# SECTION 2 Capital Facilities Plan









# **Chapter 12.** Capital Facilities Plan

# 12.1 Introduction

One of the more challenging aspects in managing growth is ensuring that needed public facilities are available when growth occurs. The implementation of a well-defined capital facilities plan will help realize the community's vision of a well-managed city. The ultimate full development of the Land Use Plan is contingent on the development of needed infrastructure in a timely and orderly fashion.

The purpose of the Capital Facilities Plan (CFP) is to demonstrate that all capital facilities serving Poulsbo have been addressed and that capital facility planning has been and will continue to be, conducted for all capital facilities. A meaningful and GMA compliant CFP enables Poulsbo to practice good management of its infrastructure and resources. Planning for major facilities and their costs allows Poulsbo to:

- Ensure future capital facilities are provided cost effectively and compliant with the Growth Management Act;
- Ensure adopted level of service is maintained;
- Demonstrate the need for facilities and the need for revenues to pay for them;
- Estimate future operation/maintenance costs of new facilities that will impact the annual budget;
- Take advantage of sources of revenue (e.g. grants, impact fees, real estate excise taxes) that require a CFP in order to qualify for the revenue; and
- Get better ratings on bond issues when the City borrows money for capital facilities (thus reducing interest rates and the cost of borrowing money).

Poulsbo owns and manages a number of capital facilities including its roads, parks, water and sewer lines, police facilities, and administrative buildings. In addition to facilities owned and managed by Poulsbo, there are a number of publicly owned capital facilities managed by other entities which provide for some of Poulsbo's public capital facility needs. These include, but are not limited to schools, libraries, fire protection, sewage treatment, public transit and park-and-ride facilities.

Planning decisions made regarding these facilities are made by the responsible governing bodies. These decisions include the construction of new facilities, improvements to existing facilities, the levels of service provided by those facilities, and the sources of revenues and financing for needed facilities. Such decisions also recognize the evolving and adaptive role of technology in the provision of capital facilities.

# Capital Facilities Planning Under the GMA

#### What is our vision for Poulsbo?

#### **Setting GOALS:**

- The GMA Urban Growth Planning Goal directs development of an urban area with adequate public facilities provided in an efficient manner.
- Countywide Planning Policies goals ensure jurisdictions develop their allocated growth consistent with the Capital Improvement Plan, and urban areas must have public facilities/services to meet the allocated growth.
- Poulsbo's Capital Facilities Plan must provide reasonable assurance there
  are adequate public facilities which address past deficiencies, anticipate
  growth needs, achieve acceptable levels of service, efficiently use fiscal
  resources, and meet realistic timelines.

#### How are we doing?

#### Tools to MONITOR and REASSESS the process:

- Annual comprehensive plan amendments
- Annual CIP updates
- Preparing annual CIP Budget monitoring reports
- Annual Implementation Strategies report to Mayor and City Council
- Periodic GMA-level comprehensive plan monitoring and updates (buildable lands, updates, urban growth boundary).



# How can we pay for it?

The **SIX-YEAR FINANCING PLAN** included in the City's Capital Improvement Plan must include projects that are realistically intended to be constructed within its time frame.

The City's Capital Budget must represent the amount and a secure funding source that will be used to pay for the construction of the facilities.





#### What do we have?

#### **Taking INVENTORY** of facilities:

City managed facilities -Water, Sewer, Storm Drainage, Parks and Recreation, Transportation, Police, Government facilities, Solid Waste; and non-city managed Fire Protection, Libraries, and Schools.



# What do we need? Project FUTURE FACILITY NEEDS

based on Land Use Chapter growth allocation.



#### How can we do it?

Use levels of service, consistency measures, and **FUNCTIONAL PLANS:** 6-Year Transportation Facility Plans; Water, Sewer, Storm Water Management; Park, Recreation and Open Space Plans; Solid Waste Management, and other non city-managed capital facility plans.

# Poulsbo's Capital Facilities

In this Chapter, a section is devoted to each type of capital facility service: Water, Sanitary Sewer, Storm Water Management, Transportation, Parks and Recreation, Police Protection, Solid Waste, Government Facilities, Fire Protection, Libraries, and Schools.

For Water, Sanitary Sewer, Storm Water Management, Transportation and Parks and Recreation, the most recent functional plan developed for each of these facilities has been included as an appendix to this comprehensive plan and are adopted in full. For those facilities where a functional plan is included as an appendix, the existing system conditions, LOS evaluation, and identified deficiencies discussion can be found in the respective functional plan.

This Chapter identifies: 1)a list of needed capital facility projects in order to meet the project growth demands to the year 2036; 2) the facilities' 6-year Capital Improvement Program (CIP) with projected costs; and 3) a funding strategy for implementation of the identified projects.

**Table CFP-1** Types and Providers of Capital Facilities

Facility Type	Provider	Description	Applicable Functional Plan(s) or other Documents
Water	City of Poulsbo Public Works Department	Provide supply of potable water from system of wells. Service area includes developed portions of city and surrounding unincorporated areas.	Water System Plan 2014
Sanitary Sewer	City of Poulsbo Public Works Department	Provide facilities used in the collection, transmission, storage, treatment or discharge of waterborne waste within the city limits.	Comprehensive Sanitary Sewer Plan 2016
Storm Water Management	City of Poulsbo Public Works Department	Provides facilities that collect, treat and transport Storm Water runoff.	Storm Water Management Comprehensive Plan 2016
Transportation	City of Poulsbo Public Works Department	Provides streets, sidewalks, traffic controls and street lighting.	Transportation Chapter 4  Transportation Plan Update 2016
Parks	City of Poulsbo Parks and Recreation Department	Provides facilities for active and passive recreational activities.	Parks, Recreation and Open Space Chapter 8 Poulsbo Park, Recreation and Open Space Plan 2016
<b>Police Protection</b>	City of Poulsbo Police Department	Provides facilities that support the provision of law enforcement services.	Poulsbo Annual Budget
Solid Waste	City of Poulsbo Public Works Department	Provides facilities for the collection and disposal of solid waste.	2017 Solid Waste Utility Plan
Government Facilities	City of Poulsbo	Provides facilities at which the function and	Poulsbo Annual Budget

		administration of city services	
	can occur.		
Fire and Emergency Services	Poulsbo Fire Department	Provides facilities that support the provision of fire and emergency services.	Poulsbo Fire Department Annual Budget
Libraries	Kitsap Regional Library	Provides facilities that support the provision of library and community meeting space services.	KRL Annual Budget
Schools	North Kitsap School District	Provide elementary and secondary facilities for instruction in the several branches of learning and study required by the Basic Education Code of the State of Washington.	NK School District Capital Facilities Plan 2016-2022

# 12.2 Poulsbo Capital Facilities Level of Service

All capital facilities provided by Poulsbo use a form of measurement to evaluate performance and needs. The quantity and quality of needed capital facilities are measured by level of service, operating criteria or performance standards.

Levels of service (LOS) are quantifiable measures of the amount of public facilities that are provided to the community. Levels of service standards are measures of the quality of life of the community. Standards should be based on the community's vision of its future and its values.

**Table CFP-2 City of Poulsbo Level of Service Standards** 

Capital Facility/Service	Level of Service	
Water System	A flow volume that meets instantaneous demand together with	
water System	projected fire flows.	
Sanitary Sewer	A level that allows collection of peak wastewater discharge plus	
Samtary Sewer	infiltration and inflow.	
	Comply with all conditions of Washington Department of	
Storm Water	Ecology's NPDES Phase II Western Washington Municipal	
	Storm Water Permit.	
	The transportation LOS is established to identify the need for	
	growth-related transportation programs and projects, as well as	
	those that serve people already living and working in Poulsbo.	
Transportation	The transportation concurrency requirement ensures that these	
Transportation	programs and projects are implemented proportionally with the	
	level of growth, and serve to implement the City's Land Use	
	Plan. Transportation LOS standards are contained in the	
	Transportation Chapter, Policies TR-2.1 and TR-2.11.	
	Citywide: 13.73 acres per 1,000 population	
	Neighborhood parks: 2 acres per 1,000 population	
Parks	Community parks: 3.5 acres per 1,000 population	
raiks	Regional parks: 1.5 acres per 1,000 population	
	Open space parks: 6 acres per 1,000 population	
	Trails: 1 mile per 1,000 population	

	Facilities, equipment and personnel sufficient to meet the	
Police Protection	demand for police protection and service for the residents and	
	businesses located within the city limits.	
	Weekly curbside refuse collection for single-family residences.	
Solid Waste	Provide daily to every other week collection from multi-family	
	and commercial buildings.	

Once LOS standard has been established, the performance of a capital facility can be measured. A capital facility operating at or above the established LOS indicates no need for improvements or new facilities. A facility operating below the established LOS is an indication that there may be a need for improvements, new facilities, or an evaluation of the LOS.

# 12.3 Capital Facilities Future Facility Needs

The 2036 population target established for Poulsbo by the Kitsap Countywide Planning Policy Appendix B-1, approved and adopted by the Kitsap Regional Coordinating Council is 14,808, reflecting a growth of 4,182 persons from 2016. The Capital Facilities Plan and the utility functional plans, have applied Poulsbo's total population allocation of 14,808 to analyze system deficiencies, identify future capital needs, and to provide overall and long-term capital facility planning.

The City will ensure that the Comprehensive Plan's Capital Facility Plan list of capital improvements is implemented. The City shall provide and fund the capital improvements, or require others to do so within the City's legal parameters of doing so. The identified capital improvement projects are listed as a 20-year list of projects, with a 6-year CIP serving as short-term budgetary focus for implementing the CFP.

The functional plans include a list of projects that have been identified as necessary to provide the necessary capital facilities to accommodate the 2036 population allocation. In some cases, those projects have been reflected in the functional plan as being programmed into the 6-year CIP; however, it is important to note, that regardless of what the functional plan depicts in its 6-year CIP, only those items in the 6year CIP (Table CFP-4) identified here in the comprehensive plan's Capital Facilities Plan are the projects intended to be financed and constructed in that time frame by the City of Poulsbo; the remaining projects have been identified in the City's 2036 Capital Facility Project List (Table CFP-3).



It is the intent of the City to continually manage the Comprehensive Plan's Capital Facilities Plan's 2036 project list and 6-year CIP to ensure its relevancy, and update as necessary during the City's annual comprehensive plan amendment process. As the City completes projects on its 6-year CIP, projects from the 2036 project list will then move onto the 6-year CIP.

Recommended project priorities – what projects are to be completed when on the 6-year CIP, and what projects are to move off the 2036 project list onto the 6-year CIP – is to be conducted through the City Council Committee structure - with recommendations made by the City Department Heads. The policy guidance provided in Capital Facilities Chapter Policy CF-1.1 shall be used when recommending capital facility project priorities.

Once these recommendations have been agreed upon in Council Committee, the Committee forwards its recommendation to the City Council as part of the City's budget process, identifying: 1) the 6-year project priority funding and 2) any 2036 project list modification recommendations which may need to be included as part of the City's annual comprehensive plan amendment process.

Further, the City's functional plans shall also be kept current and relevant by the appropriate Department, updating them at a minimum of the state required six-years, but earlier if warranted by changing conditions or new information. The functional plans' updates and/or amendments shall be adopted as comprehensive plan amendments (or as set forth in Capital Facilities Chapter Policy CF-6.4). The functional plans shall serve as the foundation for identifying the City's long-term capital facilities needs and funding strategies.

This method of continuous evaluation by the City, through its budget process (6-year CIP), the annual comprehensive plan amendment process (2036 Project List), and by keeping the City's functional plans current and relevant, ensures long-range, coordinated capital facility planning and implementation of the City's Capital Facilities Plan.

Table CFP-3 below identifies the list of capital facility improvements necessary for the City to adequately accommodate the 2036 population allocation assigned to Poulsbo. Detailed descriptions of each of the projects as well as funding strategies are identified further in this chapter under the specific facilities section.

Please note this list of projects has been developed comparing current facilities and projecting the needs of the 2036 population allocation, as described in detail in the City's functional plans. These projects are to be implemented over the long-term planning period and will be funded through a variety of means available to the City. Specific funding sources are identified later in this Chapter.

Table CFP-3 2036 City Capital Facility Project List

Capital Facility	Project List
	Lincoln Wells No. 1 and No. 2 Manganese Treatment
	Westside Well Treatment
	Big Valley Well No.3
	Westside Well No. 2
	Reservoir Coating Program
	Wilderness Park Reservoir Repairs
	Raab Park Reservoir Replacement and Booster Station
	340 Zone Fire Flow Pump and Zone Expansion
	Old Town Water Main Replacement
Water System	Viking Avenue PRV
water System	Hostmark Transmission Main
	Noll Road Water Improvements
	SR 305 Crossing
	Liberty Ridge Fire Flow
	Water main Replacement Program

	Material Design of Design
	Meter Upgrade and Replacement Program
	Telemetry System Upgrades
	System Rehabilitation Projects
	Annual Inflow Reduction Program
	Applewood Pump Station Replacement
	Village Pump Station Repair
	Annual Pump Station Rehabilitation/Replacement
	Replace Force Main Between Marine Science Center Pump Station and Harrison
	Street
	Downstream Conveyance Capacity Improvements
	Repair or Replace Metering Flume and Flow Measurement System
	Pipe Replacement Upstream of Lemolo Siphon
Sanitary Sewer	Pipe Replacement at Johnson Road
	Storage Facility for SR 305 Interceptor
	Purchase and Demolition of Lemolo House
	Lemolo Siphon #2
	System Expansion Projects
	SR 305 Force Main Extension
	Noll Road (north) Collection System
	Noll Road (south) Collection System
	South Viking Avenue Collection System
	Liberty Bay Pump Station Improvements
	Central Viking Avenue Collection System
	Finn Hill Collection System
	Restore South Fork Dogfish Creek near 8th Avenue
	8 <sup>th</sup> Avenue Culvert Replacement
	South Anderson Parkway Retrofit
	Poulsbo Creek Outfall Rehabilitation
	Viking Avenue Treatment Facility
	Ridgewood/Kevos Pond Basin Drainage Improvements
	Fjord Drive Water Quality and Habitat Improvements
	Replace Bjorgen Creek Culvert
	Community Bioretention Program
	Fjord Drive Drainage and Water Quality Improvements
	Repair American Legion Park Outfall
Storm Water	Deer Run Pond and Swale Retrofit
	Replace Storm Drain at 10 <sup>th</sup> Avenue
	Anderson Parkway Outfall Capacity Improvements
	Glen Haven Storm Drain Replacement
	Noll Road Improvements
	Poulsbo Village Regional Facility
	North Kitsap School District Campus Retrofit
	Front Street Retrofit
	Torval Canyon Water Quality Retrofit
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	Poulsbo Place Water Quality Retrofit

#### Roadway Improvements

Turn lane and Sidewalks: 10<sup>th</sup> Avenue 600' north of Liberty to Liberty Sidewalks. Widen and Resurface: 8th Avenue from Hostmark to 7th Avenue

Sidewalks and Resurface: Pugh from Lincoln to city limits

Sidewalks, Widen and Resurface: Mesford from 20th Avenue to Noll Sidewalks and Resurface: Hostmark from 4<sup>th</sup> Avenue to 6<sup>th</sup> Avenue

Sidewalks and Resurface: Caldart from Hostmark to Gustaf Sidewalks: 11<sup>th</sup> Avenue from Hostmark to Sol Vei Way

Shared Use Path, Turn Lanes, Noll from Storhoff Lane to Mesford Sidewalks and Resurface: 4th Avenue from Iverson to Torval Canyon Sidewalks and Resurface: 4th Avenue from Iverson Street to Hostmark Street Sidewalks, Bike Lane, Resurface: 3<sup>rd</sup> Avenue from Iverson to Hostmark Sidewalks, Bike Lanes and Resurface: Finn Hill from W City Limits to Olhava

Sidewalks and Resurface: Liberty Road from Viking Way to New Road "M" Non-Motorized Improvements and Resurface: Bernt Road from SR 307 to Little

# Valley Road

Sidewalks, Resurface, and Bike Lanes: Johnson Road from SR 305 to Sunrise Ridge extension

Pavement restoration, sidewalks and drainage: Hamilton Court from Jensen Way to 1<sup>st</sup> Avenue

Sidewalks or Shared Use Path and Resurface: Little Valley Road from Forest Rock Lane to UGA boundary

Sidewalks: Lincoln Road from Hostmark to SR 305

Liberty Bay Waterfront Trail: American Legion Park to Nelson Park

#### New Roadway Segments

Forest Rock Extension from Caldart Avenue to Pugh Road

Mesford Extension from Gilmax Lane to Caldart

New Road "W" from Baywatch Court to Johnson Road

New Road "X" from Johnson Road to Noll Road

Sunrise Ridge Extension from existing end to Johnson Road

Olhava E Street from existing end to Urdahl Road

New Road "M" from Finn Hill Road to Viking Way

New Road "N" from Rhododendron to Urdahl Road

New Road "K" from New Road "M" in West UGA boundary

Vetter Road Extension from existing end Vetter Road to SR 305

12th Avenue from existing end to Genes Lane

New Road "L" from Viking Avenue at Liberty Shores to New Road "M"

Laurie Vei extension from existing end of Laurie Vei to Caldart

12<sup>th</sup> Avenue from existing end to Lincoln

Langaunet/Maranatha from Mesford to Lincoln

New Road "O" from Langaunet to Noll Road (E-W)

New Road "R" from Noll Road @ Mesford to Hostmark

New Road "S" from Noll Road @ soccer fields to New Road "R"

New Road "Y" from New Road "S" to New Road "T"

