Orcas Island Population Study

Study prepared by Steve Smith of Madrona Voices

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The data source is the American Fact Finder, which is a division of the US Census Bureau.

See footnote on how to access the data that we used.

The 2016 Census estimate for Orcas Island is 5,408 people. This is a count of those who are the "usual residents" of Orcas Island, Washington. Follow this link for the Census definition of residency. https://www.census.gov/population/www/cen2010/resid_rules/resid_rules.html

The following table, Table 1, reports the population by age and by gender for Orcas Island.

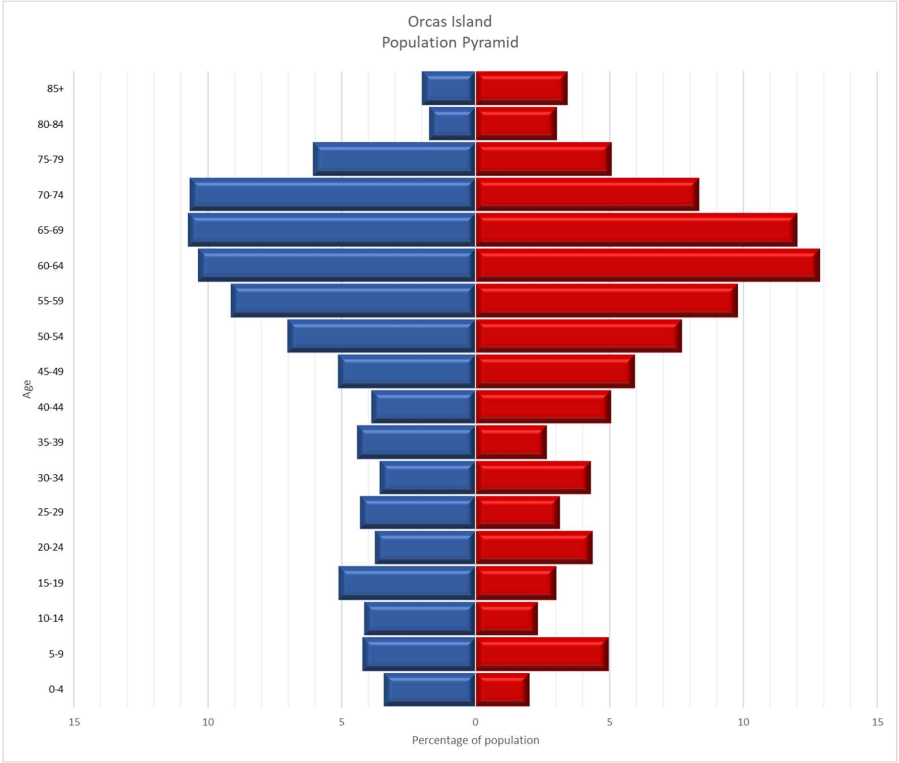Table 1 – Orcas Island Population Estimate by Age and Gender

