

Deliverable One: Crime in Lincoln Nebraska

The data required for this portion of the project included crime as well as police station locations to better understand their relationship with one another. To do this, I used primary symbology on both the crime count and police location layers and gave them appropriate symbols. Additionally, the data was processed to create a chart of crime by day of the week. To do this we selected attributes from the crime attribute table with weekday labels that were not equal to zero, and put them into a bar chart. From this, it is visible that the crimes are most centralized around police stations, and there is only one region in the North West region that is not protected. It is also visible that the highest crime days in this region are Tuesday and Wednesday by a margin of nearly 100 crimes per day.

Deliverable Two: Crime Surrounding Police Stations in Lincoln NE

In order to analyze the proximity of crime to police stations, I used a multiple ring buffer tool, with non-overlapping rings on the police stations with intervals of 1, 2, and 3 miles. I then spatially joined the crime layer and the multiple ring buffer with a one to one join (contains). Under output, I selected event, count to quantify the number of crimes within each ring. I then symbolized police stations with graduated colors. With this map it is visible that a majority of crime occurs within a mile and a half of a police station, and the pink X symbolizes the most appropriate area for a new police station to be built.

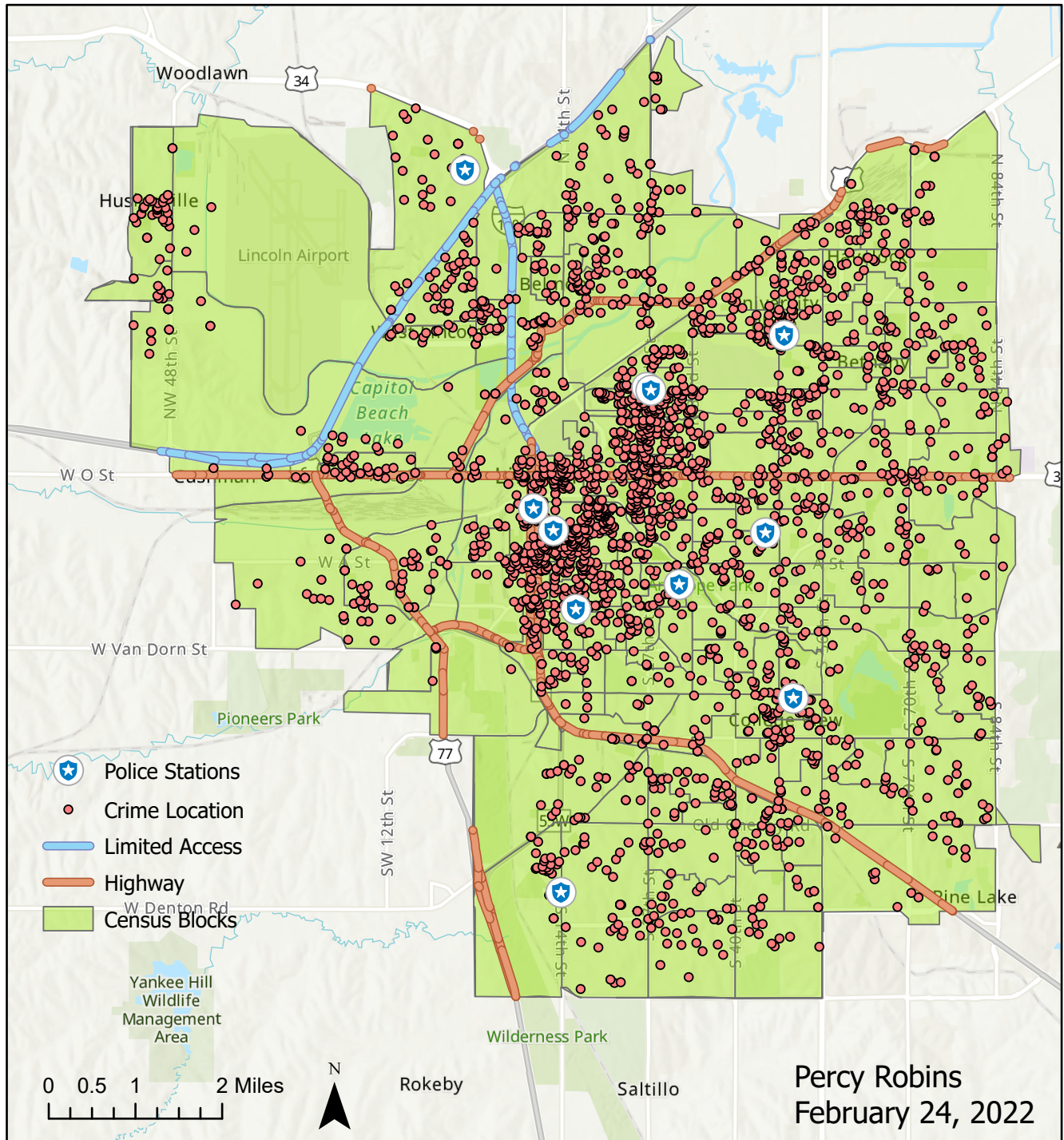
Deliverable Three: Lincoln Nebraska Crime Distribution by Type