# **Transportation/Streets**

New Road "T" from Noll Road @ Thistle to Noll Road @ Heron Pond

New Road "U" from Bjorn Street to New Road "T"

New Road "Z" from Forest Rock Lane to 10th Avenue

#### Intersection Improvements

Intersection Control/Signal: Finn Hill at Rude and Urdahl

#### **Transportation/Streets**

#### 2016 Poulsbo Comprehensive Plan

Signal and Channelization: Finn Hill at Rasmussen Court Signal and Channelization: Finn Hill at New Road "M"

Channelization: SR 307 at Bernt Road

Signal and Channelization: Viking Way at Stendahl Court extension

Signal, Channelization: Lincoln at Pugh Channelization: Vetter Extension at SR 305

Intersection Control/Turn Lanes: Hostmark at 8<sup>th</sup> Avenue

Channelization: Hostmark at Caldart Mini-Roundabout: Noll Road at Mesford Signal, Channelization: Noll Road at Hostmark

#### TDM Strategies/Measures

#### Roadway Segments

Front Street, from Bond Road to Sunset Torval Canyon from Front Street to 4<sup>th</sup> Avenue Viking Way from south city limits to Bovela Lane Lindvig Way from Viking Way to Bond Road

Intersections

Front Street at Torval Canyon, Jensen Way and Fjord/Hostmark Lindvig Way at Viking Way and Finn Hill Road

#### **Transit Improvements**

Park and Ride lot: Noll Road vicinity

#### Park Land Acquisition

Acquire properties adjacent to Centennial Park

Acquire land adjacent to Fish Park

Acquire land East Poulsbo for new neighborhood park Acquire land West Poulsbo for new neighborhood park

Acquire Hamilton Field

Acquire East Liberty Bay Shoreline Property Acquire Johnson Creek Wildlife Corridor parcels

Shoreline Property north Front Street

Acquire land for Vista Park at College Market Place

#### Park Land Development

Poulsbo Fish Park development College Marketplace Athletic Fields Centennial Park development

Nelson Park Phase 2 development Morrow Manor park development

Vista Park development

Indian Hills Recreation Area development

Net Shed Park development Hattaland Park development

West Poulsbo Waterfront Park development

Betty Iverson Kiwanis Park upgrades

Dog Park development

Accessible playground improvements

#### Trail Acquisition and Development

#### **Parks**

	The Urban Paths of Poulsbo Plan and maps serve as the 2036 vision for trail acquisition and development. The UPP Plan is included as Appendix B-6 of the Comprehensive Plan. Figure PRO-3 maps the 2036 vision for trails in the City, as identified in the plan. Trail development and acquisition projects will be prioritized through the 6-year Capital Improvement Program process.	
Government Buildings	Construct New Public Works Complex Acquire a new Recreation Center North Kitsap Regional Events Center	

Sources: Comprehensive Water Plan 2014; Comprehensive Sanitary Sewer Plan Update 2016; Comprehensive Storm Water Management Update 2016; Transportation Plan Update 2016; Parks, Recreation and Open Space Plan 2016; and 2016 City Annual Budget CIP.

Table CFP-4 6-year Capital Improvement Project	Table Cl	FP-4 6-vea	r Capital Im	provement Projects
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The City's Capital Improvement Projects (Table CFP-4) are divided into three categories in the City's Annual Budget. The General-Purpose category contains projects dealing with police, parks and recreation, and public buildings. The Transportation category contains projects dealing with vehicle and pedestrian transportation. The Enterprise category contains projects associated with the City's utilities – water, sanitary sewer, storm water and solid waste.

The Water, Sanitary Sewer, Storm Water and Solid Waste Capital Improvement Projects are funded through each utility's enterprise fund capital reserves. The enterprise funds' monthly user charges and initial connection charges are the primary revenue sources for their capital projects.

The funding source for the General-Purpose category is from general obligation bonds, impact fees, federal and state grants, city reserves and in kind donations, usually associated with park projects and through the contribution of community groups' labor and donated materials.

# 12.4.1 Capital Facility Funding

The Capital Improvement Program identified in the Comprehensive Plan Capital Facilities Plan and in the City's most current annual budget, is the City's six-year financing and implementation plan where the City's prioritized public facilities and infrastructure projects have been identified and priced.

The objective of the CIP is to identify capital facility needs and funding mechanisms to finance the construction, reconstruction, and acquisition of needed assets because of aging infrastructure, growth, changing needs, and Poulsbo's desire to improve the city's capital investment.

The CIP utilizes numerous revenue sources to fund designated capital improvement projects. City Revenues come from various sources, including sales tax, utility monthly rates and initial connection charges, as well as state revenues, bond issues, and state and federal grants or loans. Another source of revenue is impact fees and other specific revenues allowed under the Growth Management Act to fund the city's capital investment and needed public facilities. Similar to citymanaged capital facilities, non-city-managed capital facilities improvements are funded through bond issues and special assessments.

The City of Poulsbo believes that a "pay as you go" approach for capital facility improvements is the most advantageous method for the community. This has often resulted in delaying capital improvements until most, if not all, of the funding was at hand. To achieve this, the City established several reserve accounts. For example, the City transfers into utility reserves an amount equal to 100% of its depreciation expense, this has allowed the City to prolong the need to go out for debt on smaller projects and be able to fund the entire project.

In addition, of the City's property taxes collected, the City transfers flat amounts based upon percentages of property tax, approximating 26% into the street fund for maintenance, operations and small projects; 4.3% into park reserves; and 2.15% into the street reserves for capital projects. The City also uses the first one-quarter percent of its real estate excise tax for streets; while the second one-quarter percent held in reserve for CIP projects. Many of the City's streets and parks have been improved and/or developed with a combination of federal or state grants, and funds from the City's reserves.

#### **Debt Financing**

As the demand for public sector investment and infrastructure continues to grow, the issuance of debt has become an increasingly important component of state and local government capital programs. While the issuance of debt is frequently an appropriate method of financing capital projects, it also entails careful monitoring of such issuance to ensure that an erosion of the City's credit quality does not result. The City of Poulsbo currently received an underlying "AA" rating for its last insured General Obligation Bonds issue from Standard and Poors. This is an upgrade from the previous "A+" rating.

The implementation of the City's formal debt policies is an important component of the City's overall capital program. Two basic forms of long-term debt are General Obligation and Revenue Bonds. The difference between the two types is that General Obligation bonds are backed by the full faith and credit (i.e. taxes) of the City. Revenue bonds are backed by the income of a specific utility or activity for repayment (i.e. monthly utility fees). The City of Poulsbo has utilized both general obligation and revenue debt in its operations.

The decision to borrow money binds the City to a stream of debt service payments that can last as long as thirty years. The consistent application of carefully developed debt management policies can benefit the City in a number of areas. Foremost among these benefits are enhanced credit quality and improved access to the tax-exempt and tax credit markets. Formal debt policies send a clear message to credit analysts, underwriters and investors that the City is administering its debt program in a responsible manner. The City of Poulsbo complies with its policies relative to debt management.

In addition, the City, under RCW 39.36.020(4), may ask the public to approve park facilities and utility bond issues. The voter - approved bonds have a limit on the amount to be approved. All voted bonds require a 60% majority approval, and total votes must equal at least 40% of the total votes cast in the last general election.

The City may issue bonds for general government in an amount not to exceed 2.5% of the city's assessed valuation. Within the 2.5%, the City Council may approve bond issues not to exceed 1.5% (non-voted) of the City's assessed value.

#### Rate Increases

The City's current utilities of sewer, water, storm drainage and solid waste are enterprise funds, and are intended to be self-sufficient – the rates collected for the service, are in turn used to operate, maintain and improve the utilities. With the continued aging of the City's utility infrastructure, repair and replacement of existing facilities will become more critical within the 6- and 20-year planning period. The City, through its functional plan updates, continuously monitors its utilities' financial ability to fund its operations, maintenance and necessary capital improvements, alerting the City of when rate increases or additional revenue sources are necessary. Rates for storm drainage and water utilities were increased in 2014 and 2015 respectfully, and the sewer utility is planned to have its rates increased in 2018. These rate increases are intended to provide for needed future capital projects and debt issues. It is also expected that utility bonds (issued and/or voted) will be necessary to pay for future sewer system and plant upgrades, and general obligation bonds will be necessary to pay for future street and facility improvements.

#### Impact Fees

Impact fees are charges assessed by local governments against new development projects that attempt to recover the cost incurred by government in providing the public facilities required to serve the new development. Impact fees are only used to fund facilities, such as roads, schools, and parks, that are directly associated with the new development. They may be used to pay the proportionate share of the cost of public facilities that benefit the new development; however, impact fees cannot be used to correct existing deficiencies in public facilities.

In Washington, impact fees are authorized for those jurisdictions planning under the Growth Management Act (RCW 82.02.050 - .100), as part of "voluntary agreements" under RCW 82.02.020, and as mitigation for impacts under the State Environmental Policy Act (SEPA – Ch. 43.21C RCW). GMA impact fees are only authorized for: public streets and roads; publicly owned parks, open space, and recreation facilities; school facilities; and fire protection facilities in jurisdictions that are not part of a fire district.

The City has collected mitigation fees for park and transportation facilities through the authority of the State Environmental Policy Act (SEPA) for many years. However, in October 2011, the City adopted ordinances authorizing the imposition of transportation and park impact fees on new development, under the authority of RCW 82.02.020.

#### **Business and Occupation Tax**

The City is currently one of the few cities in the State of Washington that does not impose a business and occupation (B&O) tax. All cities are authorized to establish such a tax and doing so could generate significant revenue that could be earmarked to fund the City's capital improvements.

#### <u>Transportation Benefit District</u>

Chapter 36.73 RCW authorizes cities and counties to form transportation benefit districts (TBDs), quasi-municipal corporations and independent taxing districts that can raise revenue for specific transportation projects, usually through vehicle license fees or sales taxes. Transportation benefit district revenue may be used for transportation improvements included in a local, regional or state transportation plan. Improvements can range from roads and transit service to sidewalks and transportation demand management. Construction, maintenance and operation costs are also eligible.

The City's ability to finance its Capital Improvement Plan is the critical piece in ensuring the City is able to fully serve its current and future citizens, as well as being compliant with the requirements of the Growth Management Act. The City has in its financing "toolbox" the choices of borrowing funds or raising service rates and taxes as methods of increasing its revenues. Perhaps neither of these options are desirable, but the reality of needing to improve aging infrastructure, providing and maintaining streets, securing future sewer capacity and water supply, as well as facilities which significantly improve Poulsbo's resident's quality life, such as trails, parks and open space, must be funded somehow. The City Council will need to tackle these important funding questions.

#### 12.5 Reassessment of Land Use Element

The Growth Management Act requires that provisions be made to reassess the Land Use Element of the Comprehensive Plan periodically because a capital facilities plan is an evolving document based on projected population growth and future land development. The purpose of this requirement is to ensure that adequate facilities will be made available at the time certain portions of the City are developed and facilities are needed. If the anticipated funding for the needed capital facilities falls short, the GMA requires a reassessment of the Land Use Element to determine what changes needed to be made.

The Capital Facilities Policy CF-4.4 establishes the procedure the City will use in reviewing the Land Use Element.

# 12.6 Water System

The City of Poulsbo Water Utility provides potable water within the city limits and some limited areas in the surrounding unincorporated UGA. A complete inventory, analysis of need, identification of deficiencies, and the capital facilities program is provided in the 2014 Water System Plan, which is included in Appendix B-1 to the Comprehensive Plan and adopted in its entirety.

The City's water system provides service to approximately 9,388 people located in an area totaling 2,970 acres. These customers are served by five wells (capable of 3.4 million gallons per day), nine reservoirs (4.1 million gallons), and six pressure zones. Approximately two-thirds of total water consumption is used by residential customers.

The City's water service area encompasses approximately 4.93 square miles and ranges from sea level to 360 feet. The downtown area lies in the lower elevations near the shores of Liberty Bay. The service area is separated into six pressure zones to serve the varying service elevations. The City's water service area encompasses where direct service connections exist, or service connections are currently available. The City's water service area is identified in Appendix B-1 Figure 1-2.

The City's water service area has been adjusted since the 2007 Water System Plan to reflect changes to the city limits and adjustments to better serve customers. The service area adjustment in the northwestern part of the UGA does not include the entire UGA due to the topography of the area. Services west of Olympic College had been in the City's planning area but are now served by the Kitsap Public Utility District (KPUD). In 2011, the City agreed to relinquish these areas to the KPUD and in return there is an additional intertie at NW Reliance Road that will help provide fire flow storage for the West High Zone.

An average of 74 water service connections was added to the City's water system annually over the last seven years, which corresponds to an average annual growth rate of approximately 2.3%. Single-family residential connections lead the new connections and non-residential connections decreased for several years after 2008.

The amount of water the City uses has dropped significantly since the last water system plan. In the 2007 Water System Plan, the City used on average 195 gpd/ERU and currently uses 159 gpd/ERU. This decrease in water has been a combination of increased efficiency, education, and

lowering the distribution system leakage. Consequently, the long-term projected consumption of the City is not anticipated to exceed their water rights as it did in the 2007 plan.

By 2020, the total annual water use is projected to be 1,270 acre-feet/year, a 30 percent increase from current usage. By the end of the 20-year planning period at 2036, usage is\_projected to increase to 1,612 acre-feet/year. These projections do not include reductions in water use created by increased conservation and water use efficiency measures underway and planned by the City. At this time, the City holds water rights for a total of 1,893 acre-feet/year. It is not expected that the City will need additional instantaneous or annual water rights within the 20-year planning period.

# 2036 Water Facility Improvements

Water system capital facility improvements have been evaluated, identified and prioritized on the basis of water quality concerns, growth demands, regulatory requirements, component reliability, system benefit, and financial priority for the planning period to 2036. When the Water System Plan is updated again at the end of its 6-year planning period, the projects presented for the 20-year planning period should be reevaluated and scheduled for the subsequent 6-year planning period as necessary.

#### **Water Supply Projects**

#### Lincoln Wells No. 1 and No. 2 Manganese Treatment

The Lincoln Wells have higher than desired manganese concentrations in the raw water. The concentrations exceeded the high concentrations and cause the City to frequently have to flush its water mains, as it can add an unwanted color, odor and taste to the water. The City conducted a pilot test in 2014 and constructed a treatment facility in 2015. The treatment would reduce or eliminate the manganese from the raw water concentration to below 0.05 mg/L in the finished water. The Pugh Well has iron bacteria issues. The Pugh Well will be isolated from the system and remain as a resource for emergency situations.

#### **Westside Well Treatment**

The Westside Well also has manganese concentrations in the raw water that are slightly higher than the EPA's Secondary MCL. Manganese can add an unwanted color, odor and taste to the water. The City plans to install a pilot test system in 2015 and a treatment facility in 2016. The treatment system would reduce the manganese from the raw water concentration to below 0.05 mg/L in the finished water.

#### **Long Term Water Supply Study**

The City plans to develop a long-term water supply study that identifies alternatives to procuring additional water rights or water supply capacity. The City has sufficient water rights to supply demands for the 20-year planning period, but the existing pumps will need to pump an excess of 18 hours a day; therefore, the City plans to add source capacity to improve system reliability and meet DOH recommendations.

#### Big Valley Well No. 3

The City plans to drill, develop, and equip a third well at the Big Valley Well site. Additional source capacity is necessary to provide maximum day demand and replenish fire suppression storage during the planning period, and a new 500 gpm well will provide sufficient flows.

#### Westside Well No. 2

The City plans to drill, develop, and equip a second well at the Westside Well site. Additional supply capacity should be installed to reduce the demand on aquifers and equipment. This project will be re-evaluated upon completion of the long-term water supply study.

# **Acquire/Upgrade Supply Capacity**

The City needs to acquire additional or upgrade current source capacity in order to meet its predicted demands and Department of Health's reliability recommendations. Project identification is expected to come from the long-term water supply study.

#### **Storage Projects**

#### Wilderness Park Reservoir Repairs

Based on a seismic study which evaluated the City's reservoirs, the Wilderness Park Reservoir does not meet current seismic design standards. This project will retrofit the existing reservoir to have additional ties to the foundation to resist overturning forces induced by seismic loads.

#### **Raab Park Reservoir Replacement**

Replace the existing 150,000- gallon tank with a 300,000-gallon tank. The existing tank does not meet seismic design standards and is at the end of its useful life.

#### **Reservoir Coating Program**

The City plans to recoat the interior and exterior of the Finn Hill and Olhava Reservoirs. Periodic coatings need to be applied to protect the structural steel from corrosion damage.

#### **Booster Station Projects**

#### **Raab Park Booster Station Replacement**

The City plans to construct a new booster station to feed the high zone from the middle zone location. The new booster station will transfer supply from the Low Zone to the East High Zone to eliminate the storage deficiency in the East High Zone and provide redundancy to the Pugh and Lincoln Wells. Currently, the City does not have a pumping facility to transfer supply to the East High Zone. The booster station will consist of three 750 gpm pumps, integrated control systems, standby generator, and an automatic transfer switch with anew CMU building. This station will replace the station at Wilderness Park tank site.

#### 340 Zone Fire Flow Pump and Zone Expansion

The 340 Zone currently has houses that are served by a pump for average day and maximum day demands but is served by gravity for fire flow. The high elevations cause pressures to drop below 20 psi during fire flow emergencies when the reservoirs are depleted of operational storage. A fire flow pump is needed to boost flows and pressures in the 340 Zone and would decrease the large

dead storage in the Low Zone. This project will be coupled with a zone expansion to address the low pressure at the 4<sup>th</sup> Avenue Townhomes since work will need to be performed at the existing booster station. This project will include an additional 250 feet of pipe to expand the zone and the pumps necessary to meet projected demands.