2016 Data	Total population		5,408
		Male	Female
		2,615	2,793

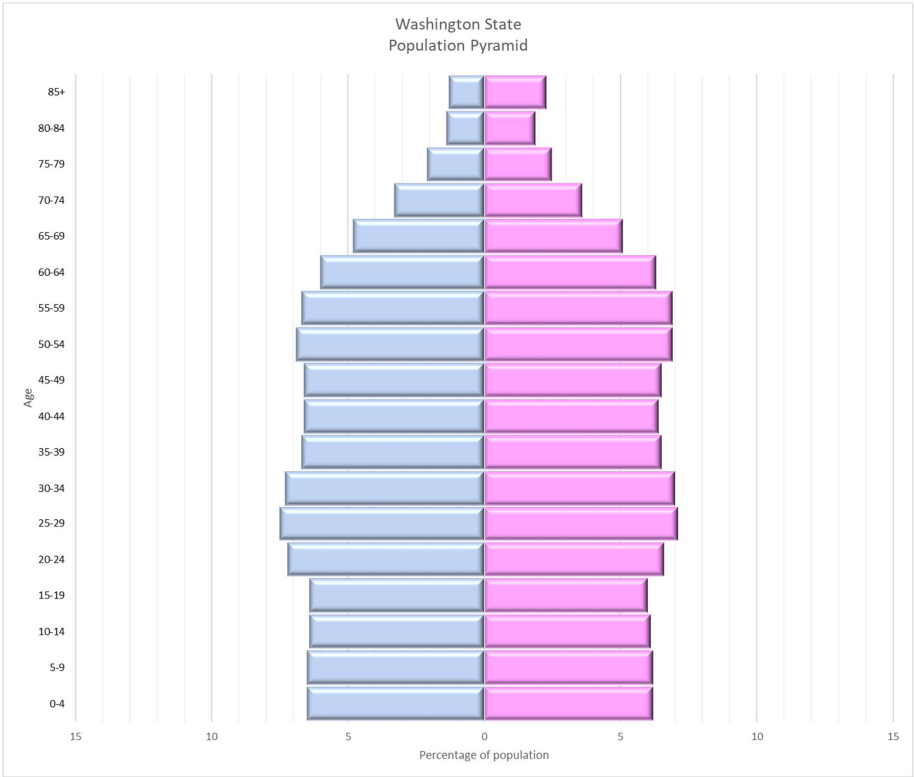| Ref	Age	OI Male	OI Female
1	Under 5 years	90	56
2	5 to 9 years	111	139
3	10 to 14 years	109	65
4	15 to 17 years	81	64
5	18 and 19 years	53	20
6	20 years	29	11
7	21 years	18	26
8	22 to 24 years	52	85
9	25 to 29 years	113	88
10	30 to 34 years	94	120
11	35 to 39 years	116	74
12	40 to 44 years	102	141
13	45 to 49 years	135	166
14	50 to 54 years	184	215
15	55 to 59 years	239	273
16	60 and 61 years	71	158
17	62 to 64 years	200	201
18	65 and 66 years	99	206
19	67 to 69 years	182	129
20	70 to 74 years	279	233
21	75 to 79 years	159	142
22	80 to 84 years	46	85
23	Over 85 years	53	96
	18+population	2,224	2,469
	Ratio	47%	53%

The Table 1 numbers are converted to a percentage of the population, which allows us to create a pyramid. It allows us to graphically look at the same information, which makes it easier to see the pattern.

