-year capital facility plan identifies the capital improvements that need to be made to assure their demands standard is satisfied based upon existing and projected development.

Table E.32
2016-2021
Battle Ground
6-Year CFP Fire
Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
Replace Station 35	1	\$4,000,000	\$4,000,000
Ladder Truck	1	950,000	950,000
Land	1	1,000,000	1,000,000
Rescue	1	100,000	100,000
TOTAL	4	\$6,050,000	Fire Impact Fee, Revenue and General Obligation Bonds, Development and/or Fire Impact Fees

City of Camas/Washougal's 6-year capital facility plan can accommodate the proposed growth in the February 23, 2016 map.

Table E.33
2016-2021
Camas/Washougal 6-
Year CFP Fire
Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
Construct new fire stations	2	\$6,000,000	\$6,000,000
Replace ambulance	2	300,000	300,000
Replace pumper truck and equipment	1	400,000	400,000
TOTAL	5	\$6,700,000	Bonds, General Fund, Emergency Rescue Fund

Fire District #2's CFP 6-year capital facility needs will be met through Clark County Fire & Rescue.

Table E.34
FD #2
2005-2011
6-Year CFP Fire Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
Remodel	1	Not provided	
Fire engine	1	Not provided	
Water tender	1	Not provided	
TOTAL	3	\$1,150,000	General obligation bonds

Fire District #3 has indicated that their 6-year CFP can provide services and mentions building fire station 36. This part of the service area is now under review for a possible zone change to Rural Industrial Land Bank. If changed and developed, it is anticipated that a fully staffed fire station with a new fire engine would be required.

Table E.35
FD #3
2016-2021
6-Year CFP Fire
Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
New fire engines	3	\$1,500,000	\$1,000,000
New Water Tender	1	350,000	300,000
New Fire Station	1	4,000,000	4,000,000
New brush engine	1	150,000	150,000
TOTAL	6	\$6,000,000	Existing reserve fund, bond sale, Development and/or Fire Impact Fees

Vancouver and Fire District #5's CFP contains a three-year capital facilities needs list based on call volume rather than population served..

Table E.36
Vancouver and FD #5
2016-2021
3-Year CFP Fire
Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
Fire Station Maintenance	10	\$590,000	\$590,000
Construct new fire station	2	15,000,000	15,000,000
Remodel	3	1,710,000	1,710,000
Land Acquisition	2	1,500,000	1,500,000
TOTAL	17	\$18,800,000	General fund, property tax revenue

Fire District #6's 6-year CFP includes the purchase of two new fire engines, one new brush/squad and one new command vehicle. Fire District #6 also has a plan in place for remodeling two existing facilities and building a new station 63 facility and a training facility in the Salmon Creek area to accommodate residential and commercial growth. This will likely be included in their 20-year CFP, which was not submitted at the time of this writing.

Table E.37
FD #6
2016-2021
6-Year CFP
Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
New engines and related equipment	4	\$1,550,000	\$1,550,000
TOTAL	4	\$1,550,000	Property tax revenue

Fire District #10's 6-year CFP does not indicate a need for future buildings or apparatus' to serve the area in February 23, 2016 map.

Clark County Fire and Rescue's 6-year CFP includes the purchase of two new fire engines, two new rescues, three new command vehicles and replacement of existing Air Packs. CCF&R also has a need to remodel an outdated fire station and purchase land for a new fire station in the area south of Ridgefield to accommodate residential and commercial growth.

Table E.38 Clark County
Fire & Rescue
2016-2021
6-Year CFP Fire Summary

Capital Facility Project Type	Number of Projects	Cost	Funding
Remodel 1 Station	1	\$1,000,000	\$1,000,000
Purchase Land	1	400,000	400,000
New Rescues	2	150,000	150,000
New Engines	2	1,000,000	1,000,000
New Command Vehicles	3	120,000	120,000
Air Packs	unspecified	450,000	450,000
TOTAL	9	\$3,120,000	Reserve fund and general obligation

Fire District #13 did not provide and submit a 6-year Capital Facility Plan.

Transportation

Most of the transportation elements and transportation capital facilities plans reviewed meet the requirements of the state law (as noted in the Definitions section of this report). Of those plans reviewed, several communities have identified shortfalls in available transportation funding over the 20-year plan life. Other communities have identified that an aggressive approach to external funding sources, like grants, will be necessary to maintain their transportation desired level-of-service (LOS). At least one community has asked, through its plan document, for the county to invest in county facilities seen necessary for the support of that city's urban area. The latter part of this comprehensive planning process should prompt discussion between jurisdictions seeking a cooperative approach to meeting needs that exceed the ability of jurisdictions to fund them.

