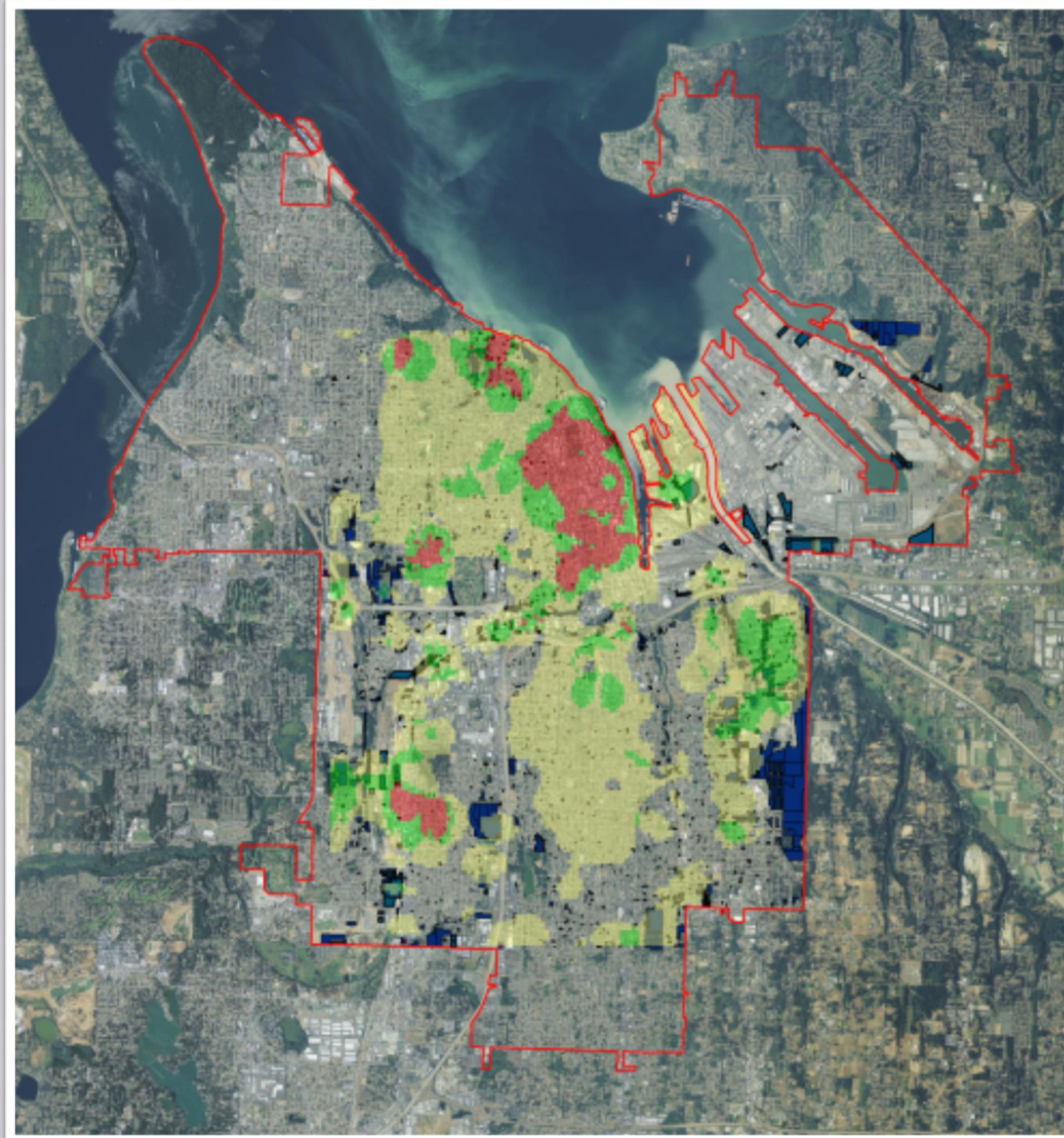