#### **Distribution System Projects**

The following distribution system projects are recommended to increase fire flow, replace undersized water mains, or to accommodate transmission and storage projects.

#### **Old Town Water Main Replacement**

The City plans to replace the undersized and aging water mains in the "old town" area located south of downtown. This area is primarily residential although a few businesses are located along the waterfront. Existing piping serving the area is approximately 9,000 LF of 4-inch water main and 5,450 LF of 6-inch water main. This project will replace 3,140 LF of 4-inch piping with 8-inch piping along 6th Avenue and Haugen Street. The new piping will serve as a "backbone" for the area and increase fire flow availability.

#### Viking Avenue PRV

The Viking Avenue water main currently has very high pressures (180 psi) that need to be reduced. High pressure in the main has caused pipes to burst several times. The City plans to install two PRV systems, including one at the old Viking Avenue Booster Station site to reduce pressure along this main.

#### **Noll Road Water Improvements**

The City plans to provide water system improvements including a new transmission main approximately 1,000 LF as part of the Noll Road Improvement construction. The new transmission line is intended to serve new eastside residential development.

#### SR 305 Crossing

The City plans to replace the transmission main that crosses SR 305 at Hostmark. The existing water main is an old and undersized pipe that serves the downtown area.

#### **Liberty Ridge Fire Flow**

The Liberty Ridge Apartments require a minimum of 2,500 gpm for fire flow. They are at a higher elevation than most of the Low Zone and are served by 6-inch piping from the south. An additional 8-inch pipe from Bond Road to 1<sup>st</sup> Avenue NE at the south end of the complex would loop the service and increase fire flow to above 2,500.

#### **Water Main Replacement Program**

The City has scheduled specific water main replacements for the next 6 years and will continue replacing aging water mains annually. Which mains will be replaced beyond what is currently scheduled will depend on the needs of the system and the known pipe conditions at that time.

# **Miscellaneous Projects**

#### **Meter Upgrade and Replacement Program**

The City plans to replace all existing meters in their water system. The new meters will have remote read capabilities and will be a higher quality magnetic meter. This project is intended to help reduce water loss and improve the efficiency of the water system.

#### **Telemetry System Upgrades**

The City plans **to** replace the current telemetry system. This project will upgrade the central control system so that the City will have better remote operation of its water and sewer facilities.

#### **Public Works Complex**

The City plans to construct a Public Works Complex which will provide a maintenance and operations center for the water, sanitary sewer, storm sewer, solid waste, roads and parks departments. The water utility is expected to fund 20% of the project costs.

# Water Facilities Funding Strategy

Municipal utilities in Washington State are operated as enterprise funds and are required by state law to operate with a balanced budget. Therefore, the City must decide how it will finance its utility capital improvements as well as provide funds to operate the utility through some combination of user rates, debt, and contributions. It must then establish user rates at a level that is sufficient to operate and maintain its facilities, pay debt service on any debt issued, and maintain reasonable cash reserves.

Funding the Water System's capital improvements comes from the Water Enterprise Fund, which is intended to be self-sufficient. Revenue is from monthly rates from both residential and commercial users, and through one-time utility connection charges. The combination of these revenue sources funds the water utility's operational expenses, debt reduction, maintenance and capital improvements.

The 2014 Water System Plan provided a financial analysis of the water utility's anticipated monthly rate revenues and projected operational expenses over a six-year period. It also provided an analysis for projected connection charge revenues, which are used to upgrade and expand the water system. Based upon the Plan's analysis, the City has adequate operating revenue to meet its existing and projected operating expenses, as well as its 6-year CIP project.

The City has seen an increase in the amount of revenue since the 2007 Water System Plan, and based upon projected revenue and an increase in water rates approved in 2014, the expected revenue is sufficient to complete system upgrades. In addition, the City, however, has several options for funding the CIP should revenue projections be less due to slower than expected growth or decreased water consumption. Projects identified on the 6-year CIP intended to accommodate system growth can be delayed until such time as needed. Further, additional revenue sources such as public works loans, revenue bonds, or rate increases can be utilized when necessary. The anticipated long-term coordinated water supply, storage and distribution agreement with KPUD may also decrease or eliminate the need to implement some of the identified 6-year and longer-term capital improvements.

#### **System Expansion Projects Funding**

For future proposed developments that currently do not have the City's water system readily available, the City generally requires the developer or landowner to agree to execute a utility extension agreement. Through the agreement, the City requires the developer or property owner to pay all costs associated with designing, engineering, and constructing the extension to City standards. This agreement does not, however, guarantee or reserve water capacity within the system. Capacity is only assured when a building permit is actually issued. This agreement also requires the developer/landowner to turn over and dedicate any capital facilities to the City at no cost. All agreements must be approved by the City Council. The City anticipates this process will be used more often to serve development occurring throughout the underdeveloped areas of the city and the urban growth area.

# 12.7 Sanitary Sewer System

The City of Poulsbo Sanitary Sewer Utility provides sanitary sewer within the city limits and some specific areas in the surrounding unincorporated UGA. A complete inventory, analysis of need, identification of deficiencies, and capital facilities program is provided in the 2016 City of Poulsbo Sanitary Sewer System Plan, which is included in Appendix B -2 to the Comprehensive Plan and adopted in its entirety.

The City of Poulsbo owns, operates, and maintains a wastewater collection and conveyance system that serves approximately 2.5 square miles within the City of Poulsbo and the associated UGA. The sewer system consists of approximately 42 miles of collection system main, nine wastewater pump stations, and a collection system, which feed two interceptor sewers that convey wastewater from the west and north sides of Liberty Bay to the Kitsap County conveyance system at Lemolo. The County conveyance facilities transport the wastewater south under Liberty Bay to the Central Kitsap Wastewater Treatment Plant (CKWWTP) located in Brownsville. The effluent is treated at the CKWWTP, which is owned and operated by Kitsap County Department of Public Works (KCDPW).

# **Projected Wastewater Flows**

Projected sewer flows for existing and future population were calculated using different per capita rates and peaking factors. Total future sewer flows were calculated by adding existing sewer flows to the calculated sewer flows from future population growth. Future wastewater flows were estimated using an estimated peaking factor (PF) of 2.8 and sewer flows of 70 gallons per day per person (gpcd) for new population and PF of 4.05 with sewer flows of 62 gpcd for existing population. The higher future per capita flow rates were used in order to be conservative, while the lower peaking factor is assuming modern construction materials and techniques which will result in lower inflow and infiltration (I/I).

# System Deficiencies

Primary deficiencies in the City's sanitary sewer system consist of: 1) high inflow and infiltration (I/I); and 2) potential capacity constraints within the City system and in the downstream conveyance system owned by Kitsap County.

#### **Inflow and Infiltration**

The 1992 Comprehensive Sewer Plan identified significant Inflow and Infiltration in the older sections of the city. Over the past 20 plus years, the City has repaired and replaced many of the original sanitary sewers in the downtown corridor and older sections of the city. The 2008 Comprehensive Sewer Plan identified a significant reduction of infiltration, steady flow, and inflow into the Poulsbo wastewater collection system compared to the 1992 study. Between 1996 and 2008, approximately 30,000 lineal feet of gravity sewer main in Jensen Way, Front Street, Caldart Avenue, and streets in the 6<sup>th</sup> Avenue Basin area were repaired or replaced by both open trench and pipe bursting methods.

A major concern for the City is the continued I/I within the sanitary sewer system. The City has accordingly developed an on-going I/I reduction program. This program includes continuous monitoring of sewer pump station flow run times, I/I reduction, capital projects and videotaping and inspection of the gravity sanitary sewer main as needed.

Based on the 2016 Comprehensive Sewer Plan, the City does not exceed EPA criteria for excessive inflow or infiltration. Inflow during periods of heavy rain was calculated at 132 gallons per capital per day (gpcd), compared to EPA "excessive inflow" criteria of 275 gpcd. Infiltration during the seasonal high-water table period of December through March was calculated at 83 gpcd, compared to EPA "excessive infiltration" criteria of 120 gpcd.

#### **Potential Capacity Constraints**

Potential future capacity constraints may exist both within the City system and at the downstream conveyance system owned by Kitsap County. Projects have been identified and included in the 2036 project list that addresses these potential capacity constraints.

#### City system:

The 2016 Comprehensive Sewer Plan included a capacity assessment of the City's system to evaluate selected conveyance pipes that had been identified as having potential concerns due to recent or future growth. Based on the analysis, several pipe segments and pump stations in limited areas of the City are potentially deficient in the future. Based on the assessment, several projects were added to the capital 2036 project list to remedy these capacity constraints.

#### Downstream Conveyance Capacity:

Capacity of the County conveyance system is currently limited by the Central Interceptor, the Lemolo gravity sewer system, and the Lemolo siphon.

The Central Interceptor collects flow from most of the City's collection system. The existing peak hour rate is approximately 2.67 mgd and its capacity is approximately 2.35 mgd within its minimally sloped section. Projects identified to address this deficiency include a near-term construction of an off line storage facility to divert peak flows and a long-term solution of extending the Bond Road Pump Station force main past the minimally sloped section. Pipe replacement projects are also proposed for the very long-term (60 years) for the Lemolo gravity sewer deficiencies and upgrade of the Lemolo siphon. More detailed descriptions of these projects are found in the 2036 Sanitary Sewer Facility Improvements section.

# Treatment Capacity

The Central Kitsap Waste Water Treatment Plant (CKWWTP) has an existing maximum month treatment capacity of 6 mgd, which is adequate to accommodate the City's existing and projected flows. The CKWWTP is being upgraded to a treatment capacity of 12 mgd, and the City will participate on a pro-rata basis of 15.83% for capital improvements needed. The CKWWTP will be able to accommodate Poulsbo wastewater flows of the 20-year planning horizon.

# 2036 Sanitary Sewer Facility Improvements

# **System Rehabilitation Projects**

#### **Annual Inflow Reduction Program**

Flow monitoring data shows that the existing sewer system experiences high levels of inflow during storm events. This inflow may be associated with leaking manholes, storm drain connections or roof drain connections. The City will continue an annual inflow reduction program consisting of identifying and repairing inflow sources.

The annual I/I control program will include the following elements:

- Installation of inflow prevention devices (such as manhole inserts).
- Development of an I/I am monitoring program to identify areas of high I/I
- Smoke tests of suspected high I/I areas to identify specific inflow sources.
- Development of public education activities that inform private property owners of the requirement to disconnect roof drains and other sources of direct inflow to the sanitary sewer system.

#### Poulsbo Village Pump Station Repair

This project is under design and construction will be completed in 2016. It will allow for upgrades to approximately 700-750 gpm by replacing impellors or pumps. This is a system upgrade and a system rehabilitation and maintenance project.

#### Replace Force Main between Marine Science Center Pump Station and Harrison Street

This project replaces the 12-inch force main from the Marine Science Center pump station that runs along the beach. The existing main is subject to damage or failure which would result in release of sewage to Liberty Bay. The force main will be rerouted along Fjord Drive and then tie into the existing Central Interceptor main in SR 305 at Harrison Street. This is a system rehabilitation and maintenance project.

#### Applewood Pump Station Replacement

This project will consist of replacement or major rehabilitation of all mechanical, structural, electrical and instrumentation of the pump station.

#### Annual Pump Station Rehabilitation/Replacement

The City has budgeted \$50,000 annually for ongoing pump station rehabilitation/replacement. Capital improvement items that this annual allocation might be used for including the following:

 Request services of the applicable equipment vendor or representative to conduct training sessions at pump stations with Human Machine Interface (HMI) devices for all O&M staff

- that may be required to review and/or change settings and alarms for the operating equipment.
- Install lifting chains for deeper submersible pumps, attach chain to pump, and affix to a hook near the wet well hatch. All materials (chain/cable/hook, etc.) shall be constructed of 316 stainless steel. Lifting chain options (i.e. chain or cable/chain and "grip eye") shall be reviewed and selected with O&M staff at each station and shall consider station depth and accessibility.
- Inspect and replace all hooks, supports, carabineers, concrete anchors, strain relief grips, and other appurtenances in wet well with 316 stainless steel materials as appropriate.
- Install a fall protection system at each pump station wet well that requires regular inspection. Fall protection system shall consist of a hinged safety grating or retractable safety net. Fall protection safety into the wet well can be maintained during routine inspection and maintenance activities for O&M personnel when the wet well hatch is open.
- Develop and implement a valve exercise program to regularly inspect and exercise isolation and check valves (including buried valves) to confirm acceptable operation. Identify, prioritize, and replace/rehabilitate valves as necessary.

#### **Public Works Facility**

The City will be constructing a new Public Works Facility which will be shared with all City utilities. The total project cost is estimated at \$7,000,000. The sewer utility will fund 30% of the total project cost with bonds estimated at \$150,000 per year starting in 2017.

#### **Noll Road Sewer Improvements**

This project will abandon the Alasund Pump Station with a gravity sewer once the gravity sewer in Noll Road is extended north. This is a system rehabilitation and maintenance project and is a component of the Noll Road construction project.

#### **Telemetry System**

This project will upgrade the City's telemetry system with a new ICS Healy Ruff MTU in order to better monitor pump station flows, high level alarms, and run time. This is a system rehabilitation and maintenance project.

# **Downstream Conveyance Capacity Improvements**

Downstream conveyance capacity projects are designed to increase capacity of County-owned facilities located between the Johnson Road metering stations, and the CKWWTP.

Pursuant to the agreement between the City and the County, the City is responsible for 100 percent of the costs of these improvements because the City generates 100 percent of flow within this portion of the County's system.

#### Repair or Replace Johnson Road Metering Flume and Flow Measurement System

The County's flow measuring flume does not register peak flows in excess of 2.5 mgd. Since the two siphons have a fixed flow capacity, it is important to know how close to this capacity the flows are during heavy rain events. The cause of the flume malfunction is not known, and may be an

electronic device, or it may be an incorrectly sized flume. This project will determine the problem and correct it.

#### Pipe Replacement Upstream of Lemolo Siphon

The 2016 CSP included analysis of the 14-inch pipe upstream of the Lemolo siphon upsized to 18-inches. The model showed that with a flow of 4.74 mgd no surcharging would occur. This project is under design and in review in 2016. These upgrades are estimated to be needed in the next 20-year planning horizon, and it indicates that additional flows will be able to be accommodated without installing an additional siphon. An additional siphon for redundancy may still be desired, subject to the existing condition of the 14-inch gravity/force main.

#### Pipe Replacement at Johnson Road

The conveyance pipe from Johnson Road and State Route 305 leaves the JRMS in an 18-inch diameter reinforced concrete pipe (RCP). One hundred and seventy-five feet away the conveyance turns into a 14-inch diameter ductile iron pipe force main. This pipe connects into the two 12-inch diameter siphons under Liberty Bay. This 18-inch diameter pipe would be upsized to match the capacity of the upstream 305 interceptor improvements.

#### **Pump Station 67 Replacement**

This project in Keyport is to change the hydraulics on the Poulsbo side of the piping system in order to eliminate PS 16 and reroute all the Poulsbo flow to PS 67. Upgrades to PS 67 are needed to handle the increase flow.

#### **Storage Facility**

This project would include construction of a storage facility adjacent to the SR-305 Interceptor to reduce surcharging during high flow events, and to help limit flow surcharges due to pumps turning on and off. The facility would be approximately 80,000 gallons and located near Sol Vei and SR-305.

#### **Purchase and Demolition of Lemolo House**

Kitsap County currently owns the property on Lemolo Shore Drive NE (parcel number 252601-2-045-2009). The County was considering using the property to construct a pump station, but has opted not to. The City will purchase the property, which could be used as a staging/construction area to install a third siphon barrel across Liberty Bay.

#### Lemolo Siphon Phase 2

This project would be to construct a third siphon barrel under Liberty Bay, either parallel to the existing two siphon barrels, or from the Lemolo House property purchased and discussed above.

# **System Expansion Projects**

System expansion projects provide for new facilities in the sewer service area in order to support new housing and commercial development. These upgrades generally consist of new gravity mains that carry wastewater to one of the nine existing pump stations. In a few cases, at low elevations, a pump station will be required to lift the wastewater to a gravity main. Attempts to minimize new pump stations have been made in order to reduce future operation and maintenance

costs and to be consistent with City policy. The following sections describe specific projects to expand the system to accommodate new growth.

#### **SR-305 Force Main Extension**

This project would install approximately 5,170 lf of 12-inch force main from the existing Bond Road Pump Station force main to the Johnson Road chlorination manhole. This would reduce flows in the capacity limited portion of the Central Interceptor and associated surcharging and flooding. The project would include air/release vacuum valves as necessary, as well as roadway restoration. WSDOT is considering widening SR-305 through Poulsbo, which could present an opportunity for this project to be constructed concurrently.

#### **Noll Road (north) Collection System**

This project will serve new residential development in the Noll Road corridor and consists of a new gravity main in or near Noll Road between Lincoln Avenue and Deer Run. The new pipe will connect to the 10-inch main carrying wastewater from the Deer Run development. Since the 10-inch Deer Run gravity main is on a very flat slope, the new development flows will result in existing capacity being exceeded. Therefore, the existing 10-inch main will either be increased to a 15-inch diameter main using pipe bursting methods, or a new 10-inch diameter main paralleling the existing main will be installed.

A new pump station and force main would be constructed to serve a small portion of this

basin that is not able to connect to the main by gravity flow. The new gravity sewer would allow the existing Alasund Meadows pump station and force main to be phased out. This project will allow the development of new housing along Noll Road.

#### **Noll Road (south) Collection System**

Property along Noll Road south of Deer Run is at a low elevation and therefore cannot drain into the existing Deer Run collection main. To serve this area, a new 10-inch main will be placed in or near Noll Road from Deer Run to SR 305. A pump station will be constructed at SR 305 and the wastewater pumped through a new force main in SR 305 to the chlorination manhole located at Johnson Road.

This project will allow wastewater collection from existing and future homes along Noll

Road. No major developments are currently proposed, nor is it likely that any large development will be proposed that could fund the entire project. Funding may therefore need to be a combination of developer latecomer fees and City funding, if available.

#### **South Viking Avenue Collection System**

This project consists of constructing a new collection system to serve residential and commercial areas at the south end of Viking Way. A pump station at the lower end of Anderson Lane will be required to convey wastewater to the existing gravity main in Viking Avenue. Flow from both the east and west sides of Viking Avenue could discharge to this pump station. This project will allow wastewater to be collected from a new development west of Viking Avenue. Existing homes located east of Viking Avenue, currently on septic systems, could connect to the system if the pump station is located in Anderson Lane.

#### **Liberty Bay Pump Station Improvements**

This project is under design and construction will be completed in 2017. The upgrade, modifications or additions to the pump station are planned generally as follows:

- Remove above grade wet well mounted pump station including enclosure, control system, power service and appurtenances.
- Evaluate and repair wet well infiltration sources.
- Add constant speed duplex submersible solids-handling pumps on guide rail system.
- Add precast concrete top slab with access doors and interior fall protection hinges and grating.
- Repair or replace existing concrete pad immediately around wet well.
- Add valve/meter vault with check valves, plug valves, electromagnetic flow meter and sump pump.
- Add above grade reduced pressure backflow assembly, in insulated enclosure.
- Add above grade electrical power cabinet, control and telemetry systems.

#### **Central Viking Avenue Collection System**

This project consists of constructing a new collection system to serve the area west of Viking Avenue that can flow either to the Liberty Road pump station or to the Lindvig pump station. No pump stations or force mains will be required.

#### **Finn Hill Basin Collection System**

This project consists of constructing a new collection system to serve the Finn Hill and

Urdahl Road areas located north of SR 3. Wastewater from these properties will all flow via the Olhava gravity system to the Bond Road pump station. A gravity main will be placed in Finn Hill Road and a portion of Urdahl Road leading to a new pump station at Finn Hill near SR 3. This pump station will lift the wastewater to the gravity system in Olhava Way NW, which will carry it to the Bond Road pump station. Portions of the north end of Urdahl can flow either by gravity to the Olhava sewer system, or to the new pump station at the lower end of Finn Hill Road.

Based on the capacity assessment, the following upgrades to the existing sewer system in the Finn Hill basin will be needed as development occurs:

- Olhava basin near Wal-Mart, Pipe Run 18. Increase 246-ft of 8-in diameter pipe to 10 or 12-in diameter.
- Olhava basin on Bond Road, Pipe Run 94. Increase 70-ft of 8-in diameter pipe to 10 or 12-in diameter.
- Additional projects to increase capacity of the other segments in the Olhava basin that
  exceed capacity for 100 percent of full build out may be added to the CIP at a later date
  after development assumptions and as-built conditions are confirmed. These pipe segments
  appear to have adequate capacity in the near term to allow completion of a more detailed
  hydraulic model and back water analysis that would verify capacity conditions.

# **Sewer Facilities Funding Strategy**

Funding the Sanitary Sewer System's capital improvements comes from the Sewer Enterprise Fund, which is intended to be self-sufficient. Revenue is from monthly rates from both residential and commercial users, developer contributions, grants and loans, and through one-time utility connection charges. The combination of these revenue sources funds the sewer utility's operational expenses, debt reduction, maintenance and capital improvements.

The 2016 Comprehensive Sanitary Sewer Plan provides a financial analysis of the Sewer Utility's anticipated monthly rate revenues and projected operational expenses over a six-year period. Based upon the Plan's analysis, it was identified that sewer rates and connection charges need to be increased to cover costs associated with normal operation and maintenance, as well as the necessary system upgrades.

A recommended rate increase for the sewer monthly rates and connection charges was presented to the City Council, with the rate increase to begin implementation in 2018. It is also expected that utility bonds (issued and/or voted) will be necessary to pay for future sewer system and plant upgrades.

#### **System Expansion Projects Funding**

For future proposed developments that currently do not have the City's sanitary sewer system readily available, the City generally requires the developer or landowner to agree to execute a utility extension agreement. Through the agreement, the City requires the developer or property owner to pay all costs associated with designing, engineering, and constructing the extension to City standards. This agreement does not, however, guarantee or reserve sewer capacity within the system. Capacity is only assured when a building permit is actually issued. This agreement also requires the developer/landowner to turn over and dedicate any capital facilities such as main lines, pump stations, and wells to the City, at no cost. All agreements must be approved by the City Council. The City anticipates this process will be used more often to serve development occurring throughout the underdeveloped areas of the city and the urban growth area.

# 12.8 Storm Water Management System

The City of Poulsbo Storm Water Utility provides surface water management within the City limits including development and maintenance of the storm water collection, conveyance and treatment system. A complete inventory and analysis of existing drainage system and facilities inventory and water quality, analysis of minimum control measures, evaluation of the City's operation and maintenance program, and summary of system deficiencies is provided in the 2016 City of Poulsbo Storm Water Comprehensive Plan, which is included as Appendix B-3 to the Comprehensive Plan and adopted in whole.

The 2016 Storm Water Comprehensive Plan completed an evaluation of the City's existing system, compliance with the NPDES Permit conditions, and progress toward meeting the Liberty Bay Total Maximum Daily Load (TMDL) Plan that was prepared by the Department of Ecology in 2013. Primary system needs consist of localized flooding problems and funding for capital costs associated with continued compliance with both the NPDES Phase II permit and Liberty Bay TMDL Plan.

# **System Description**

The City of Poulsbo owns, operates and maintains a storm water collection, conveyance and treatment system that services approximately 4 square miles within the City of Poulsbo city limits. The storm water utility's services are divided into two functional areas: management and administration (which includes capital improvement activities), and operation and maintenance (O&M). These two functional areas have a total of 6 full time equivalent staff and are supported by other Public Works and City staff, and non-utility support as needed.

Poulsbo is located entirely within the Liberty Bay watershed, and the natural drainage system consists of portions of Dogfish, Lemolo, Johnson and Bjorgen Creek basins, as well as several other drainage courses that discharge directly to Liberty Bay. The physical storm water system consists of gravity collection ditches and pipelines that collect storm water primarily from impervious surfaces such as roads, parking lots and buildings, and conveys it to natural drainage features such as streams and creeks, which eventually discharge to Liberty Bay. Water quality treatment and water quantity detention structures are interspersed throughout the system, many of which are privately owned and maintained.

# **2036 Storm Water Management Facility Improvements**

The storm water capital improvement projects (CIP) identifies the specific facilities, priorities and costs of capital projects that address and implement identified needs, goals and policies.

Projects in the CIP were identified through the 2016 StormWater Comprehensive Plan update process. Specific projects were developed to address each of the high priority sub-basins identified via the watershed assessment. The combined list of existing CIP projects and proposed priority projects were then screened, compared, and rated relative to a set of criteria that included water quality, flood control, habitat, and community development criteria.

Projects were then prioritized as either high, medium, or low based on scores. Project prioritization will be reviewed and revised annually based on new information, funding availability, and specific project needs.

Following project identification and prioritization, the CIP implementation program was developed that considered project cost, potential funding source, and project timing. Project costs are based on planning level estimates that reflect concept design level information. Project funding assumptions reflect that capital funding is expected to be in the range of \$2.0M per year, with approximately 25% funded with utility rates and fees, and 75% funded with grants.

# Restore South Fork Dogfish Creek Near 8th Avenue

The South Fork of Dogfish Creek downstream of 8<sup>th</sup> Avenue frequently floods due to upstream erosion that has resulted in channel aggradation, which creates a shallow and flat channel that is not able to convey peak flows. This project will consist of restoring 525 feet of degraded stream and 36,750 square feet riparian buffer between 8<sup>th</sup> Avenue and Centennial Park. The project will construct bioretention facilities to treat run-off from the existing Public Works site and portions of Lincoln Road, 8<sup>th</sup> Avenue, 7<sup>th</sup> Avenue and Iverson Street. The existing detention pond at the Poulsbo Library will be retrofit into a treatment wetland, and a new treatment wetland would be constructed for runoff from SR 305 and portions of adjacent commercial development.

# 8<sup>th</sup> Avenue Culvert Replacement

This project will replace the existing undersized 24-in diameter pipe under 8<sup>th</sup> Avenue with a new 12-ft wide concrete box culvert.

# **South Anderson Parkway Retrofit**

The south Anderson Parkway retrofit will complement the retrofit of the main Anderson Parkway parking lot that occurred in 2010. The project will retrofit the existing 0.65-acre parking lot with pervious pavement and modular wetland system, and will replace an undersized 12-in diameter outfall conveyance pipe with new 18-in diameter pipe.

### **Poulsbo Creek Outfall Rehabilitation**

The existing outfall pipe is corroded and has collapsed in places. This project will replace the corroded metal splash pad and outfall pipe with concrete splash pad and energy dissipater. The existing culvert will be lined from the outfall to Lions Park and new catch basin control structure will be installed. The project will also install habitat features at the outfall channel for mitigation and will convert the existing ditch on Fjord Drive to a bioretention swale.

### West Poulsbo Park/Viking Avenue Regional Treatment Facility

The south-central Viking Avenue basin discharges untreated storm water from a relatively large impervious area. This project will construct a regional treatment facility for the 60-acre urban basin consisting of bioretention, high performance media filter and a constructed wetland. It will also improve capacity of the conveyance system. The project includes acquisition of a 3-acre waterfront property for the site of a future storm water park.

# **Ridgewood/Kevos Pond Basin Drainage Improvements**

Undersized pipes and conveyance systems result in localized flooding and drainage problems. This project will replace undersized 12-inch diameter storm drains with 18-inch diameter storm drains and modify existing control structure to improve conveyance and reduce flooding. It will also replace existing drainage ditch on Norrland Court with new 18-inch diameter storm drain, and construct bioretention cells to improve water quality.

# **Fjord Drive Water Quality and Habitat Improvements**

Fjord Drive and associated shoreline areas experience water quality and erosion problems due to untreated storm water discharges and deteriorated outfall structures. This project will consolidate three outfalls between 6th Avenue and Oyster Plant Park and install a new Modular Wetland System for treatment. It will also modify the storm collection system between 9th Street and east City limits and install a Modular Wetland System and Filterra vaults at the corner of Holm Court and Fjord Drive. The project will stabilize eroding shoreline and outfall energy dissipaters at multiple locations using soft armoring techniques.

# Replace Bjorgen Creek Culvert

The existing culvert under Storhoof Lane is undersized and creates a fish passage barrier due to elevation drop at the downstream end of the culvert. This project would replace the existing 36-inch culvert with a 12- foot wide bottomless box culvert.

### **Community Bioretention Program**

The community bioretention program is a collaborative partnership between the City and Kitsap Conservation District to site, design and construct bioretention facilities in the City of Poulsbo. Projects would be constructed at multiple locations over a period of several years.

# Fjord Drive Drainage and Water Quality Improvements

This project would replace 700-ft of deteriorated 8-inch diameter concrete pipe between Hostmark Street and Harrison Street, and would install a Modular Wetland System to treat 0.5-acres of City Street. The project would also replace the existing 12-inch diameter outfall with a concrete energy dissipater structure.

### Repair American Legion Park outfall

The outfall structure at the north end of the American Legion Park is eroded and in jeopardy of collapsing into Liberty Bay. Further erosion of the steep bank will result in risk to the outfall structure and additional erosion of the park property. This project will stabilize the bank and replace the outfall pipe.

#### **Deer Run Pond and Swale Retrofit**

The existing storm water treatment system for the Deer Run development is undersized and eroding. This project will retrofit the existing detention wet pond and bioswale to increase capacity, reduce erosion and improve water quality treatment.

# Replace Storm Drain of 10<sup>th</sup> Avenue

The existing storm main that runs across property located at 1858 10<sup>th</sup> Avenue NE is undersized and needs to be replaced. This project would replace the existing storm drain with a new larger capacity pipe.

# **Anderson Parkway Outfall Capacity Improvements**

The existing north outfall at Anderson Parkway that serves much of the downtown area is undersized for flows from peak rain events. This project will provide a new 18-inch diameter storm drain and outfall from Jensen Way to the existing outfall location near the Park gazebo. The project will also stabilize the armored slope and install flow splitter at Jensen Way.

# Glen Haven Storm Drain Replacement

This project will replace the existing corroded and undersized 12-inch diameter storm drain from Mesford Street to Wilderness View with a new 18-inch diameter storm drain.

#### **Noll Road Improvements**

Noll Road will be improved for vehicles, non-motorized users and storm water management between SR305 and Lincoln Road over an approximate six year period. The storm water portion of the project will retrofit the existing and future roadway with new treatment and detention facilities.

# Poulsbo Village/7th Avenue Regional Facility

The Poulsbo Village basin is largely developed and discharges untreated storm water to the South Fork of Dogfish Creek. This project would construct a regional treatment facility for the basin

consisting of a detention pond and high-performance media filter or constructed wetland. It would also modify the existing conveyance system and acquire property needed to support construction of the facility.

# North Kitsap School District Campus Retrofit

The upper segment of Bjorgen Creek below the NKSD has been degraded due to untreated storm water discharges. This project would construct regional treatment facilities on the NKSD property for a 76-acre urban basin that includes both the NKSD and residential areas. Treatment facilities may consist of a combination of bioretention, high performance media filter and a constructed wetland. The project will also improve capacity of conveyance system to alleviate localized flooding during high intensity storm events.

#### **Front Street Retrofit**

This project would retrofit Front Street between 3rd Avenue to the south and King Olaf parking lot to the north by installing bioretention cells using Filterra media at crosswalk bulb outs and existing planting strips. The project would also realign the intersection of Front Street and Jensen and create an area to construct a small-scale storm water park.

# **Torval Canyon Water Quality Retrofit**

This project would retrofit portions of Torval Canyon Road with Modular Wetland Systems and Filterra vaults. It would also modify the storm collection and conveyance system to direct flows to treatment devices.

### **Poulsbo Place Water Quality Retrofit**

Storm water runoff from Poulsbo Place is largely untreated. This project would retrofit the Poulsbo Place development with Modular Wetland Systems and Filterra vaults and modify the storm water collection and conveyance system to direct flows to treatment devices.

# Storm Water Facilities Funding Strategy

Funding the Storm Water facilities' capital improvements comes from the Storm Utility Enterprise Fund, which is intended to be self-sufficient. Revenue is from monthly rates from both residential and commercial users, and grants from state and federal agencies. These revenue sources fund the utility's operational expenses, maintenance and capital improvements.

The Storm Water utility expenditures cover all costs associated with operating and maintaining the storm water utility. This includes program administration, and repair and maintenance of the system. It also covers the costs of capital expenditures, which includes the purchase of equipment to maintain the system, costs to replace deteriorated pipes, culverts, or other components; and costs to install new components to better manage storm water (bioretention facilities, detention ponds and other BMPs), or to meet new regulatory requirements.

The 2016 Storm Water Comprehensive Plan provides a financial analysis of the Storm Water utility's anticipated monthly rate revenues and projected operational and capital expenses over a six-year period. Given the existing capital and operating fund reserves and capital grant funding assumptions, existing rates (increased in 2014) and future revenues are adequate to support the operations and maintenance program required under the NPDES. Under this scheme, revenues are sufficient to cover expected costs during the 6-year CIP timeframe, with no substantial increase in

rates; however, a new storm water General Facility Charge – similar to what the City charges for water and sewer -was implemented in 2016.

NPDES permit compliance requirements obligate the City to implement expanded operations, maintenance, regulation and education elements, which will continue to increase program and O&M costs and decrease revenue that could be available for capital projects. Full implementation of the 2036 Storm Water Facilities project list will need additional funding and successful grant fund awards. It is realistic to assume that storm water utility rates will likely increase in the future. The Storm Water functional plan 6-year update cycle will continue to evaluate the utility's financial plan and will identify the time when increased rates is necessary.

# 12.9 Transportation System

The City of Poulsbo 2016 Transportation Plan Update (TPU) (Appendix B-4 of this Comprehensive Plan) provides the basis for this section of the Capital Facilities Plan. The Transportation Plan Update has been developed to fit within the City of Poulsbo's Comprehensive Plan update process and is intended to meet the transportation requirements of the Growth Management Act. The 2016 Transportation Plan Update includes an existing system evaluation; growth and transportation demand forecast; future transportation needs assessment; necessary facility improvements; and implementation/funding strategies.

The GMA requires that a comprehensive plan include an evaluation of existing transportation conditions in light of the adopted standard level of service (LOS). This is to identify the existing deficiencies resulting from past growth, before planning of improvements needed for future growth. This analysis was completed in the 2016 Transportation Plan Update. The following is the summary from that analysis:

- Transportation level of service is graded from A (very good) to F (failing). In Poulsbo, the desired LOS is D, but level E is permitted before improvements are required. For intersections, Poulsbo uses a method based on the average amount of delay per vehicle using the intersection in peak hours. This method measures congestion. For road sections between intersections total traffic volume is compared to the road's capacity, with adjustments for the classification of each road, and for compliance with design standards. If the road does not meet urban design standards (particularly sidewalks and shoulders), the allowable capacity is reduced. This measures the ability of the entire road corridor to safely provide for pedestrian and bicycle needs along with vehicular travel.
- Only one existing deficiencies was identified in the 2016 TPU based on the LOS standards. The only roadway segment to operate at a LOS F in the existing condition is Viking Way from the south county line to Bovela lane (or about a .5 mile section of roadway).
- Under 2036 future conditions, it is predicted that 12 segments will be deficient (i.e. projected to carry higher traffic loads than the available capacity). There are also 10 intersections with entering volumes or geometric constraints that will likely result in operations that fall below LOS standards in 2036 without improvements. For locations with future deficiencies, improvements and strategies are identified in the 2016 TPU that provided the needed capacity and transportation demand management to meet the City's adopted transportation LOS.
- Road projects that are funded and certain to be completed within six years were treated as
  if existing, for the purpose of this evaluation. Committed improvements include the Noll

Road extension project, improvements on several downtown area roads, and non-motorized improvements on Finn Hill Road.

