

Suitable Sites for Affordable Housing Development Near Snoqualmie Ski Area in King County, WA

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BACKGROUND

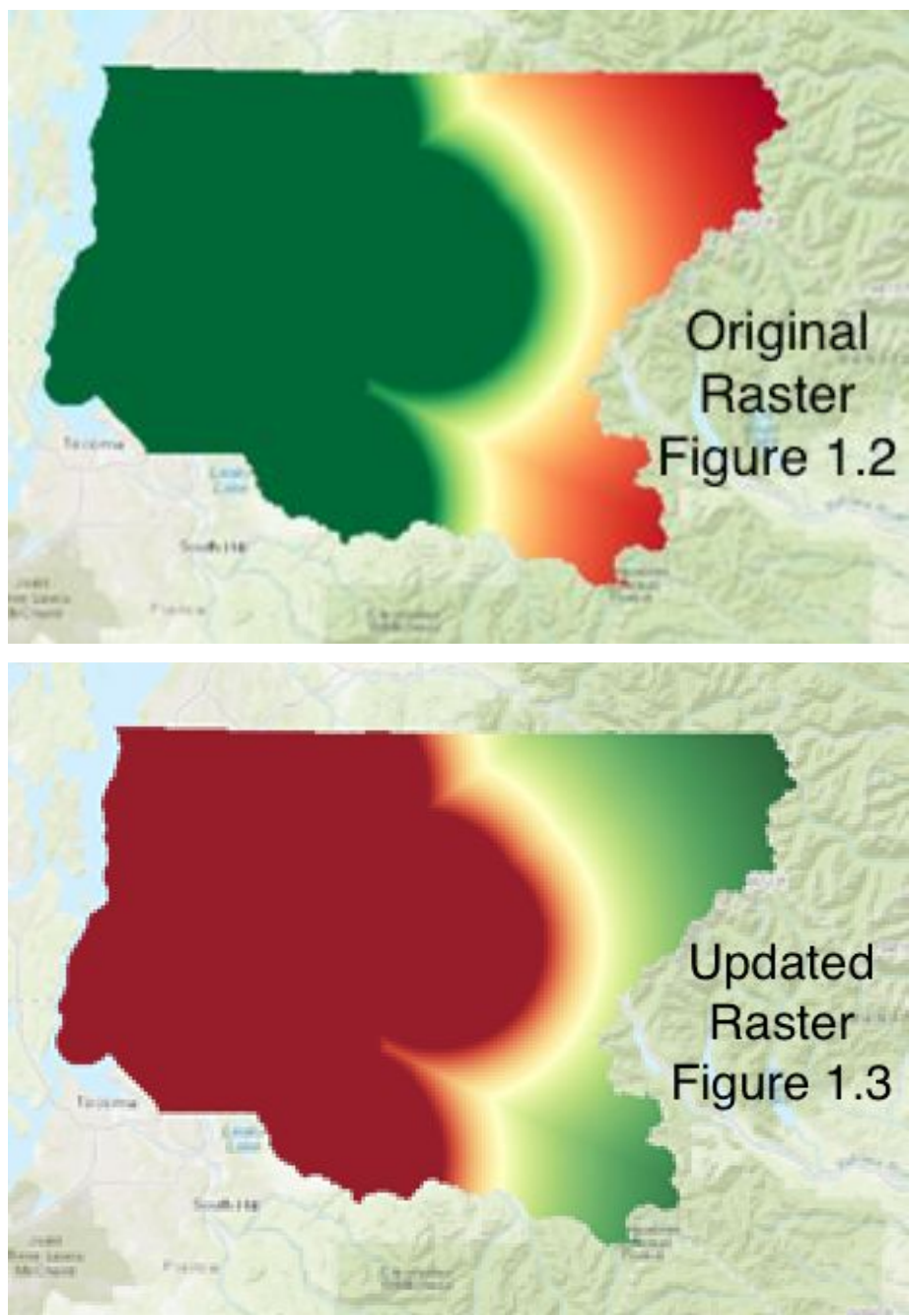
Seasonal workers employed at Snoqualmie Ski area in King County struggle to find housing that they can afford near their work. Using multiple types of data and analysis, our team found the two most suitable neighborhoods for an affordable housing development and ten top sites within those neighborhoods.