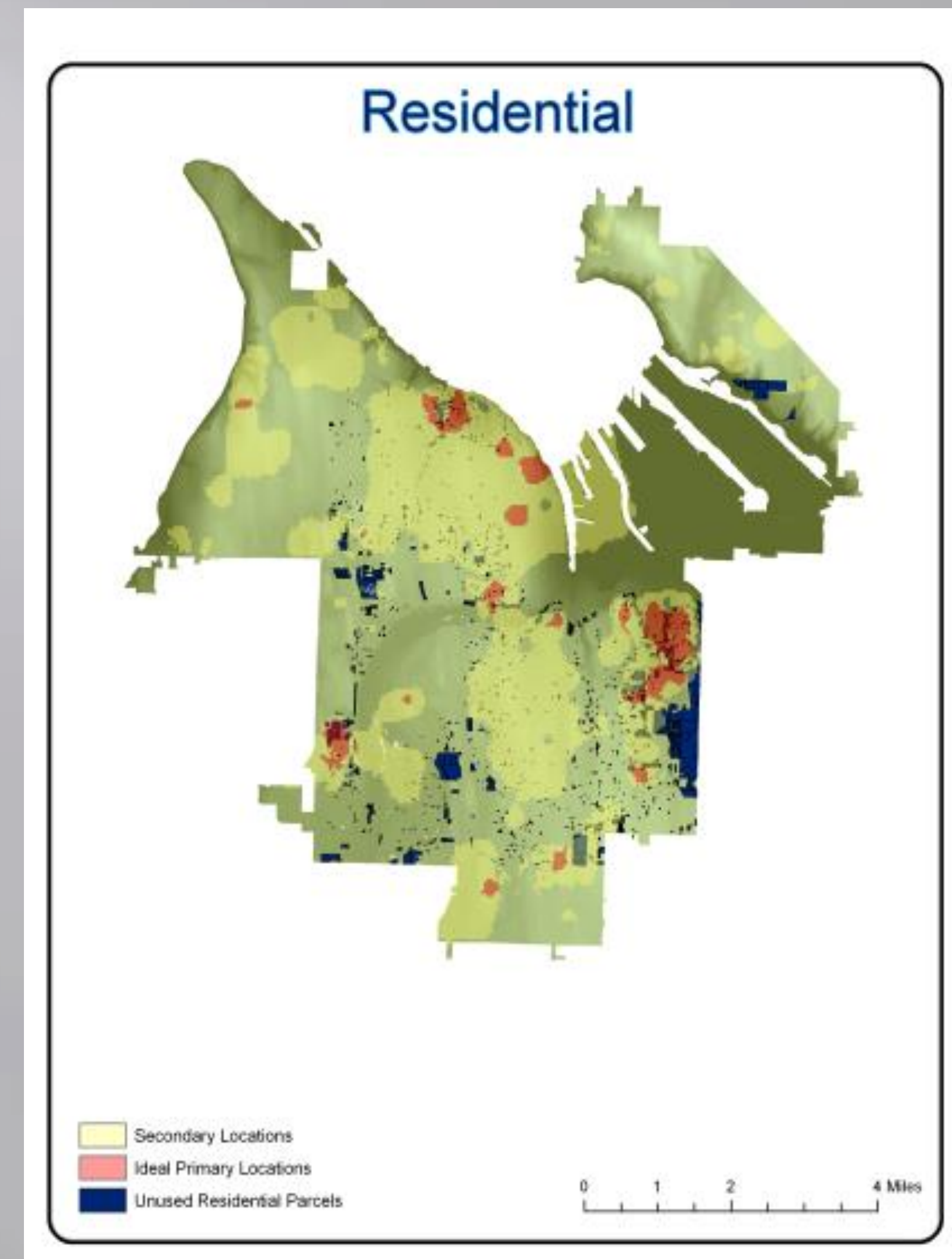