In projecting future growth impacts, the City's transportation consultant – Parametrix and David Evans and Associates – created and calibrated a traffic forecasting model for Poulsbo and surrounding areas. Using this model, the increase in travel demand was assigned to Poulsbo's road network to identify future conditions and evaluate future improvement needs.

The model identified that in order for Poulsbo to serve the projected 2036 travel demand and comply with LOS standards, transportation improvements will be needed. Some forecast needs cannot easily be solved by adding capacity, and are instead be dealt with by efforts to reduce travel demand or reroute the demand to other locations. In summary, the transportation improvements necessary to accommodate the City's 2036 transportation population forecast include:

- Nineteen projects will add sidewalks, turn lanes, bicycle lanes, and otherwise upgrade
  existing roads. These projects will assure that all arterials and collectors and sub-collector
  roads provide adequately for pedestrians and bicycles as well as motor vehicles. These
  projects will be implemented as expected growth occurs.
- Twenty-two projects will add new roadway segments of various lengths. These projects add new connections in growing areas and efficiently route traffic from neighborhoods to the arterial network.
- Ten projects will improve the capacity of intersections through signalization, channelization, roundabouts, and two-way or all-way stop controls.
- Locations where capacity improvements are not feasible, alternative strategies for Transportation Demand Management (TDM) should be pursued.

These improvements would be implemented gradually, as growth occurs. The actual timing of needs may take more or less than the 20-year planning horizon assumed.

# 2036 Transportation Facility Improvements

For most locations with future deficiencies, improvements were defined that provide the capacity needed. Many of the improvement projects on existing roads provide for upgrading to full design standards, such as adding sidewalks and other urban features that are part of the City's street design standards but missing or only partly found on existing older roads. Turn pockets or turn lanes are added where needed. No new general traffic lanes for through travel were added to any existing arterial corridor.

New roads are added to the system at the level of collector or arterial roads. These new connections are essential to the orderly development of the City – first to provide for access to developing land parcels, and secondly to provide for efficient circulation within larger sub-areas. These new roads provide more direct paths, and also minimize emergency vehicle response time. Without the proposed new road connections, some affected areas would suffer longer response times by first responders.

In a few places, adding extra lanes to directly serve the forecasted traffic growth, would likely mitigate a capacity deficiency, but that action is not recommended, either for economic, topographic or environmental reasons (such as Front Street through downtown Poulsbo.) In this case, the cost of building a wider road would be unacceptably high due to the high cost of acquiring right-of-way through an already built area. The social and environmental costs of such widening

would also be unacceptably high. For those situations, including alternative strategies for travel demand management are recommended instead of capacity improvements.

# **Mitigation Options**

There are generally three strategies for addressing LOS deficiencies identified in the 2036 Forecast model. These are defined as follows and detailed below:

- Add transportation facilities to serve forecast travel demand.
- Apply TDM or Transportation System Management (TSM) strategies to divert excess traffic away from problem areas.
- Reduce the City's transportation LOS standards.

A combination of the first two strategies is adequate to meet the 2036 identified deficiencies associated with allocated growth. There is no need to consider lowering the adopted transportation LOS standards until after TDM strategies have been fully implemented and tested.

# **Add Transportation Facilities**

Table CFP-5 below indicates the improvements to existing roadway segments to correct potential service deficiencies, and other identified transportation system improvements.

**Table CFP-5 2036 Required Transportation Improvement Projects** 

Road Classification	Name	From	То	Improvement Needed
Commercial Collector	10 <sup>th</sup> Avenue	600 feet north of Liberty	Liberty	Turn Lane Sidewalks
Commercial Collector	8 <sup>th</sup> Avenue	Hostmark	7 <sup>th</sup> Avenue	Sidewalks one side; Resurface; Widen
Neighborhood Collector	Pugh	Lincoln	City Limits	Sidewalks; Resurface
Neighborhood Collector	Mesford	20 <sup>th</sup> Avenue	Noll	Sidewalks; Widen; Overlay
Minor Arterial	Hostmark	4 <sup>th</sup> Avenue	6 <sup>th</sup> Avenue	Sidewalks; Resurface
Neighborhood Collector	Caldart	Hostmark	Gustaf	Sidewalks; Resurface
Residential Collector	11 <sup>th</sup> Avenue	Hostmark	Sol Vei Way	Sidewalks
Minor Arterial	Noll Road	Storhoff Lane	Mesford	Turn lanes; shared use path
Neighborhood Collector	4 <sup>th</sup> Avenue	Iverson	Torval Canyon	Sidewalks; Resurface
Minor Arterial	Finn Hill	W. City Limits	Olhava Way	Sidewalks; Widen; Bike lanes; Resurface
Residential Collector	Liberty Road	Viking Way	New Road "M"	Sidewalks; Resurface
Local Access	Bernt Road	SR 307	Little Valley Road	Non-motorized improvements*;

Road Classification	Name	From	То	Improvement Needed
				Resurface
Minor Arterial	Johnson		Sunrise	Sidewalks;
	Road	SR 305	Ridge	Resurface; Bike
	Roau		extension	lanes
				Pavement
Neighborhood Collector	Hamilton	Jensen Way	1 <sup>st</sup> Avenue	restoration,
	Court	Jensen way	1 Avenue	sidewalks,
				drainage
Local Access- Residential	Little	Forest Rock Lane	UGA	Sidewalks/ Shared
Access	Valley			use path;
	Road	Lane	Boundary	Resurface
Sidewalks*	4 <sup>th</sup> Avenue	Iverson Street	Hostmark	Sidewalk, Removal
Sidewarks.	4 Avenue	Iverson Sueet	Street	and reconstruction
Sidewalks*	Lincoln	Hostmark	SR-305	Removal and
Sidewarks.	Road		SK-303	reconstruction
				Sidewalk one side;
Sidewalks*	3 <sup>rd</sup> Avenue	Iverson	Hostmark	Bike lane;
				Resurface
Non-motorized Project*	Liberty Bay Waterfront Trail	American Legion Park	Nelson Park	Trail

Source: Table 12 - 2016 Poulsbo Transportation Plan Update;

(Note: Not shown are other segments that were found to be potentially deficient by 2036 but the forecast growth cannot be reasonably served by expansion of existing facilities. These are identified in Table CFP-8 as travel demand management strategies. This is discussed further in the following section.)

Most of the road segment improvements consist of adding turn lanes, center two way left turn lanes, sidewalks, and bicycle lanes. Some roads will also require reconstruction of obsolete pavement. Completion of sidewalks is also identified to satisfy the segment-based LOS policy. Without sidewalk improvements on many streets, the additional traffic impacts caused by new developments would create unsafe conditions for pedestrians. The City's design standards require sidewalks on all roads. The segment-based LOS policy enforces the requirement to add sidewalks on older rural roads as a condition for carrying the increased volumes due to urban growth.

Table CFP-6 shows the new roadway segments that are recommended for consideration by 2036. All projects shown in this table have been designated for funding by developments since they serve the purpose of providing access to and through undeveloped land. Locations of new roadways and roadway improvements are shown in Figure TR-3, located in the Transportation Chapter in Section 1 of the Comprehensive Plan.

<sup>\*</sup> Funding for sidewalks may be from the City's pedestrian improvement fund; non-motorized projects funding through state and federal grants, other agency participation, and developer agreement.

**Table CFP-6 2036 Required New Roadway Segments** 

Road Classification	Name	From	То
Commercial Collector	New Road "Z"	Forest Rock Lane	10 <sup>th</sup> Avenue
Neighborhood Collector	Forest Rock Extension	Caldart Avenue	Pugh
Residential Collector	Mesford Extension	Gilmax Lane	Caldart
Residential Collector	New Road "W"	Baywatch Court	Johnson Road
Minor Arterial	New Road "X"	Johnson Road	Noll Road
Residential Collector	Sunrise Ridge Extension	Existing End	Johnson Road
Neighborhood Collector	Olhava E Street	Existing End	Urdahl
Neighborhood Collector	New Road "M"	Finn Hill Road	Viking Way
Neighborhood Collector	New Road "N"	Rhododendron	Urdahl
Neighborhood Collector	New Road "K"	New Road "M"	West UGA boundary
Neighborhood Collector	Vetter Road Extension	Vetter Road (existing)	SR 305
Residential Collector	12 <sup>th</sup> Avenue	Existing End	Genes Lane
Residential Collector	New Road "L"	Viking Avenue @ Liberty Shores	New Road "M"
Residential Collector	Laurie Vei Extension	Laurie Vei Loop	Caldart
Residential Collector	12 <sup>th</sup> Avenue	Existing End	Lincoln
Neighborhood Collector	Langaunet/ Maranatha	Mesford	Lincoln
Residential Sub-Collector	New Road "Q"	Langaunet	Noll Road (E-W)
Residential Collector	New Road "R"	Noll Road @ Mesford	Hostmark Street
Residential Collector	New Road "S"	Noll Road @ Soccer Fields	New Road "R"
Residential Collector	New Road "Y"	New Road "S"	New Road "T"
Residential Collector	New Road "T"	Noll Road @ Thistle Ct.	Noll Road @ Heron Pond Ln.
Residential Collector	New Road "U"	Bjorn Street	New Road "T"

Source: Table 13 - 2016 Poulsbo Transportation Plan Update

Table CFP-7 shows the improvements to existing intersections that are recommended for consideration by 2036. Each intersection will require improvements to operate satisfactorily in the 20-year future, but a traffic signal is not always the right tool. For several locations, other choices should be evaluated, such as roundabouts, four-way stops, or reconfiguration of street connections.

**Table CFP-7 2036 Required Intersection Improvement Projects** 

Location	Improvement Needed
Finn Hill at Rude and Urdahl	Intersection Control/Signal
Hostmark at 8 <sup>th</sup> Avenue	Intersection Control/Turn Lanes
SR 307 at Bernt Road	Channelization
Vetter Extension at SR 305	Channelization
Lincoln at Pugh	Signal, Channelization
Finn Hill at Rasmussen Court	Signal, Channelization
Finn Hill at New Road "M"	Signal, Channelization
Viking Way at Stendahl Court Extension	Signal, Channelization
Noll Road at Mesford	Mini-roundabout
Noll Road at Hostmark	Signal, Channelization

Source: Table 14 – 2016 Poulsbo Transportation Plan Update

Analyses completed in the 2016 Poulsbo Transportation Plan Update indicate that with these 2036 Transportation Facilities Improvements implemented in a timely manner, the transportation facilities in all areas except those with TDM strategies will be able to accommodate the forecasted 2036 demand and meet desired transportation LOS\_standards.

# **Apply Transportation Demand Management Strategies**

In those situations, where it is not physically possible, economically viable, or socially desirable to meet forecast growth by adding new capacity (e.g., new lanes) in the same location where the demand appears, an alternative strategy is to divert or manage the forecasted traffic growth by redirecting to other facilities or provide transportation systems that encourage and support other transportation modes such as public transit and non-motorized paths, trails, and bike lanes.

Collectively, such strategies are described as Transportation Demand Management (TDM). The central goal of TDM is to reduce the demand instead of increasing the supply. Some common examples of TDM are:

- Speed humps, bumps, chicanes, and other traffic calming devices to discourage through traffic:
- All-way stop controls to favor local turning movements over through movements;
- Signal timing strategies that favor certain movements over others;
- Increased transit operations to provide an alternative to automobile travel;
- New non-motorized facilities such as shared use paths, bike lanes and sidewalks;
- Support for carpooling and vanpooling to reduce commute trips by automobile;
- Provision of continuous high-quality pedestrian and bicycle networks through the affected area; and
- Provision of increased capacity and better continuity on alternative routes.

The roadway segments shown in Table CFP-8 are also expected to have transportation deficiencies by 2036, but it does not appear feasible to increase capacity at those locations due to a variety of economic, social and environmental factors. TDM strategies are the desired approach to address the expected transportation deficiencies. The roadway segments are identified, acknowledging that TDM strategies impact traffic patterns for a larger vicinity. The City's approach is to apply TDM strategies to a geographic area and monitor results.

Table CFP-8 2036 Segments and Intersections for Transportation Demand Management

Classification	Street
Roadway Segments	
Minor Arterial	Front Street, from Bond Road to Sunset
Residential Collector	Torval Canyon, from Front Street to 4th Avenue
Minor Arterial	Viking Way, from south city limits to Bovela Lane
Minor Arterial	Lindvig Way, from Viking Way to Bond Road
Intersections	
Minor Arterial	Lincoln at 8 <sup>th</sup> Avenue
Minor Arterial	Front Street at Torval Canyon, Jensen Way and Fjord/Hostmark
Minor Artrial	Lindvig Way at Viking Way and Finn Hill Road
Commercial Collector	Liberty at 7 <sup>th</sup>
Commercial Collector	10 <sup>th</sup> Avenue at Forest Rock Lane
<b>Transit Improvements</b>	
Park and Ride	Noll Road

Source: Tables 16 and 17 - 2016 Poulsbo Transportation Plan Update;

# **Capital Facilities Plan & Six-year Transportation Improvement Program Coordination**

The Capital Facilities Plan Transportation section contains all major capacity, maintenance and safety improvements that have been identified as necessary to maintain LOS standards in the 2036 planning horizon. As additional projects are identified, or projects are completed, the Capital Facilities Plan Transportation section will be updated through the regular Comprehensive Plan amendment process.

The projects listed on the City's annual Six-year Transportation Improvement Program (TIP) are derived in part from the project lists (Tables CFP-5, CFP-6, CFP-7 and CFP-8) in the Capital Facilities Plan Transportation section. All projects that are potentially eligible for Federal transportation funding and most sources of funding from Washington State must be included on the Six-year TIP that is submitted to the Washington State Department of Transportation each year. The City's Capital Improvement Program (CIP) contains those projects from the TIP for which funding has been secured or is anticipated with reasonable assurance.

Pavement restoration projects are not listed individually in the Capital Facilities Plan but are kept on lists maintained by the Public Works Department and reviewed annually during the 6-year TIP and annual budget process. Similarly, minor street maintenance and restoration projects, as well as minor bicycle facilities installation and pedestrian improvements not connected to a larger plan of improvement or development, are not included in the Capital Facilities Plan if construction costs are generally less than \$100,000, and will be programmed through the 6-year TIP and annual budget process.

# **Transportation Facilities Funding Strategy**

Funding for the 2036 Transportation Facilities improvements will be through a combination of public and private financing. Primary funding sources include the City's budget, federal and state

grants, other state and local agency assistance, property tax revenue, general obligation bonds, developer impact fees and developer improvements.

Combined, Table CFP-5 "2036 Required Transportation Improvement Projects," Table CFP-7 "Required Intersection Improvement Projects", and Table CFP-8 Transportation Demand Management represent an estimated \$54 million of transportation improvements to the City's roadways and intersections:

\$31.3 million Transportation Improvement Projects (Table CFP-5), \$3.5 million in Intersection Improvement Projects (Table CFP-7), \$11.2 million for TDM, Transit and Trail projects, and \$8 million for New Road X—Noll Road Extension.

Preliminary roadway segment costs were determined by applying planning level unit costs for required lineal feet of improvements. Specific unit costs for sidewalks, turn lanes, bike lanes, roadway widening and new roadways were developed and applied to the lengths of various improvements required. Preliminary intersection costs were determined by applying planning level unit costs for various intersection improvements. Specific unit costs for signalization, roundabout construction, rechannelization, realignment, and two-way and all-way stop-control were developed and applied to the various intersection locations.

The City anticipates contributing \$54.8 million through taxes, grants and City revenues over the 2036 planning period for the improvements identified.

**Table CFP-9 Transportation Projects Public Funding Sources** 

<b>Funding Sources</b>	Approximate Funding Available
State/Federal Grants	\$20,000,000
Traffic Impact Fees	\$31,200,000
Other Sources	\$2,000,000
Fund 311	\$1,000,000
TOTAL	\$54,000,000

Source: City of Poulsbo Engineering and Finance Departments

Funding for transportation improvements will come also from private funding through improvements paid for by developers. Frontage improvements on City streets will be required for all new development, and therefore are not identified in the facility improvement tables. Projects identified in Table CFP-6 "2036 Required New Roadway Segments", are necessary due to new residential development in the underdeveloped areas of the City, and therefore will be improved by private developers at the time of project construction. However, the City has obligated itself to fund and construct New Road X – Noll Road Extension, and this has been included in the identified \$54 million of publicly funded transportation projects.

#### **Summary**

The City of Poulsbo must provide public funding for anticipated road improvements. Funding from the City Budget must be included in the variety of funding sources already identified. The City allocates 26% of annual property taxes collected into its street fund and 2.15% for street capital projects. In addition, the City has issued general obligation bonds in the past to support transportation capital projects, and it plans to do so again in the future. It is vital that the process is established to review, prioritize and fund the City's capital projects through the 6-year TIP, and that the City Council continue to review annually the revenue identified for transportation capital

improvements. If funding shortfall occurs, the options identified in Policy TR-7.3 in the Comprehensive Plan's Section 1 Policy Document must be evaluated. It is therefore in the City's best interest to be vigilant in its review and application of all available transportation facilities funding sources.