DATA ANALYSIS

The table below (figure 1.1) outlines the variables used in our analysis and how they were analyzed. Median income, median rent, and proximity to Snoqualmie Pass are weighted the highest in our analysis because these are the variables we consider the most important in identifying a suitable site. Variables weighed between 1-2 are considered less important in our analysis.

Our analysis showcased sensitivity associated with the way we scaled the affordable housing point data locations. Our analysis features a Euclidean Distance raster which considers areas of high concentration of affordable housing locations. Our initial analysis considered this criteria utilizing a "MS Small" scale, which would indicate favorable locations situated in areas with high concentrations of affordable housing locations. Alternatively, we decided the criteria should reflect a "MS Large" scale because favorable locations of an affordable housing development would be in areas where affordable housing is scarce. This change in scale reflected a drastic change in our suitability analysis, and identified more favorable locations away from the metro-Seattle area. *See figures (1.2 & 1.3)

Variable Name	Overlay or SM	Weight Multiplier	Scale	Cell Assignment	Direction	Transformation
Median Income	Suitability Model	3	1-10	Cell center	Guissian	Guissian
Median Rent	Suitability Model	3	1-10	Cell center	Guissian	Guissian
Recreation Count	Suitability Model	1	1-10	Max area	Positive	MSLarge
Healthcare	Suitability Model	1	1-10	Max area	Positive	MSLarge
Grocery Stores	Suitability Model	2	1-10	-	Negative	MSSmall
Parks	Suitability Model	1	1-10	-	Negative	MSSmall
Fire Stations	Suitability Model	1	1-10	-	Negative	MSSmall
Police Stations	Suitability Model	1	1-10	-	Negative	MSSmall
Affordable Housing Locations	Suitability Model	1	1-10	-	Negative	MSLarge
Snoqualmie Pass	Suitability Model	3	1-10	-	Negative	MSSmall
Restaurants	Overlay	1	1-10	-	Negative	MSSmall
Park Ride	Overlay	2	1-10	-	Negative	MSSmall
Transit Stops	Overlay	2	1-10	-	Negative	MSSmall
Flood Areas	Overlay	-	-	-	-	-
Elevation	Overlay	-	-	-	-	-
Antilce Roads	Overlay	-	-	-	-	-
Service Roads	Overlay	-	-	-	-	-
Trails	Overlay	-	-	-	-	-