Transportation Service Areas

The responsibility for transportation capital improvements generally follows the land use jurisdictional responsibilities. The notable exception to that is the Washington State Highway System, for which the Washington State Department of Transportation has responsibility as shown in Appendix B, Figure 35.

Analysis

The analysis of the transportation element and associated transportation capital project lists differs from other capital facilities as it is structured to respond to the applicable state requirements as noted in the Definitions section of this review document.

1. Does the transportation element cite the land use assumptions used for the transportation demand estimation?

All of the reviewed transportation elements contain references to the land use assumptions used to estimate transportation demand. It should be noted that not all of the jurisdictions use the regional transportation model maintained by Regional Transportation Council (RTC) to estimate future transportation demand.

2. Does the transportation element contain an inventory of transportation facilities and services?

Most of the transportation element and/or transportation capital facilities plans contain an inventory of existing transportation facilities within each jurisdiction. These inventories include both mapping and descriptions in text (sometimes one or both).

3. Does the transportation element contain local level-of-service standards?

All of the transportation elements and/or transportation capital facilities plans contain level-of-service standards for local facilities. The following table summarizes the local level-of-service standards for area jurisdictions. The Growth Management Act, local policies and the principle of adequate capital facilities planning dictate that evidence needs to be provided that a jurisdiction can afford the impacts of growth on their community; especially when a jurisdiction is requesting a legislative action (boundary movement) that would generate greatly increased levels of growth.

Table E.39 | Transportation Level-of-Service (LOS) Standard

Jurisdictions	Level-of-service Standard
City of Battle Ground	LOS “D” for signalized intersections. LOS “E” for side street at unsignalized intersections.
City of Camas (Policy T-7)	The Highway Capacity Manual (HCM) sets LOS for intersections and roundabouts. Roadways based on average speed using volume-to-capacity for collectors and arterials use a standard of 0.85 and 0.90 for state highways.
City of La Center (Policy 2.1.2)	LOS “C” for classified streets. Install traffic signal when LOS “D” is reached or when intersection meets warrants.
City of Ridgefield	LOS “D” except unsignalized intersections where signal is not meeting warrants or signal not desired then LOS “E”
City of Vancouver	A combined corridor and intersection approach. Lowest acceptable speed corridor is at 10 mph. Only intersection standards are applied in the City Center Zone.
City of Washougal	LOS “D” except unsignalized intersections where standard is “E”
Clark County	A combined corridor and intersection approach. For corridors Volume-to-Capacity ratios for collectors and arterials inside the Vancouver UGA exceeding 0.9. For unsignalized intersections of regional significance in the unincorporated LOS E standards or better (if warrants are not met). If warrants are met, unsignalized intersections of regional significance shall achieve LOS D standards or better.
Town of Yacolt	LOS “C” for arterial roadways, “B” for non-arterial roadways.

4. Does the transportation element contain Level-of-Service standards for the state highways?

Of the transportation elements reviewed that have state facilities within the jurisdiction boundaries, most note the required level-of-service for state facilities. Many of the documents do not cite the applicable standards but address this issue through adoption of the Metropolitan Transportation Plan by reference or through mentioning the differing standards for highways of statewide significance (I-5, I-205 and SR-14) and state highways of regional significance (SR 500, 502, 503).

5. Does the transportation element identify actions to address identified existing deficiencies in the transportation system?

Many of the transportation elements reviewed do not identify existing deficiencies in the transportation system. It is not clear whether this is because some of the jurisdictions have transportation facilities not meeting the applicable level-of-service standard or because existing conditions were not examined in the planning process.

The **City of Battle Ground** Transportation System Plan includes a table with existing operating conditions at five signalized intersections meeting the level of service.

The **City of Camas**, and the **Town of Yacolt** do not specifically identify existing deficiencies in the plan documents reviewed. However, LOS standards can be considered to reflect existing deficiencies and are summarized above.

The **City of La Center** analysis notes that the existing bridge across the East Fork Lewis River may exceed the bridge design capacity in 2036. The city intends to relieve bridge pressure by encouraging residential and mixed use development on the southwestern side of the river to balance commute and home-to-school travel patterns..

The **City of Ridgefield** plan summarizes the LOS for existing conditions in a table in the City's Comprehensive Plan. All of the intersections operate at LOS C or better; meeting the city's standards.

The **City of Washougal** plan notes that the minor crossing movements at the intersection of SR-14 and 32nd Street are not meeting the city's LOS standard. The transportation plan update identifies that a planned interchange project on SR-14 will address this deficiency.

The **City of Vancouver** cites existing conditions of the City's transportation system in Table 5-3 of the City's Comprehensive Plan. The City lists improvements and programs designed to improve connectivity and access throughout the community in their Capital Facilities Plan and displayed in Figure 5-3.

The **Clark County** Comprehensive Plan identifies existing deficiencies including the Salmon Creek area at I-5 and NE 134th Street. The county commits to correct these deficiencies in the near future.

6. Does the transportation element contain a forecast of traffic conditions for at least ten years based on the land use plan? (Since the February 23, 2016 land use plan was a 20-year plan map, this requirement in Clark County is interpreted to be a 20-year transportation conditions forecast.)

All of the reviewed transportation planning documents include projections of future traffic conditions based on the February 23, 2016 Board of County Councilor's Preferred Alternative.

Information provided by the **Cities of Battle Ground, Camas, La Center and Washougal** updated their traffic projections and CFP project lists based on the 2016 Preferred Alternative land use map. Forecasts for **Ridgefield** address impacts of urban growth boundaries similar to the 2016 Preferred Alternative land use map. There are no changes proposed to the **Town of Yacolt** boundary. The **City of Vancouver** transportation element, adopted in 2011 is consistent with the Preferred Land Use Map, the planned growth is in the northern tier of the Vancouver UGA, which is unincorporated and likely to develop under the land use jurisdiction of Clark County.

The transportation element for **Clark County** has been updated to provide a countywide 20-year forecast of traffic conditions under the Preferred Alternative.

7. Does the transportation element (or transportation capital facilities plan) contain a listing of state and local systems needs to meet forecast demand?

The cities of **Battle Ground, Camas, La Center and Washougal** updated their CFP project lists based on the 2016 Preferred Alternative land use map. The **City of Ridgefield** previously addressed transportation impacts of urban growth boundaries similar to or larger than the 2016 Preferred Land Use Map. There are no changes proposed to the **Town of Yacolt** boundary. The **City of Vancouver** transportation element, adopted in 2011 is consistent with the Preferred Map, the planned growth is in the northern tier of the Vancouver UGA, which is unincorporated and likely to develop under the land use jurisdiction of Clark County.

Clark County has identified a list of system needs, CFP projects and mitigation measures to address forecast demand. Appendix A details the transportation needs forecasted to support implementation of the Comprehensive Growth Management Plan.

8. *Does the transportation element or transportation capital facilities plan contain a finance plan which has an analysis of the funding capacity for the 20-year needs, a multi-year program (which serves as the basis for the six year program of transportation improvements) and a discussion of how to address any shortfall of probable funding?*

This is an area where the degree to which this requirement is met varies widely between the documents reviewed. Some documents are fully compliant, while others fail to address this requirement entirely.

The **City of Battle Ground** Transportation Systems Plan (TSP) includes a finance plan which analyzes the short-, medium- and long-range revenues and project costs and potential sources of additional transportation funding.

The **City of Camas** documents reviewed contain a table of costs for the 20-year list of transportation improvements. Those tables identify both the total cost of a particular project and the source of expected revenue (general fund, loans, grants, partnership or developer contribution and impact fees). An additional \$20 million in transportation projects was assumed to be needed to serve the expansion areas. The plan appears to be financially balanced over the 20-year period, but no explicit statement to that effect was found. It should be noted that the majority of transportation project costs (\$90M+) were planned for the final 6 years of the planning period. The plan document contains an explicit policy directed at addressing the potential funding shortfall. Policy TR-40 commits the city to a public discussion about possible additional funding sources or a re-evaluation of the land use plan.