To create this map of three different kinds of crime, I opened the crime attribute table and selected only crimes starting with a certain crime code. 4 representing assault, 5 burglary, and 6 shoplifting. I then created layers out of each selection, and used the point density tool to see the most concentrated locations. The point density tool was used on each unique layer with an output cell size of 500 and neighborhood radius of 2500. From this it is obvious that shoplifting is the most common and least grouped crime, with burglary being slightly lower and more centralized around the commercial district. The least prevalent crime of the three was assault which was mostly focused in the commercial district as well.

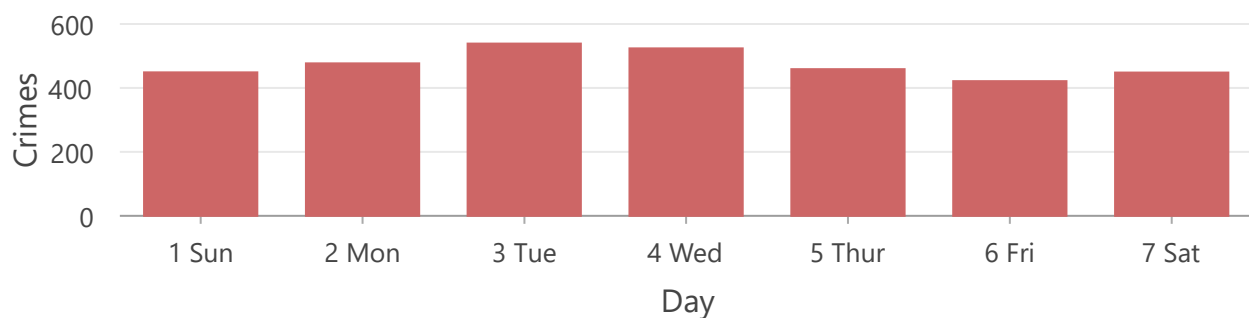
Deliverable Four: Crime Rates Over a 24 Hour Period

To create this chart of crime over a 24 hour period, I added a time field in the crime attribute table. In this time field I converted the four digit time measurements into two digits, and then merged the 0 and 24 hour as they both represented midnight. From this I created a chart with 24 bins. This shows that crime significantly increases after 6pm until around 1am.

