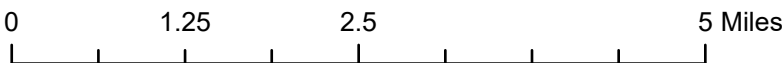
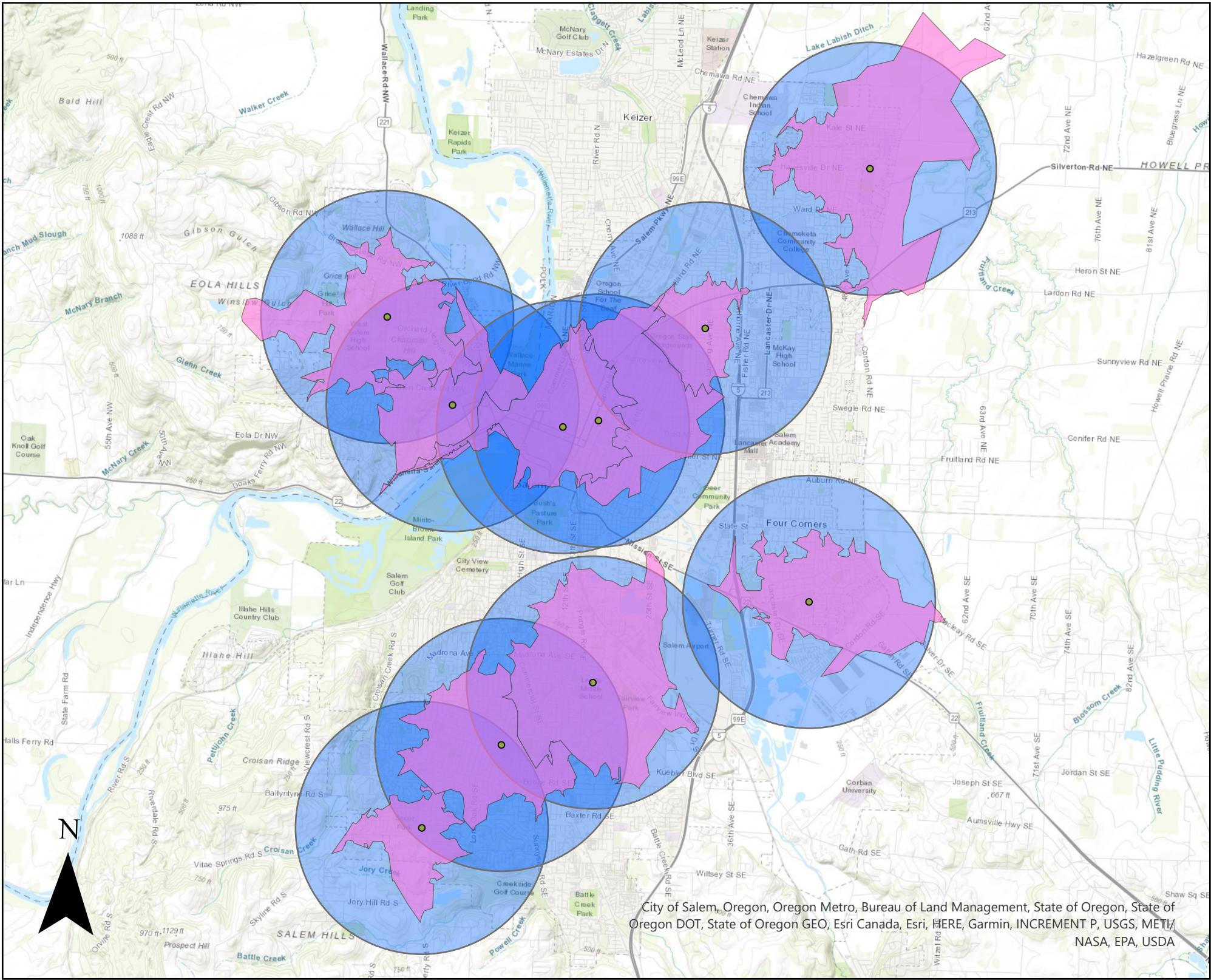


Euclidean Buffer Areas vs. Service Areas around Salem Middle Schools

Author: Hannah Siegel

Data Source: Salem Data



Legend

- Middle Schools
- ServiceArea_Generalized
- 4 Minute Drive Service Area
- 1.5 Mile Euclidean Buffer

All Buffer Areas in
Square Miles: approx.
7.068583

Service Areas in Square Miles

SCHOOL NAME	AREA (ACRES)
Stephens Middle School:	3.352809
Robert W Straub Middle School:	1.042969
Crossler Middle School:	2.617427
Judson Middle School:	3.784789
Leslie Middle School:	2.027627
Houck Middle School:	2.008897
Walker Middle School:	2.361264
Howard Street Charter School:	2.266042
Parrish Middle School:	0.949062
Waldo Middle School	4.077808

Generalized vs. Non-Generalized Service Areas

When using non-generalized, or high-precision service areas, the area around the facility often has holes or gaps for places that do not meet the criteria of drive time (or whatever else we would try to analyze). This causes an irregular shape that may have gaps even right in the center of the area, near the facility.

I used generalized service areas for my analysis because they encompass a higher area and lack holes, allowing for representation of all areas.

Buffer Areas vs. Service Areas

Buffer areas around a point or facility simply show all areas within a specific (1.5 mile) radius. However, service areas are more tailored to people’s actual access of the facility, showing all areas within a specific driving distance/time (4 minutes) of the facility. Using buffer areas provides a much more general analysis of the areas around middle schools, whereas service areas are much more precise and applicable to people who will be going to the schools.