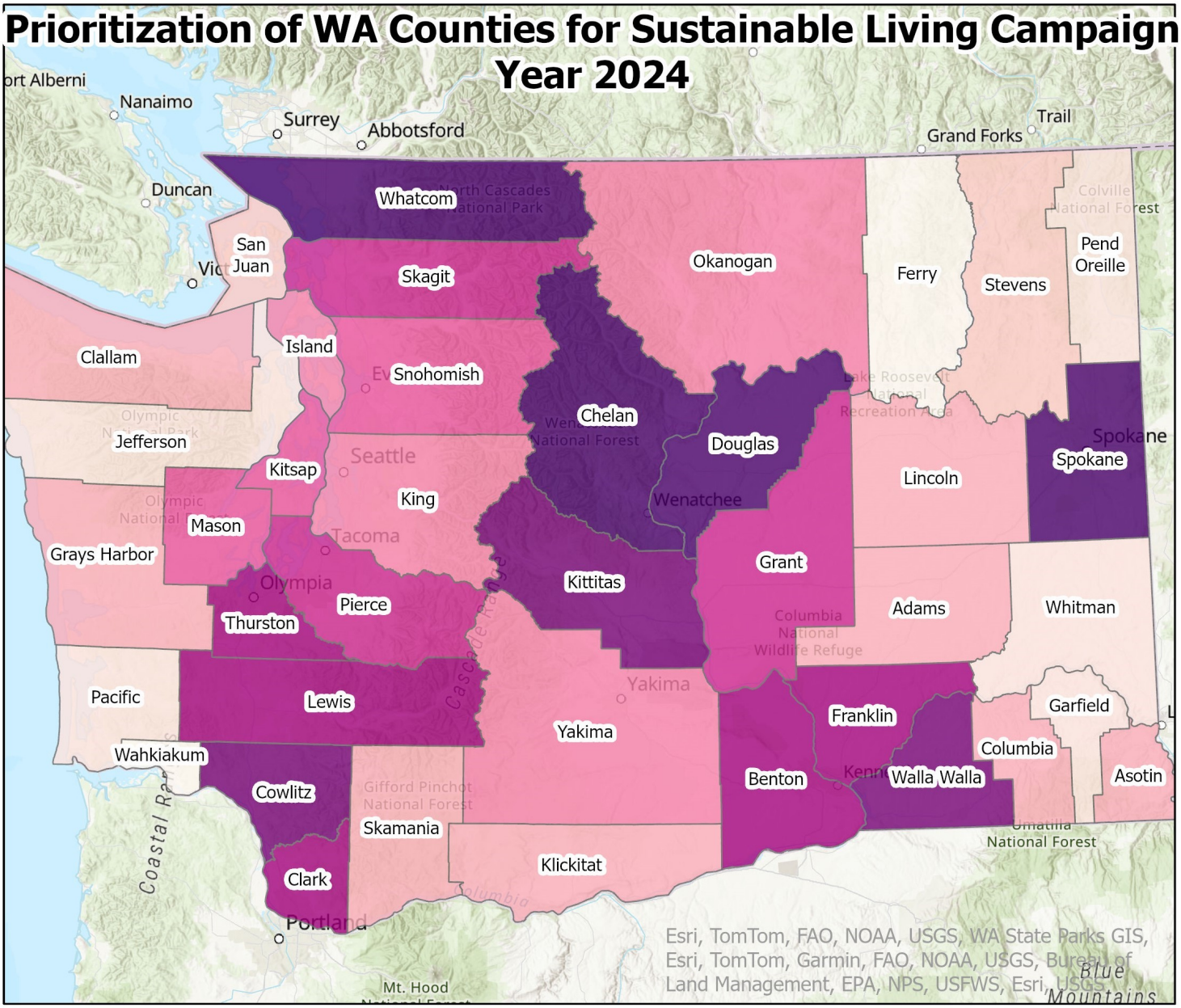
Prioritization of WA Counties for Sustainable Living Campaign Year 2024



Location of WA in United States

Legend

WA Counties

Priority based on age and income

- Less
- Medium-low
- Medium
- Medium-high
- High

N
W E
S

0 25 50 100 Miles

Name: Audrielle Staples
Date: February 20, 2024
Sources: Policy Map & Census

Analysis and Findings

Based on comprehensive data analysis, Washington State comprises 39 counties, with King County reporting a median age of 37 years and the youngest being Whitman County at 26 years, while Jefferson County has the highest median age at 59 years. King County also stands out with the highest median income of $116,340, contrasting with Whitman County, which reports the lowest at $49,345.

The integration of demographic and economic datasets involved matching records using the common field GeoID_Name. This approach facilitated a one-to-one join operation based on non-spatial attributes, linking data from the "WACounties" table with additional details on age and income from external CSV files.

Statistical analysis using the z-score revealed a median age of 42.6 years and a median household income of $72,437.80, with respective standard deviations of 7.8 years and $14,222.60. In prioritizing counties for an "alternative living" campaign, a weighted formula (0.6 for age and 0.4 for income) was applied, emphasizing the significance of age demographics in decision-making.

Counties such as Whatcom, Chelan, Douglas, and Spokane are recommended due to their younger demographic profiles and moderate income levels, despite potential inaccuracies stemming from varying population densities. Adjustments were proposed to incorporate population percentages to refine prioritization criteria, aiming to mitigate biases and improve the accuracy of spatial prioritization maps.

Improvements to this methodology include integrating population metrics and refining the Multicriteria Evaluation (MCE) equation to incorporate demographic percentages. This iterative process aims to enhance accuracy by identifying and addressing potential biases and ecological fallacies inherent in the data analysis and mapping stages.

Process of creating the map: