

# POPULATION ANALYSIS NORTH OLYMPIC LIBRARY SYSTEM A larger library for Sequim?

## Needs Assessment and Feasibility Study : Interim Report

September 26<sup>th</sup>, 2013

### INTRODUCTION

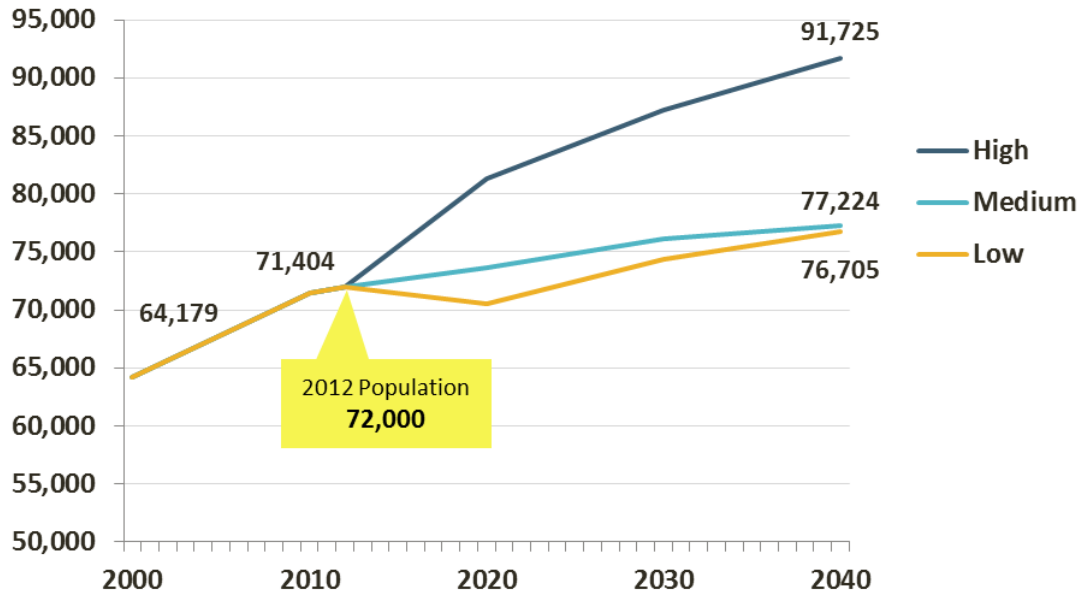
The North Olympic Library System (NOLS) is exploring the feasibility of a larger Sequim Branch Library. To understand the future needs of the Sequim Dungeness Valley community, library leaders need a transparent projection of the library's service population through 2043, the thirty-year planning horizon for a possible library expansion. This document presents analysis of the current population structure and future population projections based on common population assumptions for the region.

Washington state law allows libraries to establish a service area, known as a Library Capital Facilities Area (LCFA), as a taxing district to fund library facilities, improvements, furniture, collections, and other capital needs ([RCW 27.15.010](#)). The LCFA of the Sequim Branch Library matches the Sequim School District boundaries, including the population residing in the area from approximately Blue Mountain Road as the western boundary to the Clallam County border as the eastern border.

### POPULATION PROJECTIONS

Population projections are based on the Washington State Office of Financial Management's (OFM) 2012 Growth Management Act county projections. OFM makes high, medium, and low range projections for each county based on demographic trends, standard population dynamics, and the strength of Washington's economy compared to California and the rest of the United States. OFM does not make projections for subareas of counties. Exhibit 1 presents Clallam County's population growth from 2000 to 2012 and OFM's projections through 2040.

**Exhibit 1**  
**Clallam County Growth Projections**



Source: Office of Financial Management, 2012; BERK, 2013.

- The high projection is substantially more than the medium and low projections, and it assumes an average annual rate of growth of about 1%.
- From 2000 to 2010 the County’s population grew at an average annual rate of 2.2%.
- The medium and low projections predict similar total projected population by 2040. Both would add about 5,000 people to the county’s population over the next 30 years.
- The low projection assumes the population decreases through 2020 and then increases until 2040.

### Service Area Definition and Approach

OFM’s projections for Clallam County drive population projections for the Sequim Branch Library. This ensures that the library system’s projected population will be consistent with the County’s overall projected growth.

This analysis uses the boundaries of the Sequim School District and U.S. Census Bureau Blocks and Tracts to determine the library service area’s share of county population. U.S. Census Tracts are commonly used as approximation of neighborhoods. U.S. Census Blocks compose census tracts and is the smallest geographic unit for which Census data is published. The U.S. Census provides household economics data at the Census Tract level, and population and household structure data at the Census Block level. Census Blocks reasonably match service area boundaries, though Census Tracts do not. As a result, the household income percentages are approximations for a slightly larger geographic area.

The most accurate population count is the U.S. Census, which is conducted every 10 years on years ending with “0”. To determine the library system’s 2012 population, the analysis uses OFM’s Small Area Estimate program, which estimates the population for school districts between census years. OFM estimates a 2012 population of 29,728 for the Sequim School District.

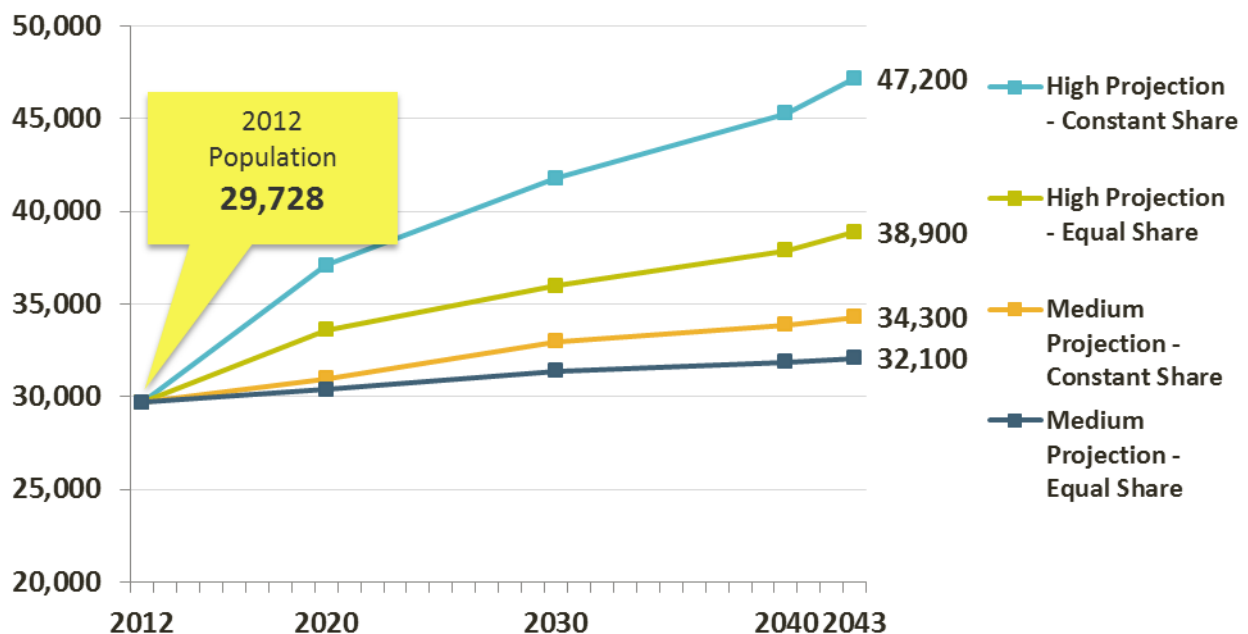
## Service Area Projections

To project population growth for the Sequim Branch’s service area, this analysis uses two different methods to determine a range of possible population growth scenarios.

- Constant Share:** This method assumes that the school district will receive the same share of the County’s projected population growth that it realized from 2000 to 2010, which was 79.2% of the county’s population growth. The method applies this percent share to OFM’s high and medium population projections for 2040 to estimate the future population of the service area. This analysis extends the projections to 2043 using the estimated compound annual growth rate between 2012 and 2040.
- Equal Share:** This method assumes that all areas of the county (including the library system’s service area) grow at the same rate from 2012 to 2040 as OFM’s high and medium projections for the county overall. The method applies the average annual growth rates of the high and medium county projection to the school district’s 2012 population to estimate the future population of the service area.

The constant share method will result in a higher projected population total for the service area because it assumes the service area will see the vast majority of new growth in the county.

**Exhibit 2**  
**Sequim School District Projected Population Growth, 2012 – 2043**



Source: Office of Financial Management, 2012; BERK, 2013.

**Exhibit 3**  
**Sequim School District Population Estimates and Projections, 2000 – 2043**

Projection	2012	2020	2030	2040	2043
High Projection - Constant Share	29,700	37,100	41,800	45,300	47,200
High Projection - Equal Share	29,700	33,600	36,000	37,900	38,900
Medium Projection - Constant Share	29,700	31,000	33,000	33,900	34,300
Medium Projection - Equal Share	29,700	30,400	31,400	31,900	32,100

Source: Office of Financial Management, 2012; BERK, 2013.

- The High Projection – Constant Share method results in over 15,500 more people in the service area by 2040.
- The High Projection – Equal Share and Medium Projection – Constant Share methods result in a middle range of the estimates with an addition of between 4,000 and 8,000 people by 2040.
- The Medium Projection – Equal Share results in a little more than 2,000 additional people in the service area by 2040.
- The projected population for a 30 year planning period, ending in 2043, ranges from 32,100 to 47,200 people. We recommend 34,300 people as a planning target for the Sequim Branch. The Needs Assessment and Feasibility Study Steering Committee will establish the facilities target population, depending on the results of the study.

## POPULATION STRUCTURE

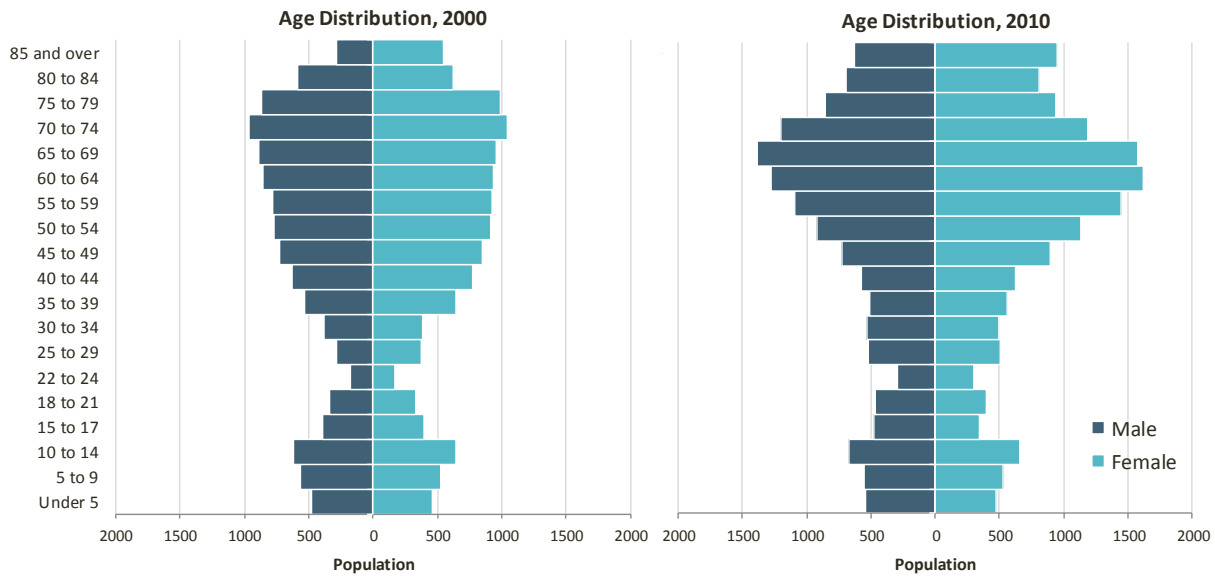
**Exhibit 4**  
**Sequim School District Household Composition, 2000 – 2010**

Income Category	2000	2010	Change	CAGR,
				2000-2010
Population	23,623	29,342	5,719	2.2%
Households	10,752	13,834	3,082	2.6%
HH with Children	2,161	2,321	160	0.7%
<i>Percent of HHs</i>	<i>20.1%</i>	<i>16.8%</i>		
Average HH Size	2.20	2.12		

Source: Based on US Census Blocks, US Census 2010

- Between 2000 and 2010, the percent of households with children decreased from 20.1% to 16.8% of households.
- In comparison, in 2010, 21.2% of households in Clallam County and 27.5% of households in Washington State had children.