The **City of La Center** draft transportation capital facilities plan contains a section addressing the financial analysis requirement. The financial analysis identifies that to meet the costs of the city's 20-year list of transportation needs, La Center would need to continue collecting local taxes and fees at or above the current levels, aggressively pursue grant funding, regularly update transportation impact fees including an annual inflation update and consider establishing a dedicated street and road fund. Funding sources for a second bridge over the East Fork of the Lewis River are not fully identified. The financial analysis updates the city's traffic impact fee program to provide an estimated \$1.9M of revenue over the 20-years of the land use plan (a resulting impact fee of \$1,964 per peak hour trip). The table of transportation capital projects identifies those projects needed in the first 6 years of the plan. The draft also cites the requirement for language regarding reassessment of the land use plan if funding projections are not met.

The **City of Ridgefield** transportation capital facilities plan contains a section regarding financial analysis. The plan proposes that the city's traffic impact fee be increased and adjusted to account for inflation. Increasing the City's Traffic Impact Fee (TIF) rate, while maintain the private/public funding split at 58%/42% will provide adequate financial resources to serve the growing city. The comprehensive plan addresses transportation finance in Policy TR-4, which identifies funding streams to implement Complete Streets strategies.

The **City of Vancouver** transportation plan contains an analysis of funding for the plan that balances costs with funding. The comprehensive plan contains a summary table indicating the 6-year program costs and 20-year CFP costs. The current 6-year TIP program adopted on June 15, 2015 includes a capital cost estimate totaling \$97.4 million. The Vancouver comprehensive plan contains Policy 6.1.G committing to reassessing its land use plan if funding is insufficient to provide the necessary public services and facilities to implement the plan.

The **City of Washougal** transportation capital facilities plan contains a section on existing and projected revenue. Of the \$143 million projected cost for capital facilities projects, \$120M is

assumed to come from TIFs and private share. There is no financial analysis of the shortfall and only a brief list of recommendations for addressing the funding shortfall.

Clark County transportation element contains a section identified as the financial analysis. This section addresses the ability of the county to finance the 20-year list of expected projects and notes that the county will balance expenditures with revenues based on historic revenue sources. The six-year program was adopted on November 10, 2015. Staff has also completed a 20-year list of projects and cost estimates. Language to address the requirement to reassess the plan if expected funding does not develop as expected is included in the plan text.

The **Town of Yacolt** plan document identifies a 6-year program of projects that fits within the town's financial capacity. There are no projects identified for years 7 through 20 but given the lack of identified long range transportation deficiencies, that may be acceptable. There is no language for addressing potential future funding deficits, which also may be acceptable given the lack of long range capacity needs of future funding shortfalls could be addressed by slowing the rate of project expenditure on retrofit/upgrade-to-standards projects.

9. Does the transportation plan commit to intergovernmental coordination? Is there any explicit analysis of external impacts?

Most of the plan documents examined contain policy statements recognizing the need for and committing to intergovernmental coordination. As widespread as those policy statements are, none of the plans except for Clark County's appear to explicitly examine impacts on the transportation facilities of other jurisdictions.

The **City of Battle Ground** TSP addresses the need for interagency coordination and cooperation.

The **City of Camas** plan document commits to intergovernmental coordination in policy T-3.1 of its transportation element. The City recognizes the importance of coordinated and strong inter-jurisdictional action in order to collectively mitigate increased congestion.

The **City of La Center** commits to intergovernmental coordination in comprehensive plan policy 2.1.1. The transportation capital facilities plan identifies projects within and adjacent to the city's proposed UGA that are needed to maintain an adequate level-of-service.

The **City of Ridgefield** comprehensive plan commits to regional coordination in Policy TR-21 of the plan. This policy aims to ensure a seamless transportation system with neighboring jurisdictions. Policy TR-22 specifically identifies coordination with Clark County to maintain urban to rural connections for development that occurs outside Ridgefield's City Limits but inside the urban growth areas. The policy explicitly mentions that LOS C to not be exceeded for any County collector street or arterial street.

The **City of Vancouver** comprehensive plan contains a specific policy addressing intergovernmental coordination (PFS-14). Regional partnerships are maintained with Clark County, the Southwest Washington Regional Transportation Council (RTC), C-TRAN (regional transit agency), WSDOT, the Port of Vancouver and other cities in Clark County. Vancouver also works with the City of Portland, Metro (Portland's Regional Government), the Oregon Department of Transportation (ODOT) and the Port of Portland. RTC is the region's designated Metropolitan Planning Organization (MPO) and Regional Transportation Planning Organization (RTPO).

The **City of Washougal** draft update to the transportation plan does not appear to include a discussion or policy addressing regional coordination.