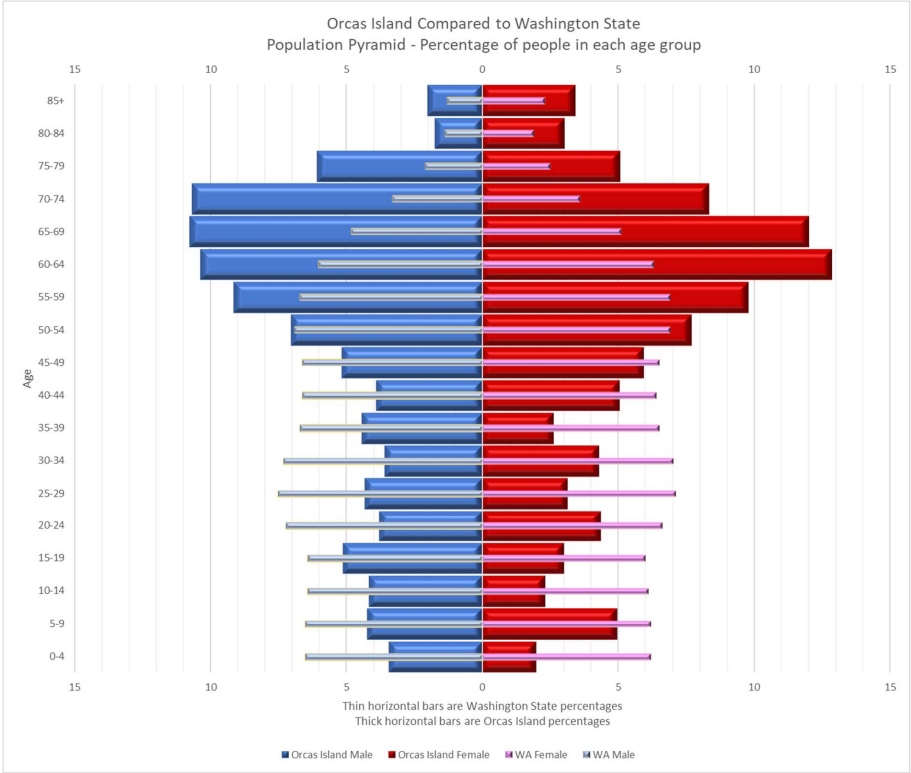OIPyramid

Orcas Island
Population Pyramid

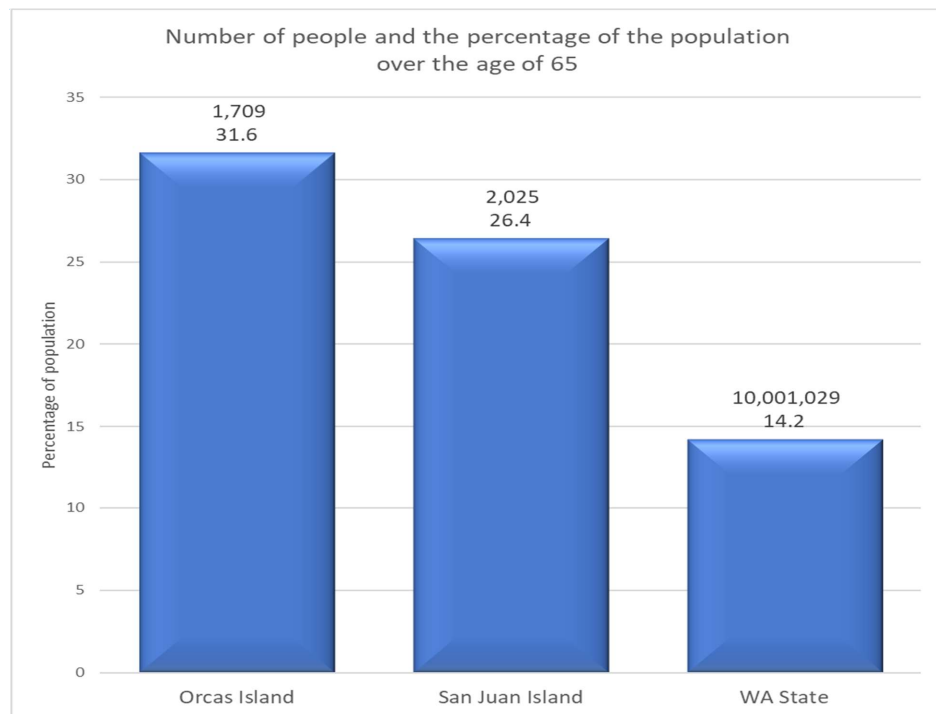Washington State population in a pyramid.

WAPyramid

Here, we combine the Orcas Island and Washington State pyramids. Orcas is represented by the wide, boldly-colored bars while Washington State is represented by the thin bars with more muted colors.

OIWAPyramid

Orcas Island Compared to Washington State
Population Pyramid - Percentage of people in each age group

Thin horizontal bars are Washington State percentages
Thick horizontal bars are Orcas Island percentages

■ Orcas Island Male   ■ Orcas Island Female   ▨ WA Female   ▨ WA Male

This looks at the population of those over the age of 65 as a percentage of the total population. The data is for 2016.

Over65

The older population results in more medical provider visits. The Centers for Disease Control has provided an estimate of the number of expected doctor visits for several age groups. This report can be found at: https://www.cdc.gov/nchs/products/databriefs/db310.htm.

When we combine the population data shown in Table 1 with the CDC estimates, we find that the Orcas Island demographic should expect 4.0 doctor visits per resident per year. See Table 2. From a survey conducted by Madrona Voices, we know approximately 13% of the island residents get their primary care off-island. As seen in the following table, then, we approximate that there are 18,795 patient visits per year.