# 12.10 Parks System

The City of Poulsbo Parks Program provides quality recreation opportunities, programs, facilities, parks and open space to the greater Poulsbo citizens. The City has a 2016 Parks, Recreation and Open Space Plan adopted to provide policy, acquisition and program guidance for the City's Parks Program. This Plan is included in Appendix B-5 and is adopted in whole. The Urban Paths of Poulsbo Plan (UPP) includes goals, policies, implementation and financing strategies for non-motorized connections throughout the city. The UPP Plan is included in Appendix B-6 and is adopted in whole.

The City of Poulsbo owns 18 parks ranging in size from .24 of an acre to over 36-acres. The types of parks have been defined into four categories, in part by their size, but also by its intended service area. Collectively, these parks contain a variety of outdoor recreation facilities, including playgrounds, picnic areas, basketball courts, a recreation center, shoreline access, boat launch, restrooms, off-leash dog runs, ball fields and natural open spaces with walking paths and trails.

- Neighborhood Parks are the parks that serve as the recreational and social focus of a neighborhood within the city. They are designed to serve a radius of less than ½ mile, and the parks themselves are small, averaging 2 acres in size. Neighborhood Parks are usually home to a combination of playground equipment, picnicking and outdoor activity areas. Poulsbo has ten neighborhood parks totaling 21.89 acres.
- Community Parks are larger in size and serve a broader purpose and population than neighborhood parks. They are developed for both passive and active recreation. These parks may typically include athletic fields, sports courts, trails, playgrounds, open space and picnicking facilities. The service radius is larger usually ½ to 3 miles. Poulsbo has two community parks totaling 27.07 acres.
  - Regional Parks are the largest park designation because people will come from many miles to enjoy the park. These parks are often along waterways and may be in the center of the economic or tourist areas in a city. Poulsbo has four such parks totaling 12 acres.
- Natural/Open Space parks are natural lands set aside for preservation of significant natural resources, open space and areas for aesthetics and buffering. These parks are often characterized by sensitive areas, and may include wetlands, slopes, significant natural vegetation or shorelines. Poulsbo has six parks with the natural/open space designation totaling 74.60 acres.
- Trails are provided in parks, along roads or in old road right-of-ways. Most of Poulsbo's trails do not connect, but by adding sidewalks and other right-of-ways, a walker can get from one place to another. Connectivity of Poulsbo parks is a priority and a major goal of the City. Poulsbo has 11 trails totaling 5.59 miles.

Table CFP-10 Poulsbo Park, Recreation and Open Space Inventory

Name of Park	Location	Acres	Park Classification	Existing Amenities
Austurbruin Park	Curt Rudolph Road	4.51	Neighborhood	Picnic area, playground, trails, wildlife habitat, open space
Betty Iverson Kiwanis Park	20255 1st Avenue	2.76	Neighborhood	Picnic area, playground, shelter/gazebo, grills
Forest Rock Hills Park	North end of 12 <sup>th</sup> Avenue	3.11	Neighborhood	Picnic area, playground, trails, grills, plants/wildlife viewing, open space
Lions Park	585 Matson Street	1.2	Neighborhood	Picnic area, playground, restrooms
Poulsbo Pump Track	20523 Little Valley Road	1.82	Neighborhood	undeveloped
Morrow Manor	SE corner of Noll/Mesford	1	Neighborhood	undeveloped
Nelson Park	20296 3 <sup>rd</sup> Avenue	4	Neighborhood	Picnic area, playgrounds, shelter/gazebo, grills, restrooms, trails, plants/wildlife viewing, open space
Net Shed Vista	18500 Fjord Drive	.69	Neighborhood	Picnic area
Oyster Plant Park	17881 Fjord Drive	.24	Neighborhood	Shoreline, small boats launch, picnic area, trails, wildlife viewing
West Poulsbo Waterfront Park	5 <sup>th</sup> Avenue NW	1.85	Neighborhood	undeveloped
Total Neighborhoo	od Parks 21.8	39 acres		
College MarketPlace	Reliance Street	6.07	Community	Undeveloped
Raab Park	18349 Caldart Avenue	21	Community	Picnic area, playgrounds, shelter/gazebo, grills, restrooms, trails, basketball court, off- leash dog run, community gardens/open space
Total Community Parks 27.07 acres				
American Legion	Front Street	4.19	Regional	Shoreline, picnic area,

Name of Park	Location	Acres	Park Classification	Existing Amenities
Park				playgrounds, restrooms, trails, plants/wildlife viewing
Poulsbo's Fish Park	288 NW Lindvig Way	4.53	Regional	Shoreline, picnic area, amphitheater, trails, plants/wildlife viewing, open space
Muriel Iverson Williams Waterfront Park	18809 Anderson Parkway	1.76	Regional	Shoreline, picnic area, shelter/gazebo, restrooms, boat ramp
Poulsbo Recreation Center	19545 1st Avenue	1.52	Regional	Basketball court, fitness center, gymnastics equipment, classrooms, , preschool
Total Regional Parl	ks 12 acres			
Centennial Park	7 <sup>th</sup> and Iverson Street	2.85	Natural/Open Space	Picnic area, trails, plants/wildlife viewing, open space
Hattaland Park	10 <sup>th</sup> Avenue NE	2.04	Natural/Open Space	Picnic area, trails, plants/wildlife viewing, open space
Indian Hills Park	Stenbom Lane	20	Natural/Open Space	Undeveloped, open space
Nelson Park	20296 3 <sup>rd</sup> Avenue NW	6.8	Natural/Open Space	Undeveloped, open Space
Poulsbo's Fish Park	288 NW Lindvig Way	32.17	Natural/Open Space	Trails, Plants/wildlife viewing, open space
Wilderness Park	Caldart Avenue and Hostmark Street	10.74	Natural/Open Space	Picnic area, trails, plants/wildlife viewing, open space
Total Natural/Oper	Space 74.60 acro	es		
Boardwalk- American Legion Park Trail	Front Street	.30 mile	Trail	Boardwalk and paved
County Road 59	Shoreline at 5 <sup>th</sup> Avenue NW	.10 mile	Trail	Soft surface
Poulsbo's Fish Park Trails	288 NW Lindvig Way	1.5 miles	Trail	Soft surface
Fjord Drive Waterfront Trail	Fjord Drive, from 6 <sup>th</sup> Avenue to city limits	2 miles	Trail	Paved shoulder
Forest Rock Hills	North end of 12 <sup>th</sup> Avenue	.25 mile	Trail	Soft surface
Lincoln Road	Lincoln Road from	.36 mile	Trail	Paved (separate from

Name of Park	Location	Acres	Park Classification	Existing Amenities
Shared Use Path	Maranatha Lane to Noll Road roundabout			street)
Moe Street Trail	Moe Street to 3 <sup>rd</sup> Avenue	.10 mile	Trail	Soft surface
Noll Road Shared Use Path	Noll Road south of Hostmark	.20 mile	Trail	Paved (separate from street)
Raab Park Exercise Trail	18349 Caldart Ave.	.33 mile	Trail	Soft surface
Raab Park Nature Trail	18349 Caldart Ave.	.20 mile	Trail	Soft surface
Wilderness Park Trail	Caldart and Hostmark	.25 mile	Trail	Soft surface
Total Trails 5.59 miles				

Source: Park acreage amount derived from 2015 Kitsap County Assessor data as accessed from Kitsapgov.com parcel search online data. American Legion Park and Muriel Iverson Williams Waterfront Park acreage amount was derived from Poulsbo Planning and Economic Development GIS analysis.

# 2025 Park System Needs based on LOS

The City of Poulsbo's planned Park Level of Service is the result of a review of various standards from sources such as the National Recreation and Parks Association, as well as input from the public and the Poulsbo Parks and Recreation Commission. When comparing the current park acreage with the acreage anticipated necessary for the City's 2036 population, the results provide the City with its park acquisition and development priorities. It proves a useful tool when programming projects into the Parks 6-year Capital Improvement Program.

The projected future population of the City of Poulsbo is 14,808 at the year 2036. Table CFP-11 identifies the City's park needs utilizing its planned level of service by park type.

The City has established a planned overall park system level of service (PLOS) of 13.73 acres per 1,000 population. Level of service standards have also been identified for the City's park types and trails, and are identified in Table CFP-11.

Table CFP-11 2036 Park Need based on LOS

Park Type	2015 Existing Acres	2015 Existing Level of Service Acres per 1,000 population	2036 Planned Level of Service Acres per 1,000 population	2036 Acreage Need based on PLOS**	2036 Park Acreage Needs***
Neighborhood Park	21.89	1.94	2	29.62	7.73
Community Park	27.07	2.72	3.5	51.83	24.76
Regional Park	12	1.21	1.5	22.21	10.21
Open Space Park	74.60	7.50	6	88.85	14.25

Trails	5.59 miles or 4.08 acres*	.56 mile or .41 acres	1 mile or .73 acre	14.81 miles or 10.81 acres	9.22 miles or 6.73 acres
TOTAL	138.93 acres	13.78 acres/1,000 population	13.73 acres/1,000 population	203.32 acres	66.17 acres

<sup>\*</sup> Trail miles are converted into acreage by assuming a 6' wide trail x 1 mile = .73 acre

Table CFP-11 shows an existing inventory of parkland of 137.08 acres and a need of 203.32 acres by the year 2036, reflecting a deficit of 66.24 acres. The greatest need is for Community Parks, followed by Open Space Parks.

### **Credits from Non-City Parkland/Facilities and Anticipated Parkland donation:**

Two types of public parkland have been identified as being available for the City to consider and credit in its demand and need analysis - North Kitsap School District fields and Washington State Department of Transportation SR 305 wetland mitigation open space land. Each is addressed below:

# Partnership with North Kitsap School District

The City has formed a partnership with the North Kitsap School District (NKSD) through shareduse agreements for fields at four schools. These fields are available for City-sponsored recreation programs, as well as for the general public use.

**Table CFP-12 Shared Fields with NKSD** 

NKSD Schools with Shared Use Agreement	Field Size
Vinland Elementary	3.4 acres
Strawberry Fields (Poulsbo Elementary)	8.34 acres
NK Middle School	20.4 acres
NK High School	11.08 acres
Total Shared Fields with NKSD	43.22 acres

Source: Poulsbo Planning and Economic Development Department GIS

The NKSD shared fields' total acreage is not available for City recreational programming or general public use all the time. Field use is reserved for school use weekdays generally between 8 a.m. and 5 p.m. during the school year. Middle school and high school facilities are less available for community use due to sports and activities conducted by NKSD. Overall, the annual community and public use is assumed at an average 40% annually. Based upon the public availability of the shared fields, the City can apply a credit of 40% of the shared field acreage, which adds in 17.288 acres to the city inventory, and is applied to Community Park acreage need.

# SR 305 Wetland Mitigation Acreage

As part of the SR 305 widening project in 2008-2009, WSDOT was required to establish a wetland mitigation site. This site is 13.69 acres, adjacent to SR 305 (near the Bond Road intersection), and is near the City's Betty Iverson – Kiwanis Park. An agreement between the City and WSDOT has

<sup>\*\*</sup> City's 2036 population of 14,808 was used to calculate total 2036 acreage needed.

<sup>\*\*\* 2036</sup> Park acreage needs calculated by subtracting 2015 existing acres from 2036 acreage need based on PLOS.

the ownership of this land transferring to the City in approximately five years. This acreage should be credited as Open Space parkland, as the transference of ownership is assured.

Table CFP-13 2036 Adjusted Project Park Need

Park Type	2036 Park	Credit to 2036	Adjusted 2036 Park
	Acreage Needs	Needed Acres	Acreage Needs
Neighborhood Park	8.44 acres		8.44 acres
Community Park	24.76 acres	- 17.288 acres (NKSD Shared fields)	7.47 acres
Regional Park	10.21 acres		10.21 acres
Open Space Park	14.25 acres	- 13.69 acres (WSDOT Wetland Mitigation)	.56 acres
Trails	9.22 miles or 6.73 acres		9.22 miles or 6.73 acres
TOTAL	64.39 acres	30.98 acres	33.41 acres

When the NKSD fields acreage and the SR 305 Wetland Mitigation acreage is credited, the needs in Community Park and Open Space Parks decrease and bring the overall citywide 2036 Park Need to 35.26 acres. With these two adjustments, Neighborhood Parks becomes the highest priority park type for acquisition during the planning period, with Regional Parks a close second. The WSDOT Wetland Mitigation acreage almost entirely meets the 2036 Open Space Park needs.

# 2036 Park System Acquisition and Improvements

The City has identified several specific needs for the growth of its park system. These are based upon the above Level of Service needs analysis. Common themes running through the list of projects is a desire to increase ownership and access along Liberty Bay and Dogfish Creek, connecting trails/walkways throughout the city, improving existing parks, and acquiring new land for neighborhood parks. Figure PRO-2 in Section 1 maps each of the City's 2036 Park Improvements. The number in each of the following project descriptions refers to the legend on Figure PRO-2. Figure PRO-3 in Section 1 maps the 2036 Urban Paths of Poulsbo trails vision.

# Park Land Acquisition

# **Centennial Park Expansion**

Acquisition of the Public Works Department's two sites and-two small residential properties will add approximately 3 acres to Centennial Park. In addition to restoration activities to South Fork Dogfish Creek and parkland expansion, the acquisition of these sites will enable the City to better manage storm water in the flood-prone area. This project is identified as #1 on Figure PRO-2. (*Priorities: improve existing park, provide additional community or regional parkland*).

## Additional land adjacent to Fish Park

The City wishes to acquire additional parcels as they become available along Dogfish Creek and its estuary for the purpose of habitat restoration and salmon rearing. Existing partnerships with the Suquamish Tribe and various organizations and non-profits will continue to benefit this project. This project is identified as #2 on Figure PRO-2. (*Priorities: shoreline access, additional trails*).

#### **West Poulsbo**

Available residentially zoned land in the western city limits will most likely develop during the planning period and would benefit from a new Neighborhood Park. The park should be 2 to 5 acres in size. No specific parcel has been identified for this park. This project is identified as #3 on Figure PRO-2. (*Priority: new neighborhood park*).

#### **East Poulsbo**

A number of future residential developments are expected to develop within the eastern city limits and would benefit from a new Neighborhood Park. The park should be at least 2 acres to 5 acres in size. No specific parcel has been identified for this park. This project is identified as #4 on Figure PRO-2. (*Priorities: new neighborhood parks*).

#### **Hamilton Field**

This 2.2-acre parcel is located on Hamilton Court and is currently owned by the North Kitsap Pee Wees Association. If acquired, the field could provide a lighted soccer/football field which includes a clubhouse/storage building on the premises. A partnership ownership opportunity may exist for this property. Access, parking and drainage issues will need to be addressed to make this a viable community asset. This project is identified as #5 on Figure PRO-2. (*Priority: new community park*).

# **East Liberty Bay Shoreline Property**

Acquisition of parcels located along Fjord Drive to provide beach access and shoreline trail connections. This project is identified as #6 on Figure PRO-2. (*Priorities: shoreline access, trail connection*)

#### Johnson Creek Wildlife Corridor

Acquisition of undeveloped parcels of land along the Johnson Creek corridor and within the city limits. This project would acquire properties as they become available or easements for future trail connections along the corridor. This project is identified as #7 on Figure PRO-2. (*Priority: trail connections*)

# **Shoreline property north Front Street**

Acquisition of .69 acres of steep shoreline property just south of Liberty Bay Auto to add to the Liberty Bay Waterfront Trail. This project is identified as #8 on Figure PRO-2. (*Priority: shoreline access, trail connection*)

## Vista Park

Acquisition of undeveloped tracts, easements, and/or parcels of land along the ridge in College Market Place, in order to take advantage of surrounding views and enhance pedestrian access. This property is identified as #9 on Figure PRO-2. (*Priorities: new community park, trail connections*).

# **NF Johnson Creek Open Space**

Acquisition of 9.21 acres of undeveloped land located near the headwaters of North Fork of Johnson Creek, north parcel at the intersection of Finn Hill Road and Olhava Way NW. This property is identified as #10 on Figure PRO-2. (*Priorities: open space/critical area protection*).

# Park Land Development

# **Poulsbo Fish Park Development**

Continue to develop Poulsbo Fish Park, with trails, interpretive areas, restoration of the estuary, and wildlife viewing areas. An environmental education learning center may be appropriate at this park. This project is identified as #11 on Figure PRO-2.(*Priorities: shoreline access, trail connections, improve existing regional park*).

# **College Market Place Athletic Fields**

This project recognizes that the City is deficient in the number of ball fields it owns. The plan for this project is the development of two multi-use fields and parking on the 6.07 acre site. This project is identified as #12 on Figure PRO-2. (*Priority: improving existing community park*).

#### **Nelson Park Phase 2**

Nelson Park encompasses over 11 acres in west Poulsbo and includes shorelines, wetlands, wooded and vegetated areas; a 4-acre portion of the park is developed with a restroom, picnic shelter, playground, parking and some trails. The second phase of park improvements includes extending trails throughout the property and providing shoreline access. This project is identified as #13 Figure PRO-2.(*Priority: trail and shoreline access improvement*).

#### **Indian Hills Recreation Area**

The 20-acre parcel is a city landfill that was closed in 1976, located just south of city limits. The City and Kitsap Public Health District continue to monitor the site for any environmental concerns, but the plan is that it can be developed in the future as an Open Space Park. This project is identified as #14 on Figure PRO-2.(*Priority: improving and enhancing existing parkland*).