The **Clark County** transportation element of the comprehensive plan through countywide planning policy commits to intergovernmental cooperation and coordination through the Southwest Washington Regional Transportation Council (RTC) as the designated Metropolitan Planning Organization and Regional Transportation Planning Organization. Appendix A (Transportation Issues) addresses likely impacts to non-County roadways and identifies adopted and potential mitigation measures. The Comprehensive Plan update includes a detailed assessment of potential impacts to state facilities.

The **Town of Yacolt** includes the countywide planning policies regarding regional coordination and cooperation and then mirrors that policy direction in its own transportation element (Policy 4-4). Given the lack of internal capacity deficiencies identified in the plan by the horizon year, it is understandable that no external analysis of possible contributions to capacity deficiencies was performed.

10. Does the transportation element or transportation capital facilities plan contain transportation demand management strategies?

Most of the reviewed plans consider or make a commitment to transportation demand management (TDM) as part of making their land use and transportation visions consistent.

The **City of Battle Ground** TSP addresses TDM strategies for walkways and bikeways.

The **City of Camas** comprehensive plan has four policies related to transportation demand management. Policy T-6.1 commits requiring large employers to implement Commute Trip Reduction Programs for employees. Policy T-6.2 commits to developing “Complete Street” design that is supportive of the use of alternative modes of travel and adopts engineering standards consistent with these goals. Policy T-6.3 supports intergovernmental development review. Policy T-6.4 supports the Regional Transportation Council with funding and staff participation.

The **City of La Center** comprehensive plan contains Policy 2.1.8 which commits the city to encouraging transit (both public and private). The policy encourages carpooling, public transportation and other strategies to reduce traffic congestion.

The **City of Ridgefield** comprehensive plan contains Policy TR-1. This policy aims at diversifying the City’s transportation system for automobiles, freight, pedestrians, bicycles and transit modes. It also specifically mentions traffic operations, transportation demand management, neighborhood traffic management and regional trails as contributing components that make up a successful transportation system.

The **City of Vancouver** comprehensive plan contains policy PFS-4 which notes the inclusion of support programs such as transportation demand management in providing an integrated and connected transportation system. Later in the text of the public facilities and services element, the draft comprehensive plan notes that demand management efforts are an important non-capital investment in the transportation system.

The **City of Washougal** draft update to the transportation plan does not contain a discussion of transportation demand management. Perhaps that discussion is left to a transportation element contained within the comprehensive plan, which was not reviewed in preparation of this document.

Clark County addresses transportation demand management in a section of the transportation element noting the commute trip reduction program and the ability to influence transportation

demand through parking policy. Plan policy 5.3.4 commits the county to supporting and promoting a transportation demand management program.

The **Town of Yacolt** comprehensive plan contains Policy 4-6 which speaks to the optimal use of roads to minimize new road construction. While not an explicit statement committing to transportation demand management, the basic tenet of transportation demand management is the optimal use of limited roadway capacity.

EXECUTIVE SUMMARY

Most jurisdictions have met or appear to be able to meet (with additional information disclosure) the requirements of the Growth Management Act for capital facilities and transportation planning. Capital facility planning has been hindered by other informational deficiencies, which have been described in this report. Despite the lack of some information, the following conclusions can be made:

1. WATER

Many of the jurisdictions and the service districts have identified the need for additional water rights in order to obtain an adequate water supply. However, many jurisdictions will be increasingly relying on CPU water provision which has acquired new reserves at the Carol J. Curtis Well Field, in the Vancouver Lake lowlands and the Paradise Point Well Field, at the confluence of the East and North Forks of the Lewis Rivers. Some jurisdictions only need additional water resources from CPU during peak times, or for major industrial users. Others will need the intertie to accommodate projected residential growth. Clark County can be instrumental in making the water available in a timely fashion by accommodating water mains within their right-of-ways and by expediting the review of site plans for wells, reservoirs, treatment buildings and booster stations.

2. SEWER

In general, sewer districts that serve Clark County, the Alliance and the cities have forecasted future capital facilities needs to accommodate growth identified in the February 23, 2016 map. Funds for the 6-year capital facilities needs shown in the sewer districts will use a combination of system development charges, grants, loans and developer financing to cover the costs of the proposed growth. Total 6-year capital facilities cost for all providers in Clark County is approximately \$158,073,580. Total cost to provide sewer service for the future population and job growth for the 20-year plan is approximately \$440,188,728.

