



# Port of Hood River Population

Portland State Population Research Center

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## **PSUPRC**

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## 1 Introduction

In this short report we elaborate on the methodology we use to estimate the population of the Port of Hood River as of the 2020 census and for July 1st, 2023. The port of Hood River has unique legislative boundaries within Hood River County that do not match the boundaries of Census defined locations. As such, determining a population for this legislative boundary is non-trivial. Figure 1 shows a comparison of the Port of Hood river boundaries in red and Census block boundaries in black. Populations within each Census block are known, however, the Port boundary crosses through a number of Census blocks.

### Boundary Comparison

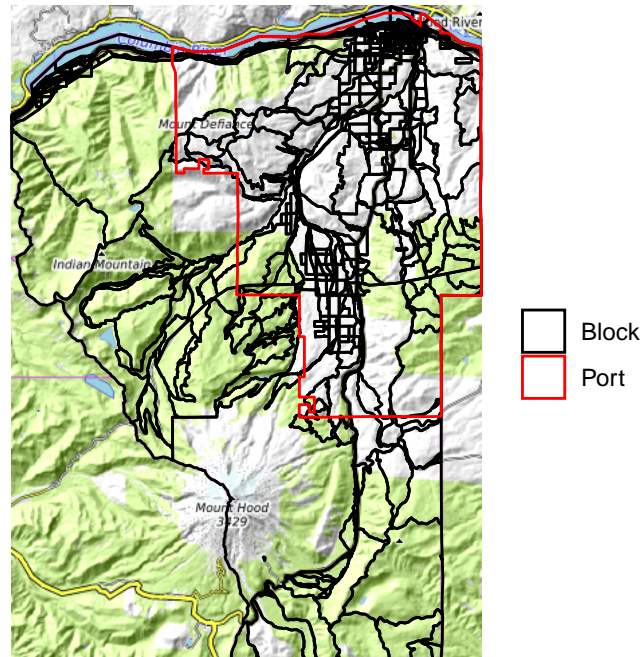


Figure 1: Port of Hood River boundaries in comparison to Census Block boundaries.

## 2 Methodology

A definitive population number for the Port of Hood River can not be determined from Census products. Given this, we outline our process for determining the population here. The Port of Hood River legislative boundary intersects with 657 of the 809 total Census blocks in Hood River County. The population total for these intersected Census blocks amounts to 22,553 individuals, a sizeable portion of the total county population which was estimated to be 23,977 individuals as of the 2020 Census. Given that the Port of Hood River legislative boundary does not completely encompass the total area of each of these Census blocks, however, this number should be seen as a reasonable upper bound of the population.

Conversely, we can consider only the Census blocks for which 90% of the total area is covered by the Port of Hood River legislative boundary. This should give us as a fair lower bound of the population given that we are considering only those Census blocks whose majority of the area falls within the Port of Hood River legislative boundary. This process gives us 618 Census blocks in the legislative boundary which combined have a population total of 22,304 individuals.

To arrive at a final population estimate, we take the population of each Census block within Hood River county, take the population count for each of these Census blocks, and redistribute each of these individuals

in the Census block area. We do this by taking the spatial area of the Census block, removing uninhabitable areas such as national parks, water masses, restricted zones, etc., accounting for the location of residential units in each Census block, and placing the population into residential units based on the estimated capacity of the residential type. This process leaves us with a exact point in space population of Hood River, which is in complete agreement with the Census block population estimates. The added benefit of this process is that it takes into account the geographic distribution of residential units in determining an accurate population total. With this new data set we may simply count the number of individuals who lie within the Port of Hood River legislative boundary. This total, gives us a population count of 22,526.

Between, April 1, 2020 and July 1, 2023, PSUPRC estimates that the county of Hood River increased in population from 23,977 to 24,406. Our analysis estimates that this population growth happened in the Port of Hood River area, increasing the port population in 2023 to 22,955.

### **3 Results**

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Our analysis estimates that the population of the Port of Hood River is 22,526 individuals as of the 2020 census. We estimate with a high degree of certainty that the true population count of the Port area falls within the range of 22,304 and 22,553 individuals. As of July 1st, 2023 we estimate the Port of Hood River population to be 22,955.