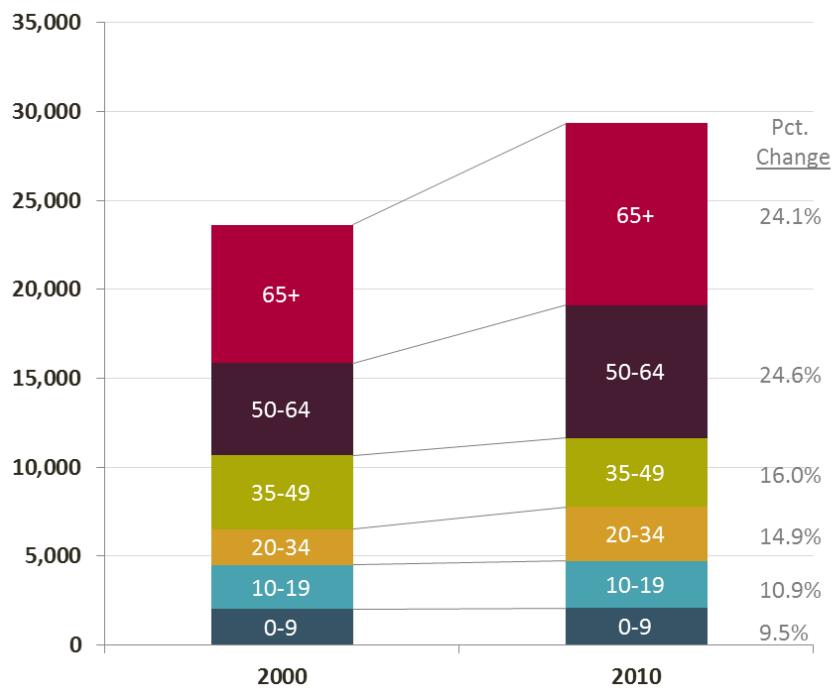
### Exhibit 5 Population Structure, Sequim School District\* 2000 – 2010



Source: Based on US Census Blocks, US Census 2010; BERK, 2013.

- The largest increase in population from 2000 to 2010 was in the age category of 50 to 75 years of age.
- Most of the other age group categories maintained similar proportions between 2000 and 2010.

### Exhibit 6 Population Change by Age Group, Sequim School District, 2000 – 2010



Source: Based on US Census Blocks, US Census 2010; BERK 2013.

**Exhibit 7**  
**Estimated Workforce Participation and Unemployment, 2010**

<b>Income Category</b>	<b>Service Area</b>		<b>Clallam County</b>		<b>Washington State</b>	
	Number	Percent	Number	Percent	Number	Percent
Total Population	29,342	100%	71,600	100%	6,817,770	100%
Population 16 and Over	25,644	87%	60,072	84%	5,424,291	80%
In Labor Force	11,077	43%	29,908	50%	3,481,463	64%
Employed	10,178	40%	26,724	44%	3,197,293	59%
Unemployed	899	8%	3,184	11%	284,170	8%

Source: US Census, 2011 5-year American Community Survey; Bureau of Labor Statistics, 2012; Office of Financial Management, 2012

- More than half of the service area’s population is over 50 years of age. This same age group grew the most from 2000 to 2010.
- The number of children in the service area, those 19 and younger, stayed the same from 2000 to 2010 despite the increase in overall population.
- The library system’s service area has a relatively low percent of the population in the labor force, with 43% of the population over 16 in the labor force. This is likely due to the large number of people near or above retirement age. For comparison, in Washington State the percent of people over 16 in the labor force is 64%, well above the service area’s total.