3. STORMWATER

Each jurisdiction relies on individual developments to be responsible for managing stormwater in accordance with state mandated stormwater management practices. The county and cities will own and manage any stormwater facilities located within the public rights-of-way or property.

4. SCHOOLS

The school districts identified what types of school facilities and the amount of funding needed to build these additional facilities. As shown in the school section of this document, the districts have improvements and funding sources identified for the first six years of the 20-year planning horizon. Most of the school districts will need to use voter approved bonds to build additional school facilities.

5. PARKS

The majority of jurisdictions have identified additional parkland needs in order to meet minimum level-of-service standards based on the projected population and the preferred alternative map. Based on the information provided by the service providers, the capital facilities plans show how the service providers could meet minimum service standards.

6. POLICE

The County's Sheriff's office and all the municipal police departments in the County have reviewed the February 23, 2016 map and related assumptions and have determined which, if any, facilities will be necessary to service the population growth forecasted for the twenty-year planning horizon. As indicated in the police section of this document, the Sheriff and police departments have improvements and funding sources identified for the first six years of the twenty-year planning forecast, which will be funded through a variety of sources.

7. FIRE

Nearly all fire districts and jurisdictions have shown an ability to serve the proposed growth for six years in the February 23, 2016 map. Almost half of the fire districts do not have an identified list of 20-year capital facilities needs to serve the proposed expansions. Most of the fire districts have identified funding sources for their 6-year capital needs such as property taxes and general funds. However, all fire district future capital facilities needs appear to be dependent on voter approved bonds and future tax property revenue. The total cost to provide capital facilities needs for fire services during the identified 6-year CFP is approximately \$43 million.

8. TRANSPORTATION

All jurisdictions have adopted "reasonably" current transportation capital facilities plans which identify projects, costs and funding sources. Almost all have been updated to address the likely impacts of adopting the proposed urban growth boundary expansions. Most city plans rely heavily on traffic impact fees and private share funding sources. Level-of-service will likely be reduced over time for heavily traveled built out arterial corridors. Increasing jurisdictional efforts in travel demand management will reduce congestion on the transportation network.

RESOURCE DOCUMENTS

City of Battle Ground

1. City of Battle Ground, Comprehensive Water System Plan, May 2013.
2. City of Battle Ground, 2015 General Sewer Plan, November 2015.
3. City of Battle Ground, Stormwater Management Plan, 2015-2035, August 2015.
4. City of Battle Ground, Fire Capital Facilities Plan, Adopted September 1999, Update April 2005.
5. City of Battle Ground, Transportation System Plan Update, 2015-2035, June 2015.

City of Camas

1. City of Camas, Comprehensive Plan, March 2016.
2. City of Camas, Capital Facilities Plan 2004-2009 & 2010-2023, March 2004.
3. City of Camas, Water Systems Plan, June 2010.
4. City of Camas, General Sewer/Wastewater Facility Plan, May 2007, revised November 2009.

City of La Center

1. City of La Center, General Sewer Plan, March 2013.
2. City of La Center, Final Draft General Sewer Plan, March 2013.
3. City of La Center, Comprehensive Plan, March 1, 2016.
4. City of La Center, Transportation Capital Facilities Plan, December 2004.
5. City of La Center, letter from Jeff Sarvis, La Center Public Works Director to the Clark Board of County Commissioners , dated July 10, 2014.

City of Ridgefield

1. City of Ridgefield, General Sewer Plan, Volumes I and II, March 2013.
2. City of Ridgefield, Comprehensive Plan, 2016-2035.
3. City of Ridgefield, Water System Plan Update, September 2013.
4. City of Ridgefield, Transportation Improvement Program, 2016-2021.

City of Vancouver

1. City of Vancouver, Comprehensive Water System Plan, December 2015.
2. City of Vancouver, Capital Facilities Plan, 2015-2018.
3. City of Vancouver, Comprehensive Plan 2011-2030.
4. City of Vancouver, Capital Improvement Program for Water, Sewer, Surface Water 2016-2021, July 13, 2015.
5. City of Vancouver, Transportation Improvement Program (TIP), 2016-2021.

City of Washougal

1. City of Washougal, Sewer System Capital Facility Plan, Update July 2006.
2. City of Washougal, Water System Plan Update, June 2012.
3. City of Washougal, Draft Transportation Capital Facilities Plan and associated Traffic Impact Fees, Update July 2006.
4. City of Washougal, Capital Facilities Plan 2006.