### **Net Shed Park**

This park is currently a vista setting of Liberty Bay high bank waterfront, and includes benches and picnic facilities. Improvement plans include beach access and shoreline trails. This project is identified as #15 on Figure PRO-2. (*Priorities: shoreline access and trail improvement.*)

#### **Hattaland Park**

This 2-acre open space park is primarily undeveloped improvement plans include trails to views of adjacent South Fork Dogfish Creek and associated wetlands, as well as benches and picnic facilities. This project is identified as #16 on Figure PRO-2. (*Priorities: trail improvement, improving and enhancing existing parkland.*)

#### Vista Park

Development of trails and benches to enhance pedestrian access along the ridge at College Market Place to take advantage of views of Mount Rainier. This project is identified as #17 on Figure PRO-2. (*Priorities: trail improvement, new community park*).

#### **Morrow Manor**

Development of a 1-acre park donated to the City. Improvement plans include sitting benches, playground equipment and shared-use path. This project is identified as #18 on Figure PRO-2. (*Priority: new neighborhood park*).

#### West Poulsbo Waterfront Park

Future development of this 1.85-acre neighborhood park in West Poulsbo. This project is identified as #18 on Figure PRO-2.

# **Betty Iverson Kiwanis Park Upgrades**

This neighborhood park needs parking lot upgrades, sidewalks, a restroom and possible playground improvements. This project is identified as #19 on Figure PRO-2.

### **Accessible Playground Improvements**

Accessible playground improvements within the Poulsbo park system is desired by members of the community. This project is not site specific but could be worked into a future park project.

# Dog Park

There is a small dog park area at Raab Park, but people have asked for a larger area to run dogs. This project is not site specific but could be worked into a future park project.

# Recreation Development

#### **Poulsbo Recreation Center**

A multi-purpose building which would ideally include two full size gyms with hardwood floors, fitness room, classrooms, and two meeting rooms. This building could serve as a new regional recreation center. Acquisition of new property or incorporating the project onto property already owned by the City or another public entity is desirable. This project could be completed in partnership with North Kitsap School District, Kitsap County Public Facilities District, or partnership with a non-profit organization. This project is identified as #20 on Figure PRO-2.(*Priority: new regional park facility*).

# North Kitsap Regional Events Center

The NK Regional Event Center is a potential project identified through partnerships between the City, Kitsap County, the Public Facilities District, and North Kitsap School District. The NK school campus in Poulsbo has been identified as the site of a regional events center. The partnership project includes field improvements, theater renovation, and the development of a Special Events/Recreation Center. This project is identified as #21 on Figure PRO-2. (*Priority: new regional park facility*).

# Trail Acquisition and Development

The Urban Paths of Poulsbo, adopted as Appendix B-6 of the Comprehensive Plan, serves as the 2036 vision for non-motorized travel within the city. Figure PRO-3 maps the network of trails and other connections that make up the Urban Paths of Poulsbo Plan vision. The UPP Plan also includes a detailed implementation table. Trails acquisition and development projects will be prioritized during the City's annual budget 6-year CIP process. (*Priority: trail acquisition and improvement*).

# Park Facilities Funding Strategy

The funding for park projects comes from a variety of means – City budget park reserves, park impact fees, federal and state grants, and in-kind donations - usually through the contribution of community groups' labor and donated materials. Park projects that are placed on the 6-year CIP have received a funding commitment, usually through a combination of grant funding, city park reserves or impact fees, and in-kind donations.

The following is a summary of the variety of funding sources available to implement the Park Acquisition and Improvement list of projects:

# **City Park and Recreation Funding**

The Parks and Recreation Department has two primary sources of funding from the City budget. The first fund contains the mitigation or impact fees that the City has collected from developers. The second, the Park Reserve fund, amounts to 5% of annual property taxes. In addition, the City Council can approve the use of ¼ of one-percent real estate excise tax for any park capital improvement project.

### **Impact Fees**

The City has collected mitigation fees for park facilities through the authority of the State Environmental Policy Act (SEPA) for nearly 20 years. In October 2011, the Poulsbo City Council voted to approve an ordinance imposing park impact fees on new development under the Growth Management Act (GMA) as authorized by RCW 82.02, consistent with identified level of service standards. This impact fee will ensure that new development pays its proportionate share of the cost of park, open space and recreation facilities within the city.

#### **Grants**

A number of state agencies provide a variety of grant programs for outdoor recreation and conservation. The amount of money available for grants statewide varies from year to year and most funding sources require that monies be used for specific purposes. Grants awarded to state and local agencies are on a highly competitive basis, with agencies generally required to provide matching funds for any project proposal. In the past, Poulsbo has been very successful in receiving state and federal grants for the acquisition and development of many of its parklands.

#### **Conservation Futures**

Kitsap County instituted a levy in 1991 that established the Conservations Futures Fund, setting aside property taxes to purchase and annually maintain open space. The \$4 million fund was augmented by \$3 million bond in 1999. Nominated properties are ranked according to their open space value and given higher ranking for outside financial support and partial donations. This program, which deals with willing sellers, is a potential source of funding for the purchase and long-term maintenance of open space in Poulsbo.

#### **Conservation Easements**

A conservation easement is placed on property when a landowner agrees to severely restrict or exclude its development in perpetuity. Conservation easements are an attractive alternative to feesimple purchase because the land is protected from adverse development without a large outlay of public money.

#### **Donations**

Occasionally, landowners who wish to preserve their property donate their land to local government or a land trust with clear instructions on its future use. Owners can also donate part or the purchase price of a piece of property they sell to the City.

# **Partnerships**

Through interlocal agreements, interagency cooperation, civic organization, non-profit, and other types of partnerships, the City has been very successful in providing and developing city parkland. The cost of planning, development of a site, or creating recreational programs can be accomplished through partnerships. Under state law, local service organizations and associations can supply plans, provide improvements to parks, install equipment, or provide maintenance services. These can come from individuals, organizations or businesses, and the donors benefit from tax deductions and publicity.

# **Voter Approved Bond**

Voter-approved general obligation bonds can be sold to acquire or develop parks, and are typically repaid through an annual "excess" property tax levy through the maturity period of the bonds – normally for a period of 15 to 20 years. Broad consensus support is needed for passage, as a 60% "yes" vote is required. A validation requirement also exists wherein the total number of votes cast must be at least 40% of the number of votes in the preceding general election.

### **Metropolitan Park District**

A discussion throughout the community regarding the formation of a Metropolitan Park District (MPD) for Poulsbo and North Kitsap has been occurring in varying degrees of support and interest over many years. The rationale for a Metropolitan Park District in North Kitsap is that many citizens who use and enjoy the City Parks and Recreation program do not live within the city limits. According to RCW 35.61.010 "A MPD may be created for the management, control, improvement, maintenance, and acquisition or parks, parkways, boulevards, and recreational facilities. A metropolitan park district may include territory location in portions or all of one or more cities or counties, or one or more cities or counties, when created or enlarged as provided by this chapter." Funding through a MPD could provide a more stable funding structure and source for parks and recreation programs and facilities.

# 12.11 Police Service

The City of Poulsbo provides police service within the city limits. The major responsibilities of the Police Department are law enforcement, maintenance of order, crime investigation and prevention, traffic control, marine enforcement, process and service of civil papers for the courts, service of criminal warrants, and other emergency services.

# **Current Personnel/Equipment**

The Poulsbo Police Department consists of eighteen commissioned police officers and three civilian clerks. The Poulsbo Police Department field operations combine the traditional police services of uniformed patrol officers and investigative follow-up. This includes the Patrol Division, Investigations Division, Field Training Officer Programs, School Resource Officer, Marine Officers, Citizen Volunteer, and Reserve Officer Division.

The department is also supported by an active and professional force of reserve officers, who provide hundreds of volunteer hours of patrol time to the city each year. Many of the City's special community events could not be safely policed without the assistance of these citizen volunteers. The Police Department is also assisted by a group of citizen volunteers, who patrol the city, enforce parking violations, make vacation checks for residents who are away from home, and assist with traffic control and parking at special events.

The department's administrative support performs records management, communications, property/evidence, background, fingerprinting, alarms, data entry, accounts payable/receivable, customer service and court/citation records keeping.

The Police Department is supported by twenty-two police vehicles, two police motorcycles, and one police motorboat.

# Department Services/Activities

Some of the services and activities performed by the Poulsbo Police Department are summarized below in Table CFP-14:

**Table CFP-14 Poulsbo Police Department Activities** 

Type of Activity	2013	2014	2015
Case Reports	1,391	1,359	1,766
Citations Issued	1,415	1,433	1,467
Prosecutor Complaints (Criminal)	143	137	150
Calls for Service	11,653	12,473	12,429
Motor Vehicle Accidents	235	203	345
DUI	28	15	29
Citizen Assist	480	604	750
Vacation House Checks	677	373	0
Parking Citations	327	374	377

Source: City of Poulsbo Finance Department 2016 Budget and Poulsbo Police Department

### **Detention and Correction**

The City of Poulsbo contracts with Kitsap County to provide most incarceration services. Kitsap County has a 472-bed correction facility, 48 bed work release facility, and a 35 bed juvenile facility. All three of these facilities are located in Port Orchard, Washington. The Forks Jail is also utilized to provide services for long time incarcerations.

# Level of Service Analysis

The Police Department's Level of Service is associated with police protection, operations, special operations, and support services. The service standard is to have facilities and equipment sufficient to meet the demand for police services. As the City continues to grow – residentially and commercially – the demands on increased calls for service on the Police Department, grows. Increased patrols and officers may be necessary in the future as these demands continue.

# Capital Facilities Needs

At this time, replacement and maintenance of the City's police patrol equipment are the only identified capital expenditures. The replacement of police capital equipment is established through the City's Capital Acquisition Fund, which provides the funding for replacement of equipment.

# 12.12 Solid Waste

State law (RCW 70.95.010) requires counties to plan an integrated solid waste management system that emphasizes waste reduction and recycling. Management of solid waste that cannot be recycled or managed alternatively can be incinerated, placed in a landfill, or a combination of the two.

Kitsap County Public Works' Solid Waste Division is the lead planning agency for solid waste management in Kitsap County. The Comprehensive Solid Waste Management Plan specifies the management actions that will be taken over a detailed 6-year and general 20-year time period. The plan is developed with participation with the County's cities, tribes, and the Navy, as well as the County's solid waste advisory committee.

Components of an integrated solid waste management program include:

- System planning, administration and enforcement;
- Collection, transfer and disposal of solid waste;
- Collection and processing of recyclables; and
- Moderate risk waste transfer and collection programs.

The City of Poulsbo provides collection, transfer and disposal of solid waste and recyclables within the city limits. The City also provides for the collection of recyclables from single-family and multi-family residences within the city limits. In 2017, the City Public Works Department prepared a Solid Waste Utility Plan that specifies the management actions that will be implemented for a detailed 6-year plan and general 20-year plan. The Kitsap County Health District is responsible for enforcement; Kitsap County is responsible for

Moderate Risk Waste transfer and collection programs.

#### Current Services/Facilities

The City of Poulsbo provides both residential and commercial solid waste collection and disposal services to approximately 3,375 residential and commercial utility customers within the city limits. Residential services include the weekly pickup of containers typically ranging in size from 10 gallons to 32 gallons. Commercial services include all sizes of containers together with dumpsters ranging in size from two yards to eight yards. For units greater than eight yards in volume, customers are referred to Bainbridge Disposal for disposal services.

Solid waste is collected on a weekly basis in the residential areas and on a more frequent basis in the commercial areas of the City subject to the property or business owner's disposal requirements.

Solid waste is transported to the Poulsbo Transfer Station, where it is consolidated and transported to the Olympic View Transfer Station (OVTS) located in Bremerton, adjacent to the Port of Bremerton Industrial Park. Table CFP-15 depicts the amount of solid waste delivered to the OVTS in recent years

Table CFP-15 Poulsbo Solid Waste Delivered to Olympic View Transfer Station

	2011	2012	2013	2014	2015
Tons of Solid Waste Delivered to OVTS	4,874	5,114	5,063	5,459	5,693

Source: 2016 Poulsbo Final Budget Document + City of Poulsbo Public Works

The City anticipates the amount of solid waste delivered to the OVTS will continue to rise, as the City's residential customer base grows. OVTS serves as the disposal system for all jurisdictions in Kitsap County. Waste Management operates the OVTS through a contract with Kitsap County. The County entered into a 20-year contract with Waste Management to send the solid waste collected at OVTS to a landfill managed by Waste Management. This landfill has capacity up to 100 years, plus additional acreage that could be permitted to increase capacity beyond that time. Kitsap County is the lead agency in planning and coordinating for future solid waste capacity needs. The City participates in disposal capacity planning by participating in the County's Consolidated Solid Waste Management Plan.

# Recycling

The Waste Not Washington Act of 1989 mandated that each local jurisdiction developed recycling services. In 1991, the City established its recycling program. The fee for recycling is included in the customer's monthly service charge rate.

Recycling services include bi-weekly curbside collection of residential recyclables, cardboard, and yard waste.

# Level of Service

# **Solid Waste Collection**

The City of Poulsbo has established a Level of Service to provide curbside collection of solid waste refuse once a week to all city residents who wish to receive such service. The City is currently evaluating the potential to go bi-weekly solid waste collection. If bi-weekly is adopted, the LOS will be revised accordingly. Garbage collection is mandatory for all residences and businesses.

# Recycling

All incorporated cities in Kitsap County are considered "Level 1" service areas, and must provide curbside collection of residential recyclables for all single-family dwellings and multi-family complexes. This LOS was established by Kitsap County Ordinance No. 157-1993.

### 2036 Solid Waste Facilities Needs

The City constructed a solid waste transfer facility in 2015. The 2017 Solid Waste Utility Plan identifies \$2,200,000 in new equipment or land acquisition between 2017 and 2022. This includes two new garbage collection trucks, a new long-haul transfer truck, and the acquisition of new property needed to collocate the Solid Waste Utility to the new Public Works Yard in 2021. The City's solid waste utility rates provide revenue to support the utility's expenditures, including capital equipment. At this time, the solid waste collection vehicle replacement expense is included City's Solid Waste Utility Plan.

# 12.13 Government Facilities

The City of Poulsbo's government facilities include government administrative offices, maintenance facilities, municipal courtrooms, police station, and recreation center.

Existing Facilities/Buildings

# **City Hall**

The existing City Hall is located at 200 NE Moe Street in downtown Poulsbo. The structure is three floors and includes an under-building parking garage. City Hall houses the Executive, Finance, Clerk, Planning and Economic Development, Building, Public Works administration, Engineering, and Police departments. The building includes several conference rooms, record storage, a courtroom, and the City Council chambers.

#### **Public Works**

The existing Public Works equipment bays, shops and some administrative space are located on 1.7 acres on 8<sup>th</sup> Avenue and Iverson Road. The existing facilities consist of one World War II surplus Quanset Hut, with an addition on the south end for offices; an 800 square foot administrative office space; and two outbuildings for storage and shops. The majority of the Public Works equipment is stored outside, exposed to the elements, shortening the life of the equipment and vehicles. Some administrative/utility files are stored in unheated, damp areas.

The Public Works complex is no longer able to meet the needs and demands of the City's public works operations, maintenance and administrative functions.

#### **Police Station**

The Police Department is housed within the City Hall building, located at 200 NE Moe Street. Within City Hall, the Police Department houses officers, administrative staff, a locker room, evidence storage, impound area, and support spaces for the City's policing functions. Current operations are 7 days per week, on call 24 hours a day with 3 daily shifts.

#### **Poulsbo Recreation Center**

The existing Poulsbo Recreation Center is located at 19540 Front Street. The Poulsbo Parks and Recreation Department occupies and operates its recreation program on the first floor of the Center, utilizing approximately 7,500 square feet. The current Recreation Center houses a preschool, fitness room, weight room, racquetball courts, and one meeting room, as well as the administrative offices for the Parks and Recreation Department staff. Recreation classes, fitness classes, preschool, and other programming utilize the Recreation Center's spaces at various hours and days throughout the week. The City leases portions of the building not currently needed for the Parks and Recreation Department.

# 2036 Government Building Facilities Needs

The City is planning to relocate the operations and maintenance functions of Public Works to a new, larger, and more suitable location. In 2008, the City purchased a 4.3acre site in north Poulsbo along Viking Avenue. It is intended that a new Public Works operation, maintenance and storage facilities will be constructed at this location. Design and construction will be phased over several years, with design completed in 2016 and construction to begin in 2018. In 2014, the City was the

recipient of a grant to begin construction of a decant facility for the disposal of storm water waste on the site. The decant facility is being combined to house a solid waste transfer station. Both facilities, in addition to the new operations and maintenance building, will be located at this north Viking Avenue site.

This project has been programmed in the City's 6-year CIP, with non-voted general obligation revenue bonds, utility reserves, and sale of the existing public works site as the funding sources.

#### **Poulsbo Recreation Center**

The City would like to acquire or construct a new Poulsbo Recreation Center that would serve as a multi-functional building and would ideally include two full-sized gyms with hardwood floors, fitness room, classrooms, and meeting rooms. This building could serve as a new regional recreation center. Acquisition of new property or incorporating the project onto property already owned by the City or another public entity is desirable. This project will most likely be completed in partnership with other agencies, educational institutions or non-profit organization(s). At this time, this project is not programmed into the City's 6-year Capital Improvement Plan.

# Government Buildings Funding Strategy

Funding for design and construction of a new Public Works complex on the north Viking Avenue site will be through general obligation bonds, utility reserves, and sale of the existing public works site. It has been programmed that each of the city utilities will contribute revenues towards the payment of these revenue bonds.

Government building projects in which the City is committed to constructing are included in the City's 6-year Capital Improvement Program, Table CFP-4.