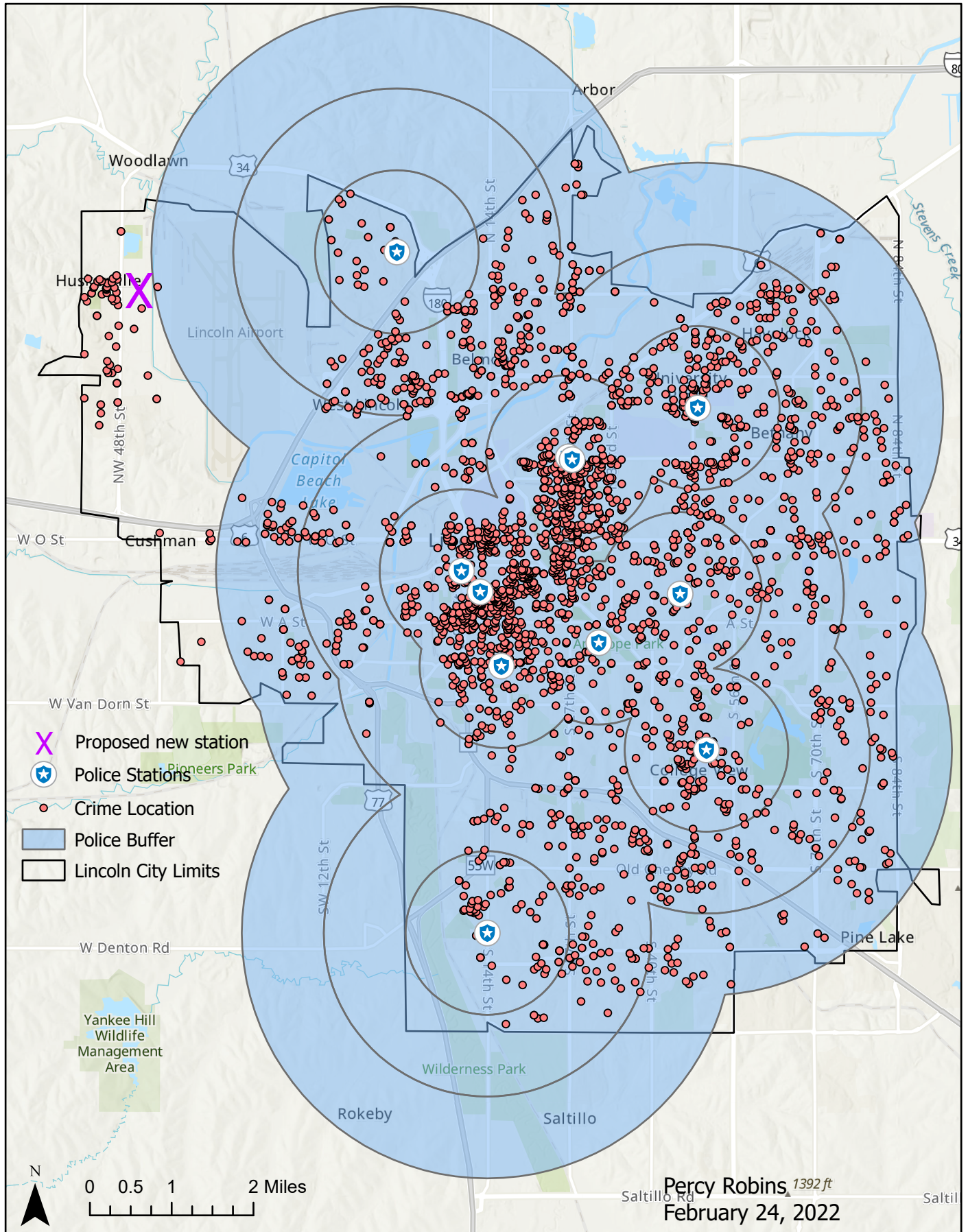
Crime in Lincoln Nebraska



Crimes per Day of the Week

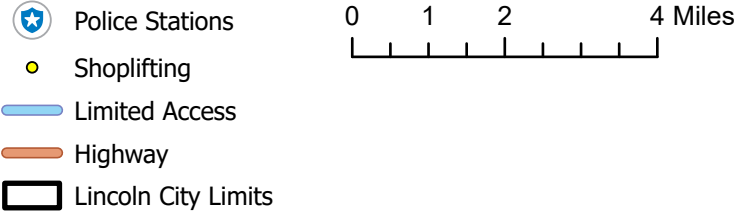
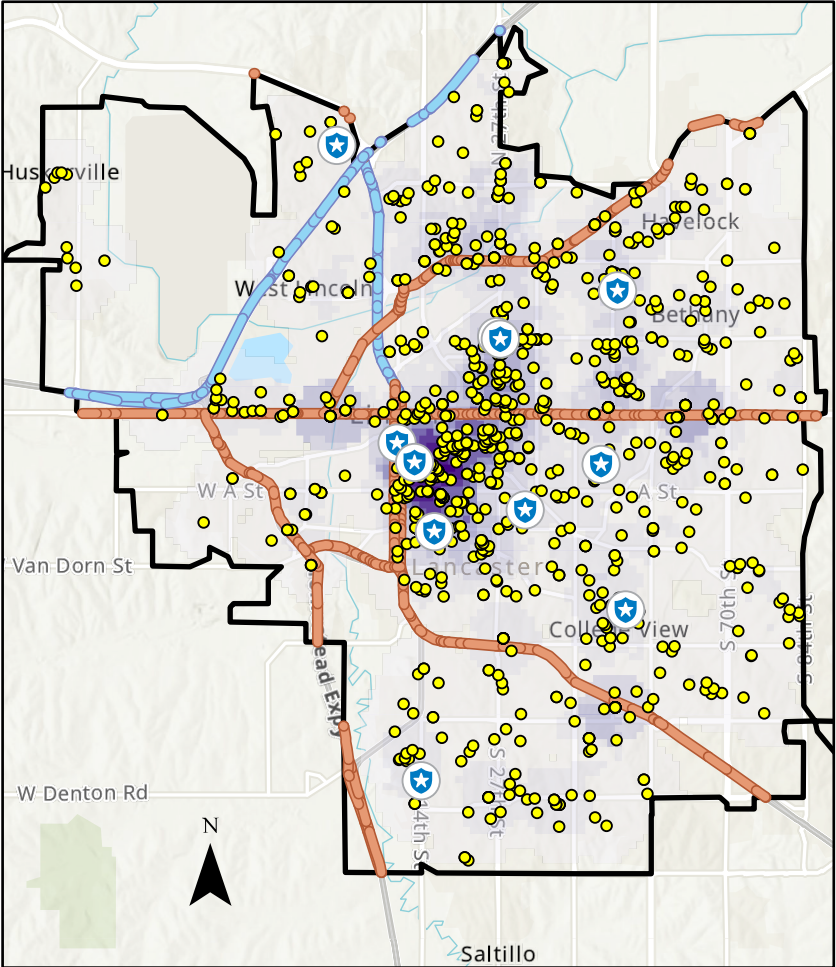