City of Woodland

City of Woodland, Comprehensive Plan (Capital Facilities Plan Element), October 2005.

Town of Yacolt

Town of Yacolt, Comprehensive Growth Management Plan Update, April 2013.

C-TRAN

1. 20 Year Transit Development Plan: A Comprehensive Strategy to Meet Public Transportation Needs for Clark County Residents, June 8, 2010

Clark Public Utilities

1. Clark Public Utilities Water System Plan, February 2003, Updated CFP project lists, March 2004 and March 2007.

Clark Regional Wastewater District

1. Clark Regional Wastewater District, Comprehensive General Sewer Plan Amendment (Final), March 2013.
2. Clark Regional Wastewater District, Capital Facilities plan, June 2006.
3. Clark Regional Wastewater District, Six-Year Capital Program 2014-2019

Clark County Environmental Services

1. Stormwater Management Plan 2016, March 2016.
2. Stormwater Capital Program 2013-2018

Clark County General Services

Capital Inventory 2015

Clark County School Districts

1. Battle Ground School District Capital Facilities Plan 2015-2021, May 2015..
2. Evergreen School District Capital Facilities Plan 2015-2021, May 2015.
3. Ridgefield School District Capital Facilities Plan 2015-2021, June 2015.
4. Camas School District Capital Facilities Plan 2015-2021, May 2015..
5. Vancouver School District Capital Facilities Plan 2015-2021, May 2015.
6. Hockinson School District Capital Facilities Plan 2015-2021, May 2015.
7. La Center School District Capital Facilities Plan 2015-2021, June 2015.
8. Green Mountain School District Capital Facilities Plan 2015-2021, May 2015.
9. Washougal School District Capital Facilities Plan 2015-2021, May 2015.

Clark County Parks

Clark County Parks, Recreation and Open Space Plan, July 2015.

Clark County Public Works

1. Clark County Transportation Improvement Program (TIP) 2016-2021, November 2015.
2. Clark County Road Log 2015.

Clark County Water Utility Coordinating Committee

Clark County Coordinated Water System Plan Update, Regional Supplement, November 2011.

Port of Vancouver

The Port of Possibility brochure 2015

Clark County Fire

1. Fire District #3 Capital Facilities Plan, March 2006.
2. Fire District #6 Capital Facilities Plan, February 2006.
3. Fire District #11 Capital Facilities Plan, February 2006.
4. Fire District #12 Capital Facilities Plan, February 2004.
5. Fire District #13 Capital Facilities Plan, February 2006.
6. North Country Emergency Medical Service Capital Facilities Plan, June 2004.

Washington State

1. Department of Health, Office of Drinking Water, Data 2015
Annual Traffic Report 1990-2014.

CITATIONS

RCW 36.070A.070

Comprehensive plans -- Mandatory elements.

The comprehensive plan of a county or city that is required or chooses to plan under RCW 36.70A.040 shall consist of a map or maps and descriptive text covering objectives, principles and standards used to develop the comprehensive plan. The plan shall be an internally consistent document and all elements shall be consistent with the future land use map. A comprehensive plan shall be adopted and amended with public participation as provided in RCW 36.70A.140.

Each comprehensive plan shall include a plan, scheme, or design for each of the following: ...

(3) A capital facilities plan element consisting of: (a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities; (b) a forecast of the future needs for such capital facilities; (c) the proposed locations and capacities of expanded or new capital facilities; (d) at least a 6-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and (e) a requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element and financing plan within the capital facilities plan element are coordinated and consistent. Park and recreation facilities shall be included in the capital facilities plan element.

(Emphasis is ours)

RCW 36.070A.070 (6)(a)(iv)

(6) A transportation element that implements and is consistent with, the land use element.

(a) The transportation element shall include the following sub-elements: ...

(iv) Finance, including:

(A) An analysis of funding capability to judge needs against probable funding resources;

(B) A multiyear financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the 6-year street, road, or transit program required by RCW 35.77.010 for cities, RCW 36.81.121 for counties and RCW 35.58.2795 for public transportation systems. The multiyear financing plan should be coordinated with the 6-year improvement program developed by the department of transportation as required by RCW 47.05.030;

(C) If probable funding falls short of meeting identified needs, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that level-of-service standards will be met;

(Emphasis is ours)