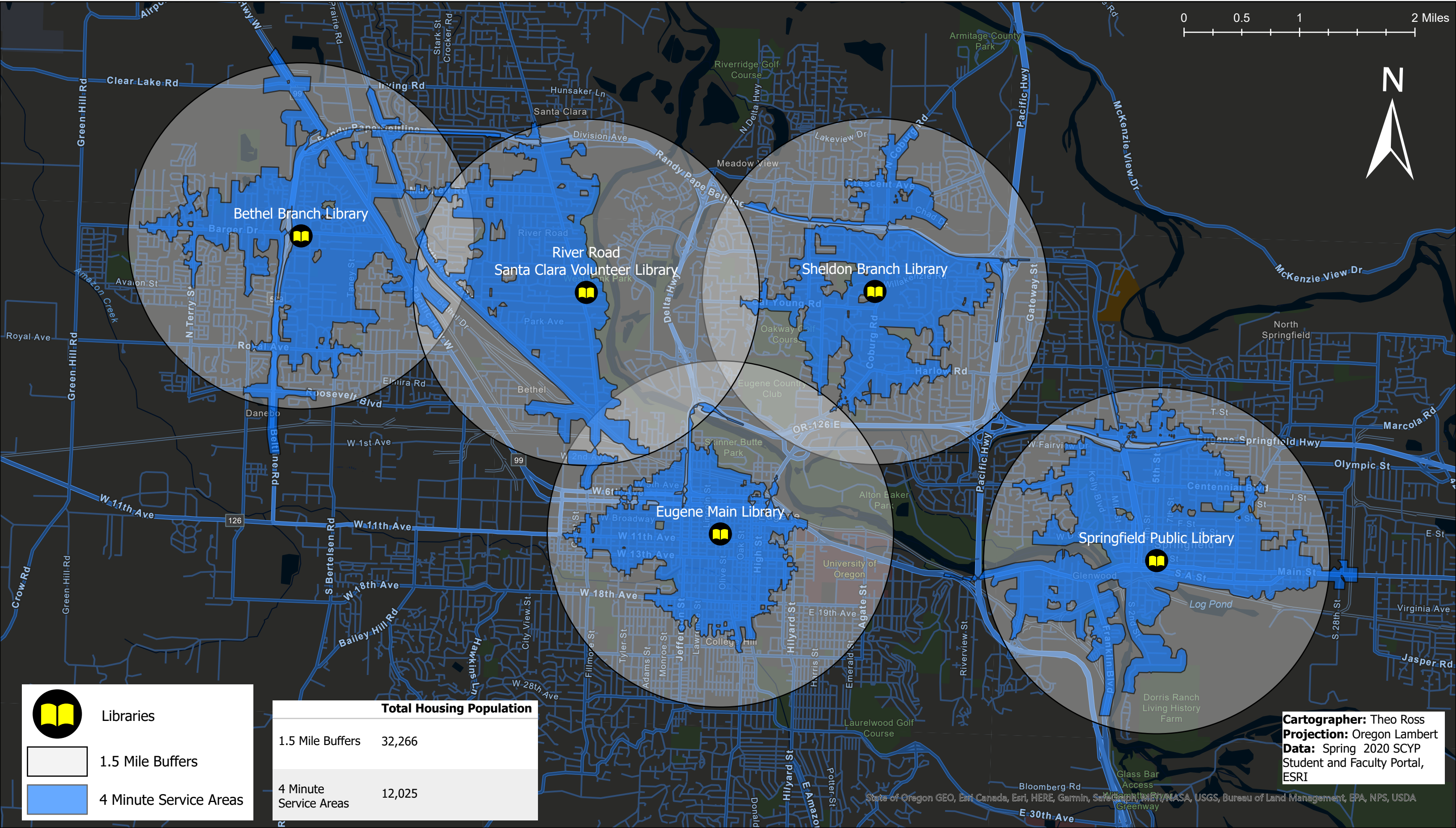

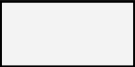


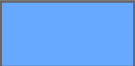
# Eugene/Springfield Library Service Areas

Euclidean Buffer vs. Network Analysis



 Libraries

 1.5 Mile Buffers

 4 Minute Service Areas

Total Housing Population	
1.5 Mile Buffers	32,266
4 Minute Service Areas	12,025

**Cartographer:** Theo Ross  
**Projection:** Oregon Lambert  
**Data:** Spring 2020 SCYP  
Student and Faculty Portal,  
ESRI

## Lab 5

For the final lab of this course, I decided to revisit the work previously done in lab 2 (involving distance analysis using euclidean buffers and road networks). I wanted to create a layout that showed the difference in area when using each analysis technique and provide additional data such as the population covered within each service area. Additionally, I wanted to create only one layout instead of separate layouts for the buffers and service areas as done in lab 2. To do this I started by creating a clean layout with a dark basemap that highlighted road networks. I then wanted to find a unique icon for the library points that made sense visually. I used a contrasting yellow to be visually distinguishable from the basemap. From here, I worked on styling the euclidean buffers for each library. I decided to use a transparent gray for the buffers that highlights areas of overlap and allows the basemap to still be visible. Finally, I styled the four minute road network service area to use a blue that was distinguishable with the basemap, but followed the coloring theme of blue signifying road networks.

After finalizing my styling decisions, I moved on to organizing the layout and adding other elements such as legends, tables, and a title. To create the legend, I used the icon used for the libraries and then the symbols for each additional layer (euclidean buffer and 4 minute service area). This was made much more efficiently than previous legends thanks to the help of Evan's suggestion to convert the legend to a graphic element. Next, I imported and cleaned up a table containing statistics on total housing population for each of the two layers. I then added a north arrow and scale bar to the layout, and I created a text box with attributions such as the cartographer, projection used, and data sources. Finally, I created the title and subtitle explaining the extent and focus of the layout. Overall, this assignment was great practice to refamiliarize myself with the analyses used for this lab and explore more options when styling and organizing my layout.