# 12.14 Fire and Emergency Services

The Poulsbo Fire Department (Fire District 18) provides fire and emergency services for the City of Poulsbo. The Department covers an estimated 54 square miles (approximately 4 square miles within incorporated City of Poulsbo limits and 50 miles of unincorporated County), and encompasses an estimated 2014 Service Area OFM population of 19,387. Fire District No. 18 extends north of Poulsbo city limits to Port Gamble, west to Bangor Naval Base/Clear Creek Road, and south to Mountain View Road. The eastern boundary is approximately 3 miles east of Poulsbo city limits. The Fire Department has four fire stations: Station 71 and Station 77 are staffed full time, Station 72 is flex-staffed and Station 73 is staffed by volunteers.

# **Current Equipment/Personnel**

Poulsbo Fire Department current equipment includes:

- 4 Fire Engines,
- 2 Water Tenders,
- 2 Medic Units
- 3 Aid Units
- 4 Staff Vehicles
- 4 Command Units
- 1 Rescue Boat

The Department's staff includes 44 paid positions (38 are paid first responders), and 20-25 volunteers.

# CFP Level of Service Standard

Consistent with GMA requirements, the CFP provides a minimum measure of need for City of Poulsbo fire services. The Level of Service standard for the Poulsbo Fire District is to achieve the following minimum Washington Surveying and Ratings Bureau (WSRB) Ratings:

• Fire districts with career staff serving urban areas must have a minimum WSRB rating of 4.

Urban areas include city limits and UGAs. The 2012 Poulsbo Fire Department WSRB is 5.

The WSRB is a non-profit that evaluates fire protection capabilities of cities and fire protection districts. In turn, insurance companies use WSRB Protection Classes to help establish fair premiums for fire insurance. The evaluation process includes a review of the following that are relevant to capital facilities: distribution of fire stations and fire companies, apparatus, equipment, water supply and water pressure. Other activities include personnel and training, response to alarms, dispatching, code enforcement and public education.

# Level of Service Analysis

The Poulsbo Fire Department meets the WSRB minimum rating of 4 and therefore meets the LOS standard. Two other tools commonly used in evaluating level of service for fire districts are fire units per capita and response time. For capital facility forecasting, the per capita method provides a quantifiable LOS measure that can be easily related to cost.

# Fire Units per Capita

The LOS using the fire units per capita method is calculated by dividing the number of fire units operated in a district by the district's population. Multiplying the established LOS by future population projections is an established method for reasonably predicting growth-related fire and emergency service capital facilities requirements.

This method only uses fire/emergency units (e.g. fire engines, water tenders, and medic units). Although personnel is an integral component of the operation of any fire district, personnel is not considered a capital facility item under the requirements of GMA.

# **Response Time**

State statute (RCW 52.33) requires fire districts with a predominance of career staff (as opposed to volunteers) to adopt and annually report response time objectives. These objectives may change over time to respond to each district's resources and needs. Response time is defined as the amount of time that elapses between the initial call for assistance and arrival of the first emergency unit on site. Response time objectives for the Poulsbo Fire Department are as follows:

- Turnout time: 2:00 minutes for fire and priority 1 and 2 events and 1:30 minutes for medical events.
- Response time of units to suburban calls for service at 8:00 minutes.
- Rural response time goals, at 11:00 minutes.

Actual response time in 2014 compared to response goals is provided in Table CFP-16.

**Table CFP-16 Poulsbo Fire Department 2014 Actual Response Time compared to Goals (in minutes)** 

Call	Goal	Average	90% Fractal*
All Suburban	8	5:51	9:45
Priority Suburban	8	5:10	8:18
Fire Suburban	8	5:16	8:37

<sup>\*</sup>Ability to response in specified time frame with 90% assurance.

Source: Kitsap County Fire District 18, 2014 Annual Report of Service Level Objections

Planning for fire protection and medical facilities that use this method is often tied to a geographic distribution of stations and the equipment housed at each facility. Typically, stations should be located within a five-mile radius of each other to provide blanket coverage. With this method, a population increase does not have as direct an effect on fire protection facility needs as it would on other types of capital facilities, such as water systems or schools. Population increases will more directly affect the number of emergency calls that a district receives, which in turn affects the number of personnel and amount of equipment needed to maintain an adequate response time.

# **Projected Capital Facility Needs**

Projected capital facilities needs are derived from the Poulsbo Fire Department chapter of the Final Kitsap County Capital Facility Plan (Kitsap County 2016). Table CFP-17 show the Poulsbo Fire Department's current and projected Level of Service, comparing current fire units per 1,000 population. The LOS analysis shows that the Poulsbo Fire Department has adequate fire units to serve its service area population during the six-year capital improvement period.

Table CFP-17 Poulsbo Fire Department Projected Level of Service - 0.54 Fire Units per 1,000 population

Time Period	Service Area Population	Fire units @ .54 per 1,000 pop	Fire units available	New Reserve or Deficiency
2010 actual	19,387	11	12	+1
2016-2022	2,465	1	12	1
projected growth	2,403		12	-1
2022 Total	21,852	12	12	0

Source: 2016 Kitsap County Capital Facility Plan

# **Project Costs and Funding Strategy**

The Poulsbo's Fire Department LOS of .54 fire units in service per 1,000 population will not require any additional fire or emergency units through the year 2021. The Poulsbo Fire Department has a 6-year non-capacity Capital Improvement Plan, which is depicted in Table CFP-18. Revenue from the current and future Fire District Tax Levies are anticipated to cover the projected capital expenses.

**Table CFP-18 Poulsbo Fire Department Capital Improvement Plan** 

Project	2016-2018	2019-2021	<b>Total Cost</b>
Capacity Increasing Projects	None	None	None
Capacity Replacement, Maintenance and Open			
Replace SCBAs (including SCBA compressor)		\$260,000	\$260,000
Replace Bunker gear	\$48,000	\$113,000	\$161,000
Medic Unit Replacement	\$243,000	\$761,000	\$1,004,000
Ongoing Hose Replacement		\$64,000	\$64,000
MCT		\$88,000	\$88,000
Replace Lifepack		\$103,000	\$103,000
Other Fire Equipment	\$9,000	\$86,000	\$95,000
Other Miscellaneous Capital Improvements	\$142,000	\$316,000	\$458,000
Replace Staff Vehicles	\$72,000	\$113,000	\$185,000
Replace Station 71 Parking Lots and Drainage		\$500,000	\$500,000
Replace Flat Roofs and Station 71 with peak roof		\$300,000	\$300,000
Replace Station 72		\$3,500,000	\$3,500,000
Add Exhaust Capture Systems, upgrade bay doors		\$450,000	\$450,000
Replace Engines at end of useful life		\$2,825,000	\$4,025,000
TOTAL	\$1,714,000	\$9,479,000	\$11,193,000
Project Revenues			
Fire District Tax Levy	\$1,714,000	\$704,000	\$2,418,000
Revenue Sources (to be determined)	\$0	\$8,775,000	\$8,775,000
TOTAL	\$1,714,000	\$9,479,000	\$11,193,000

Source: Poulsbo Fire Department 2012; BERK 2015; Fire Protection References:

Kitsap County, 2016. Final Capital Facility Plan. Kitsap County Department of Community Development, June 2016.

# **12.15 Library**

The City of Poulsbo is annexed into the Kitsap Regional Library District. The Poulsbo Library was built by, and is maintained, by the City. The Kitsap Regional Library (KRL) provides books, furnishings, equipment, and staffing. The Poulsbo Library is located within the city limits at 700 NE Lincoln Road.

In 1998, a Library Capital Facilities District was formed. This District includes properties located within the city limits as well as surrounding unincorporated areas that also use and benefit from the Poulsbo Library. The voters in this Capital Facilities District approved a \$1.6 million-dollar levy to expand the library. An interlocal agreement was approved between Kitsap County and the City. Kitsap County issued and is responsible for the debt. The City managed the construction project. Construction of the library expansion was completed in early 2001.

The Poulsbo Library is 13,558 square feet building. The Library includes a finished basement that is available for public and community meetings. The basement meeting room is used by many

community organizations, and it serves as a convenient meeting room for public agency use as well.

The Poulsbo Library is served well by its community. A Friends of the Library volunteer group serves to support the KRL and Poulsbo branch, and the City's volunteer Library Board, which in consultation with KRL, serves to offer recommendations and provide input to the City Council on the library building itself.

# **Library Service**

Kitsap Regional Library provides the library services and staffing for the Poulsbo Library, as one of nine libraries located in Kitsap County that they operate. All library cardholders are able to take advantage of the many services the KRL provides. At the Poulsbo branch classes, computer/internet access, young children story times, and book clubs are a few of the services offered. The Poulsbo Library is open 46 hours per week.

# Capital Facility Needs and Funding Strategy

The City, as maintainer of the Poulsbo Library building, had identified one capital facility expenditure - replacing the roof. The replacement is scheduled for 2017-2018 and is preliminary identified to cost \$45,000.

Funding for library capital improvements will be through the City's General Purpose Capital Improvement Fund.

# 12.16 Schools

The North Kitsap School District provides public education for the City of Poulsbo. The school district includes all of North Kitsap, bordered by Hood Canal to the west, and Puget Sound to the north and east.

The North Kitsap School District has a Capital Facility Plan, which identifies and directs the District's capital improvements for the six-year planning period 2016-2022. The District recently updated its CFP in 2016.

# **Current Service Area and Capacity**

The North Kitsap School District (NKSD) is the third largest school district in Kitsap County. It serves approximately 6,000 students within its 110 square miles. The District's twelve schools include seven elementary schools, two middle schools, two four-year high schools and one alternative high school. NKSD employees a staff of 1,000 full-time and part-time employees that support its students with all aspects of education.

The district uses the following grade level configurations: K-5 in elementary schools; 6-8 in the districts two middle schools, and 9-12 housed in two senior high schools. CFP Table -19 summarizes North Kitsap Schools and their enrollment capacity including permanent schools and portable classrooms.

Table CFP-19 North Kitsap School District - 2016 Enrollment Capacity under ESSB 6052

School	2016 Enrollment Capacity
Elementary Schools (K-5)	-
Breidablik	394
Gordon	404
Pearson	328
Poulsbo (located within city limits)	571
Suquamish	404
Vinland (located within city limits)	560
Wolfe	361
Total Elementary	3,021
Middle Schools (6-8)	
Kingston	958
Poulsbo (located within city limits)	721
Total Middle Schools	1,678
Senior High Schools (9-12)	
North Kitsap (located within city limits)	1,313
Kingston	806
Sprectum Alternative Learning Center	60
Total High School	2,194

Source: May 2016 NKSD Capital Facilities Plan 2016-2022

# Level of Service

For capacity planning purposes, the North Kitsap School District has established a Level of Service goal of 18 students per classroom for grades kindergarten through fourth grade; 27 students per classroom for fifth grade; 29 students per classroom for grades six through twelve; 8 students per self-contained special education class; and 30 students per physical education at the high school level.

# **Projected Student Enrollment**

In February 2016, NKSD contracted with a consultant to perform a demographic study in order to determine future student enrollment. The study was completed in April 2016. The projections are based upon the consultant's analysis of recent trend information and projections in population, housing and births, including projected growth within the city limits.

Based on the NKSD model, student enrollment is projected to increase by 259 students at the elementary school level, an increase of 160 students at the middle school level and to increase by 137 students at the high school level between 2015-2016 and the 2021-2022 school year. Projected student enrollment by grade span based on the District's model is provided in Table CFP-20.

Table CFP-20 Projected School Enrollment by Grade Span NKSD 2016-2022

Grade Span	Actual 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Actual Change
Elementary (K-5)	2,646	2,698	2,720	2,786	2,818	2,864	2,905	259
Middle School (6-8)	1,382	1,390	1,384	1,394	1,457	1,508	1,542	160
High School (9- 12)	1,916	1,896	1,956	1,998	1,987	2,035	2,053	137
Total	5,944	5,984	6,060	6,178	6,262	6,407	6,500	556

Source: May 2016 NKSD Capital Facilities Plan 2016-2022

Projected facility need is derived by subtracting the 2015 school facility capacity (Table CFP-19) from the 2021-22 projected student enrollment.

Table CFP-21 Projected School Enrollment 2021-2022

Type of Facility	2015 Capacity	2021-2022 Projected Enrollment	2021-2022 Facility Need**
Elementary*	2,627	2,905	278
Middle	1,678	1,542	(136)
High	2,194	2,053	(141)

<sup>\*</sup>Does not include Breidablik Elementary capacity of 394

Source: May 2016 NKSD Capital Facilities Plan 2016-2022

# Projected Capital Facility Needs

Expected student enrollment in the elementary schools (K-5) will exceed the current capacity of the elementary school facilities during the planning period. Projected increases in new students due to new housing, along with the mandated class size reductions put into effect by the State Legislature (ESSB 6052) in grades K-3, will cause NKSD's currently operating elementary schools to further exceed their capacity. Based upon these projections, the District is evaluating the need to reopen Breidablik Elementary to provide additional classrooms. This is in lieu of purchasing additional portables.

Reopening Breidablik Elementary, which has been closed in 2013, will require a significant financial investment to restore systems that have been neglected or suffered from vandalism.

# NKSD 6-year Capital Improvement Program

The NKSD Capital Facility Plan dated May 2016, identifies reopening Breidablik Elementary in order to accommodate the expected student enrollment. While the projected student enrollment for the middle and high schools are within the existing capacity during the planning period, if

<sup>\*\*</sup> Negative numbers indicated overhoused (i.e. sufficient capacity); positive number indicated underhoused (i.e. insufficient capacity).

actual and expected growth trends continue, the District should also evaluate capacity needs for its middle and high schools in the next 6-year Capital Facility Plan (2022-2028).

The identified needed improvements to Breidablik Elementary are as follows:

Table CFP-22 NKSD Six-Year Capital Improvement Program

Project	2016-2022	<b>Funding Source</b>
Reopen Breidablik Elementary		
Replace Roofing	\$380,000	
Furniture (desks, chairs, etc.)	\$280,000	
IT Equipment (computers, etc.)	\$240,000	
Phone and Computer Wiring	\$150,000	
Library Books	\$125,000	
Network Wiring	\$50,000	Cananal Fund Canital
HVAC repairs and replacement	\$40,000	General Fund, Capital Projects Fund,
PE Equipment	\$30,000	Impact/Mitigation Fees
Replace Kitchen Equipment	\$30,000	Impact/wittigation rees
Plumbing Repairs and Replacement	\$15,000	
Floor Covering Repairs and Replacement	\$15,000	
Sonitrol Upgrades	\$15,000	
Phones	\$10,000	
Playground Equipment Repairs and Replacement	\$10,000	
	TOTA	AL \$1,135,000

Source: May 2016 NKSD Capital Facilities Plan 2016-2022

Note: Should the District elect not to reopen Breidablik Elementary, additional capacity will need to be created by adding portable classrooms to elementary sites.

# School Facilities Funding Strategy

Funding of school facilities is secured from a number of sources, the primary source as voter-approved bonds. Other sources include State matching funds and developer impact (or mitigation) fees.

### **General Fund**

The NKSD General Fund revenues are primarily from state funds, special maintenance and operations levy funds, federal funds and fees. These revenues are used for financing the current day to day operations of the school district, such as instructional programs for students, food services, maintenance and pupil transportation.

# **Capital Projects Fund**

The NKSD Capital Projects Fund provides for acquisition of lands or buildings, major modernization of buildings and other property, and acquisition of equipment, including technology systems. The Capital Projects Fund is generally financed from the proceeds from the sale of bonds, state matching revenues, lease or sale of surplus real property, interest earnings and special levies.

### **General Obligation Bonds**

Bonds are typically used to fund construction of new schools and other capital improvement projects. A 60% voter approval is required to pass a bond. Bonds are then retired through the collection of property taxes.

The NKSD currently has an outstanding bond indebtedness of \$21.8 million and a debt capacity of \$271 million. The District is anticipating the need for a capital projects bond in the near future.

#### **State Match Funds**

State Match Funds come from the Common School Construction Fund. Bonds are sold on behalf of the fund then retired from revenues accruing predominantly from the sale of renewable resources (i.e. timber) from State school lands set aside by the Enabling Act of 1889. If these sources are insufficient to meet needs, the Legislature can appropriate funds or the State Board of Education can ration project funding on a priority basis.

School Districts may qualify for State matching funds for specific capital projects based on an eligibility system. Eligible projects are prioritized for allocation of available funding resources based on prioritized categories.

State match funds are available to help districts with the construction costs for enrollment and modernization related school construction projects, but cannot be used for site acquisition, the purchase of portables or for normal building maintenance. Often school districts must front fund a project with local funds, even if qualified for State matching funds, with the State's share of the project funding as a reimbursement payment to the District.

# **New Development Impact Fees/Mitigation Fees**

Authority for local jurisdictions to condition new development on the mitigation of the school impacts is provided for under the State Subdivision Act Chapter 58.17 RCW; the State Environmental Policy Act (SEPA) Chapter 43.21C RCW, and the Growth Management Act, Chapter 36.70A RCW.

Subdivision Act Mitigation. RCW 58.17.110 requires that the permitting jurisdiction find that proposed plats adequately provide for schools and school grounds. The proposed development must provide land sufficient to ensure that such facilities are provided for proposed new students.

SEPA Mitigation. SEPA provides that local jurisdictions may conditional approval of a new development to mitigate specific adverse environmental impacts which are identified in SEPA environmental documents.

*GMA Mitigation*. The Growth Management Act has specifically identified schools as a facility in which impact fees can be assessed on new growth development projects. Enacting a school impact fee would ensure that new development pays its proportionate share of the cost of school facilities that are reasonably related to new development.