PROJECT CRITERIA & VARIABLES

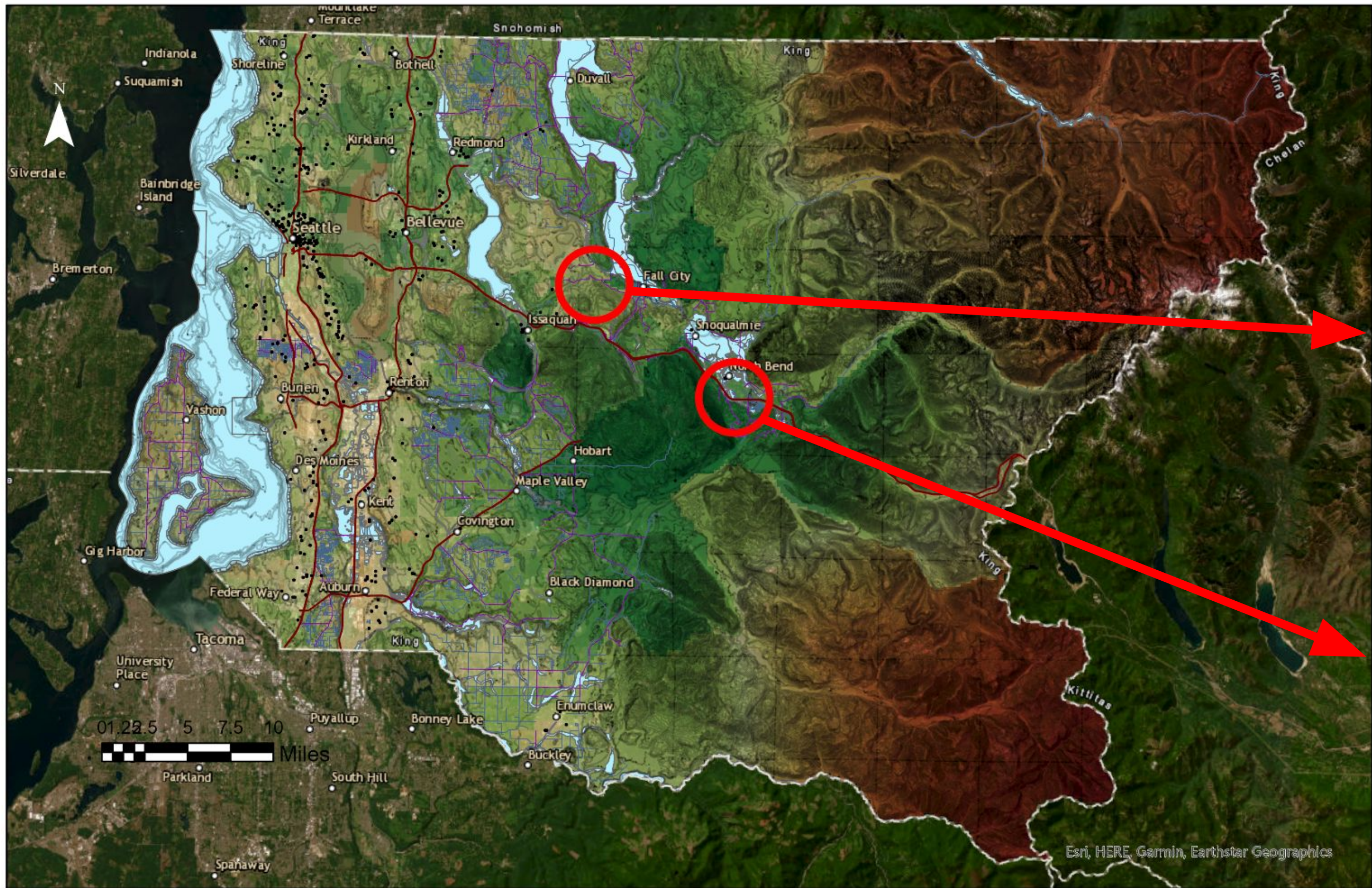
Proximity to:

- Fire Stations
- Police Stations
- Healthcare Facilities
- Transit Stops
- Park and Rides
- Parks
- Trails
- Restaurants
- Recreation Centers
- Low or No Slope
- Anti Ice Roads
- Service Roads
- Primary Roads
- High Walkability Index Areas
- Areas with Low Median Income
- Areas with High Median Rent
- Snoqualmie Ski Area

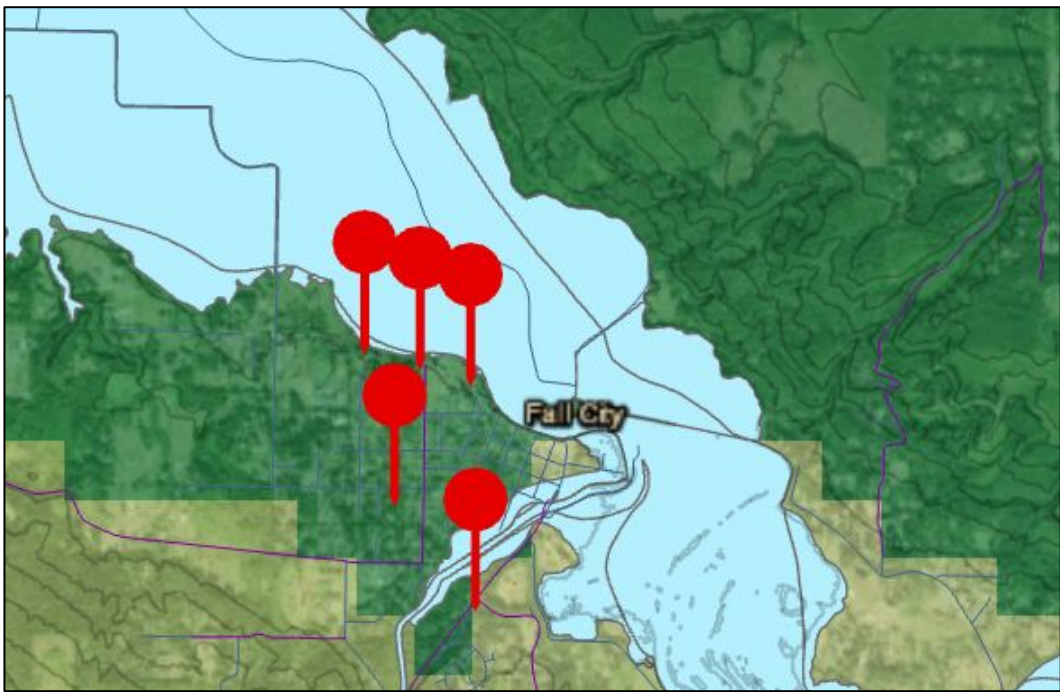
Far from:

- Other Affordable Housing
- 100 Year Flood Areas
- High Slope

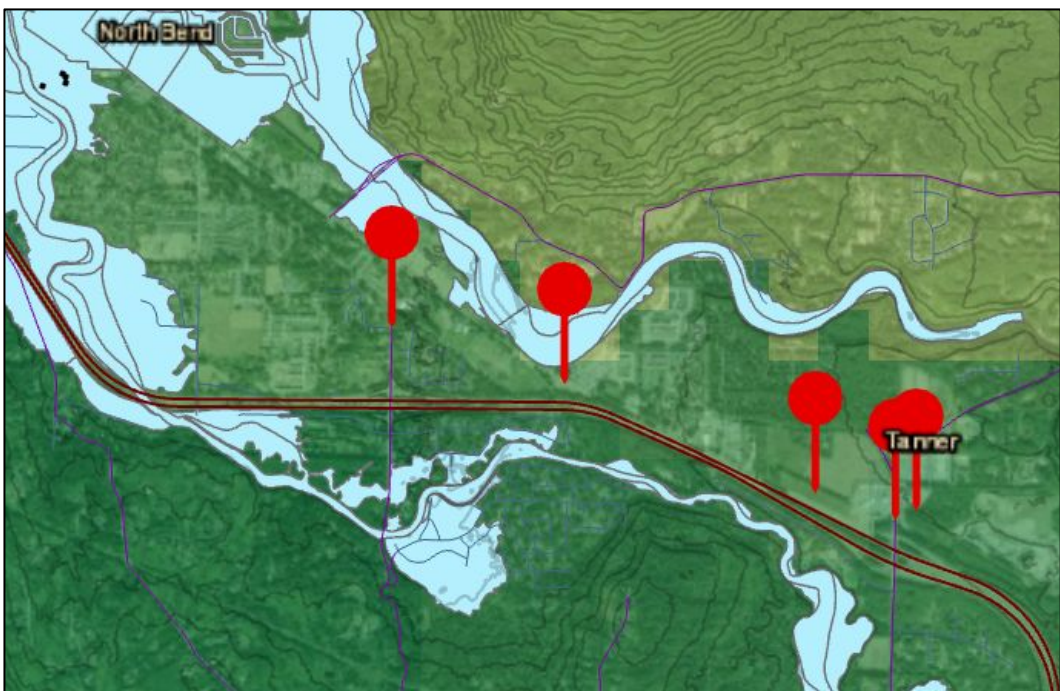
TOP NEIGHBORHOODS



FALL CITY



NORTH BEND / TANNER



TOP SITE

The site located at 46910 SE N Bend Way in North Bend (parcel # 226750-0070) was identified as the most suitable due to its proximity to amenities in North Bend, the Snoqualmie Ski Area, and onramps to I-90. In addition, the site is vacant, relatively flat compared with other areas that were identified as suitable and further from 100 year flood areas, which are prevalent along I-90.