# Land Capacity Analysis for the City of Tacoma

Natasha L. Housley  
University of Washington  
GIS Certificate Program



The mixed use center and final layout was produced by adding all unused parcels, population, hospitals, schools, commercial, and industrial data in the raster calculator.



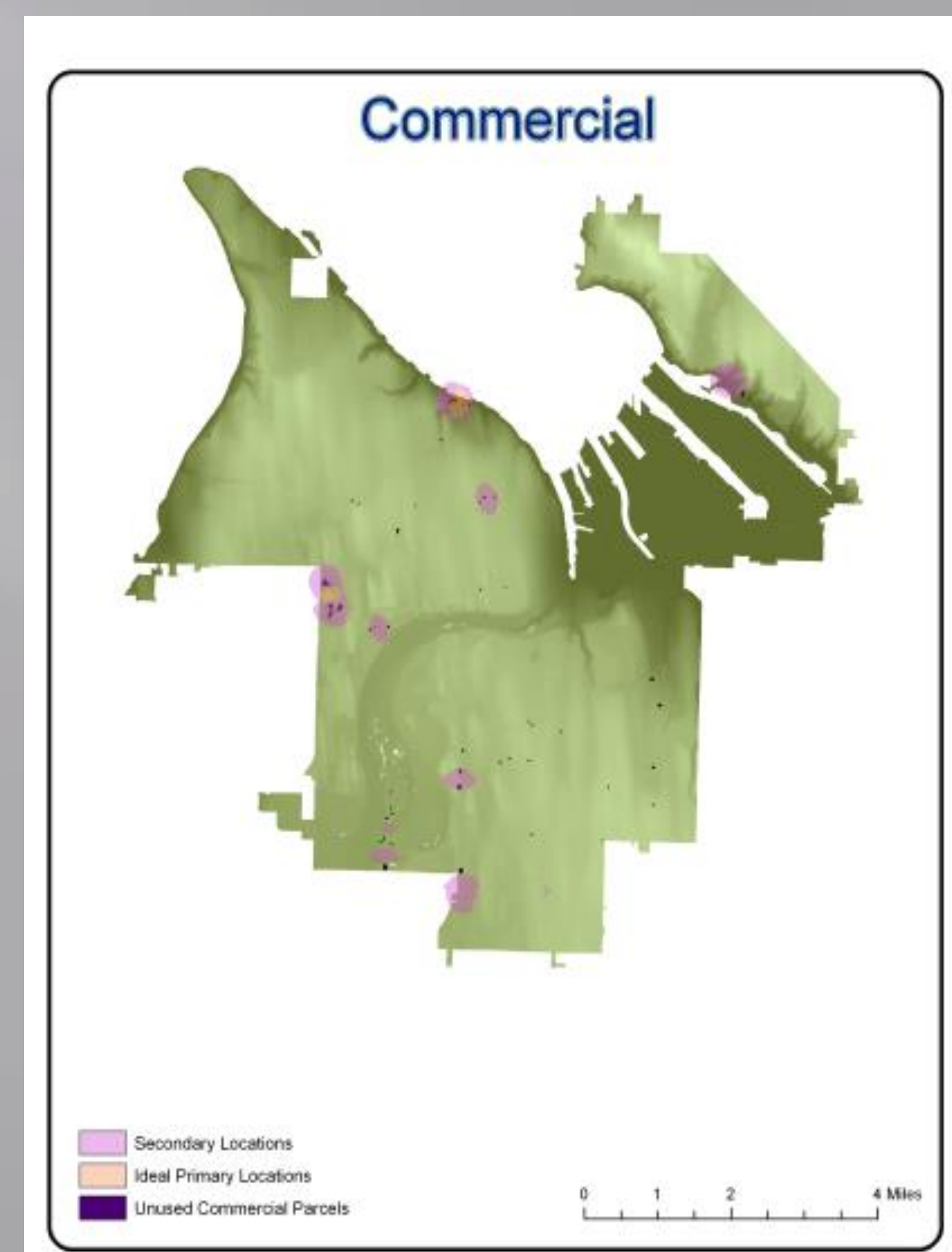
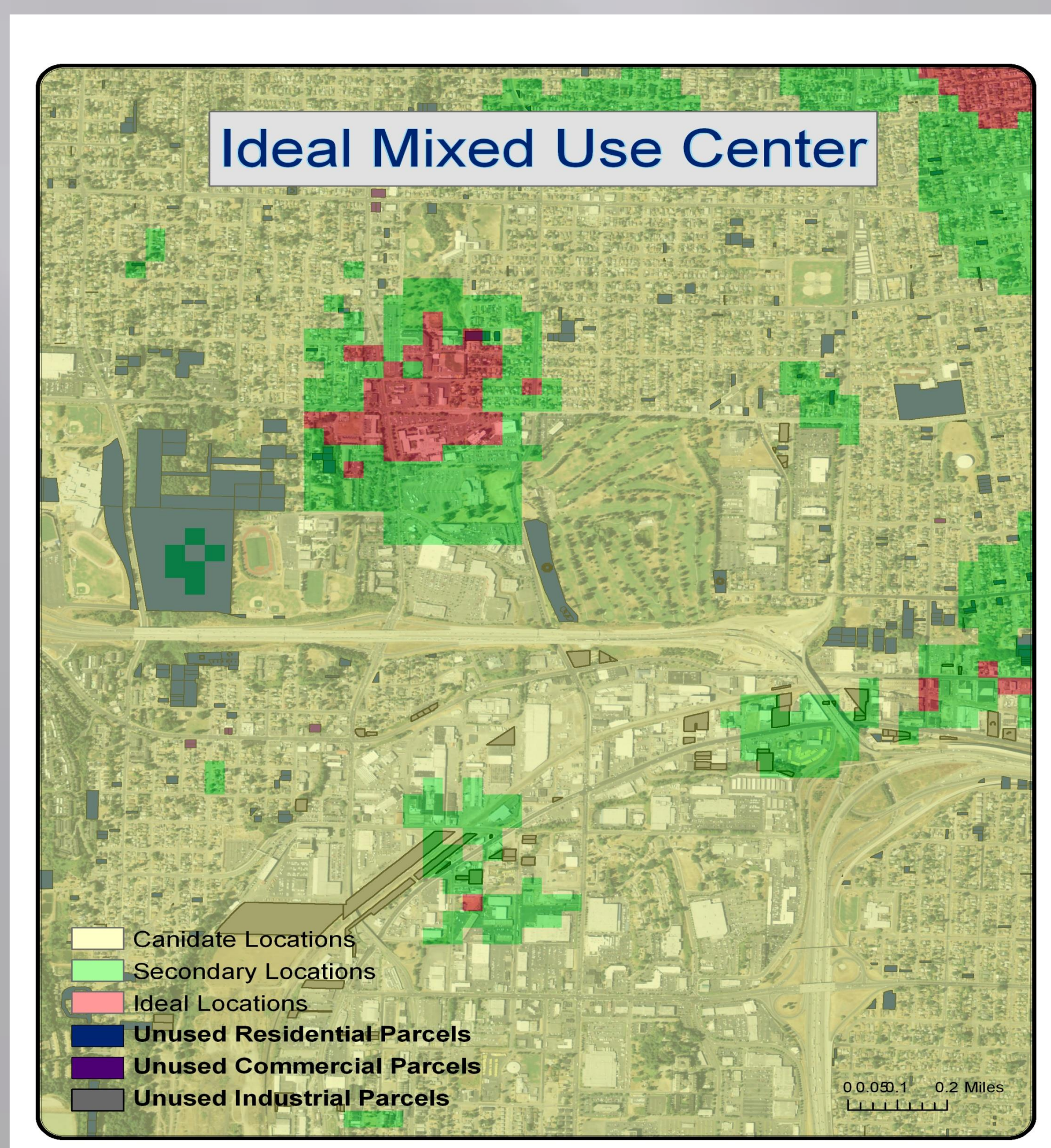
The residential map was created by adding the population with unused residential parcels.



The industrial map was created by adding population data with unused industrial parcels.

## Methods

The purpose of this analysis was to determine which land parcels in the City of Tacoma are unused. The information used was collected from a shape file that can be found on the City of Tacoma website, the parcel population data was collective from WAGDA. These three shapefiles were used in all my data analysis. To begin all the parcels were compared to the zoning shapefile to find parcels that were not in the proper zone. The three zones and parcel categories were residential, commercial, and industrial. After the analysis was finished all the unused parcels were given a classification by using density analysis. For the final product, the unused parcels have been classified by using the raster calculator to determine the best possible use for the parcels.



The commercial map was created by adding the population with unused commercial parcels.

## Purpose

The purpose of this project is to help with the reduction of sprawl. The maximization of land capacity is outlined in the City of Tacoma Comprehensive Plan. Identifying which parcels are clustered together and not being used and giving them a classification based on their attributes could help city planners with the growing population.

Acknowledgements: Dr. Matthew Kelley, Sergio Hernandez, Gabriel Rhee, Sing Wong, and everyone else that else that contributed.

Sources: NAIP (orthophoto)  
WAGDA ( all data), and  
The City of Tacoma