Using the same process, we can estimate the expected number of patient visits for the State. This is 3.0 visits per year per resident. The calculation can be found in Table 2.
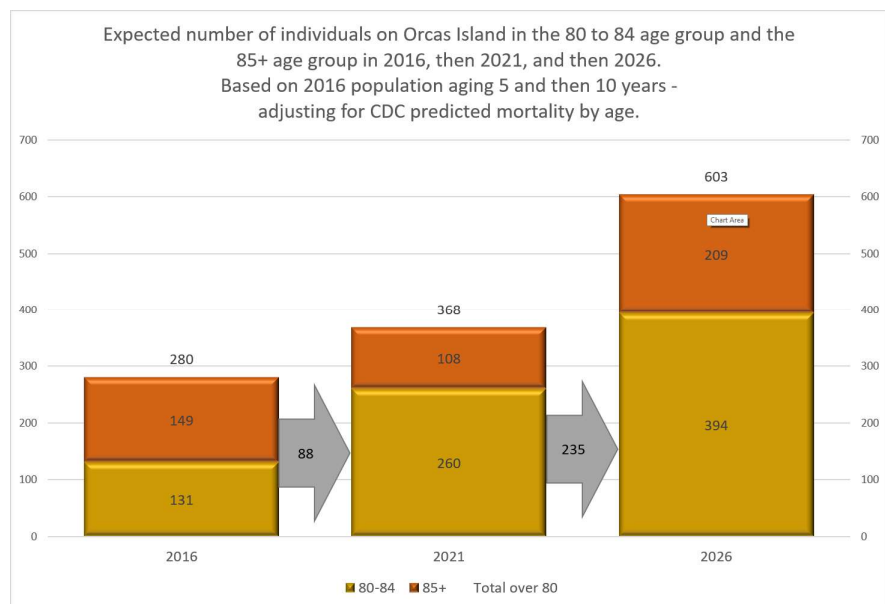
Orcas Island has 4.0 doctor visits per resident and Washington State has 3.0. All of this difference is due to the older demographic that lives on Orcas Island.

Table 2

	Orcas Island Population	Expected # of visits per 100 people	Number of Visits
Under 1	?	617	
1-19	715	180	1,287
20-44	1,142	204	2,330
45-64	1,842	366	6,742
65+	1,709	658	11,245
Number of visits if everyone used isle doc			21,604
Total population			5,408
Population not using island doctor			703
Population using island doctor			4,705
Expected visits to island docs			18,795
Avg annual doctor visits / person			4.0
	WA Population	Expected # of visits per 100 people	Number of Visits
Under 1	?	617	
1-17	1,778,803	180	3,201,846
18-44	2,436,577	204	4,970,618
45-64	1,867,339	366	6,834,461
65+	1,001,029	658	6,586,769
Expected visits to doctors			21,593,694
Total population			7,083,749
Avg annual doctor visits / person			3.0

We can show what is likely to happen to the elderly population by 2021 and 2026. Graph 1 shows the doubling of the 80-84 aged population within the next few years.

Graph 1

Expected number of individuals on Orcas Island in the 80 to 84 age group and the
85+ age group in 2016, then 2021, and then 2026.
Based on 2016 population aging 5 and then 10 years -
adjusting for CDC predicted mortality by age.

Year	80-84	85+	Total over 80
2016	131	149	280
2021	260	108	368
2026	394	209	603

(Arrows between years show increases of 88 and 235.)

Over the next eight years, there will be a significant increase in the number of people over the age of 80 and over the age of 85. The above table takes into consideration the mortality rate that increases each year, especially for males. Even with that adjustment, we can expect a large increase in the elderly population on-island in the near future.

As we age, our need for medical care increases.

How to Source the Data we use

There is no direct link to the data we use. This gives you a step-by-step guide to access the data we did. The Census produces different numbers depending on how you access their information. It is very important to always use the same process and same source when comparing data. It is also worth noting the date when you access the information. You will find that the numbers that you access today will not be the same as the numbers the Census reported several months earlier. They are constantly changing their estimates. So, the numbers you get may vary a bit from what we report here, if you source the data several months after this was written, which is in September 2018. This is true even for data that is several years old. Look at the same data file four times a year and you may see four different numbers.

To access our source data, complete the following steps:

https://factfinder.census.gov

Click on Guided Search.

Select the option you want -- for this study, it is "information about People."

Click the Next button.

Open the Plus next to Age & Sex

Click on Age, Click on Sex, Next

For the geographic type, click the drop down and select which political subdivision you want. If you want Orcas Island data, you need to select "Block Group – 150" from the drop down.

Choose State: Washington; County: San Juan.

Click on All Block Groups within San Juan County, Washington, then click "Add To Your Selections."

Next and then Next, which skips the race and ethnic groups.

Select the table or file you want. Note the years that the data is for. In our case, we use the most recent data which is the 2016 ACS 5-year estimates. The first file – Sex By Age.

This opens the data set. The information is grouped by Block Group. The first four block groups are related to Orcas Island.