Crimes Surrounding Police Stations in Lincoln NE

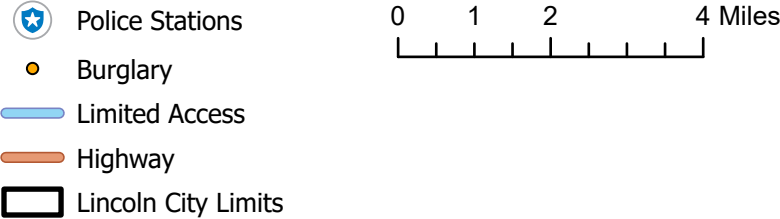
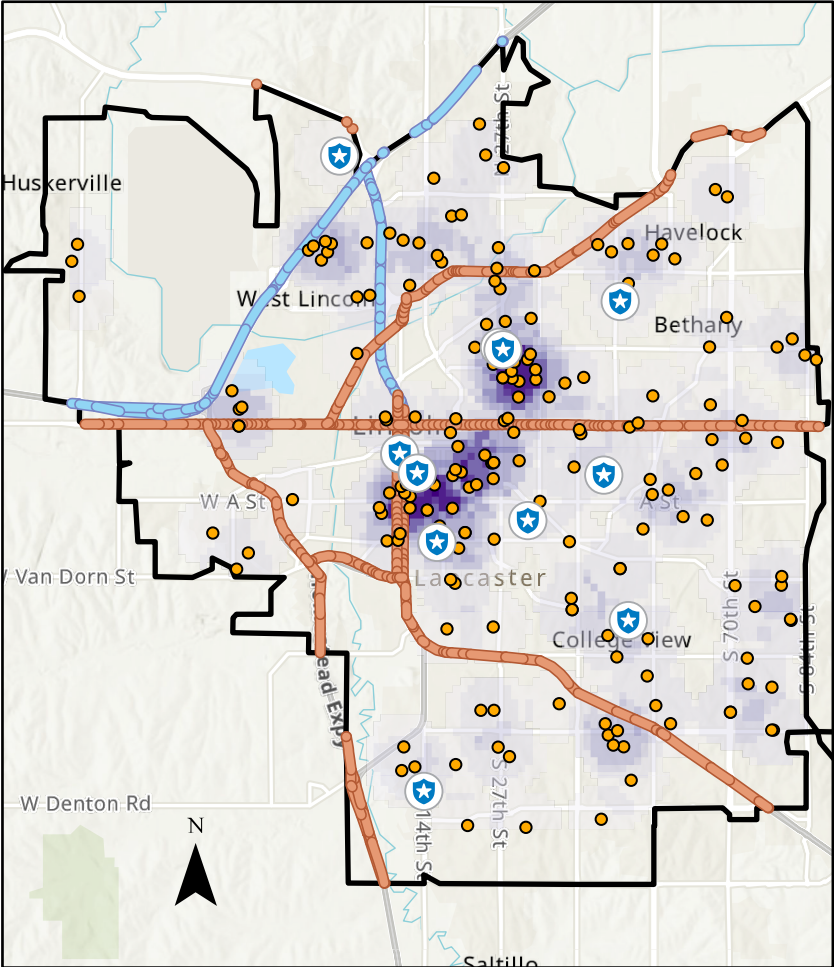


Lincoln Nebraska Crime Distribution by Type

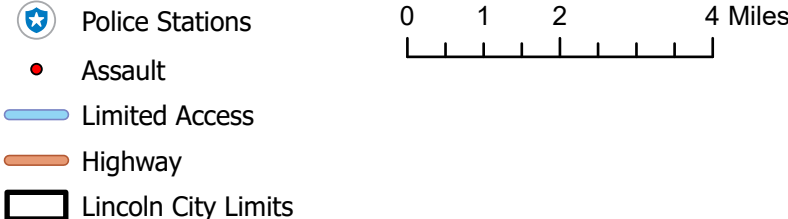
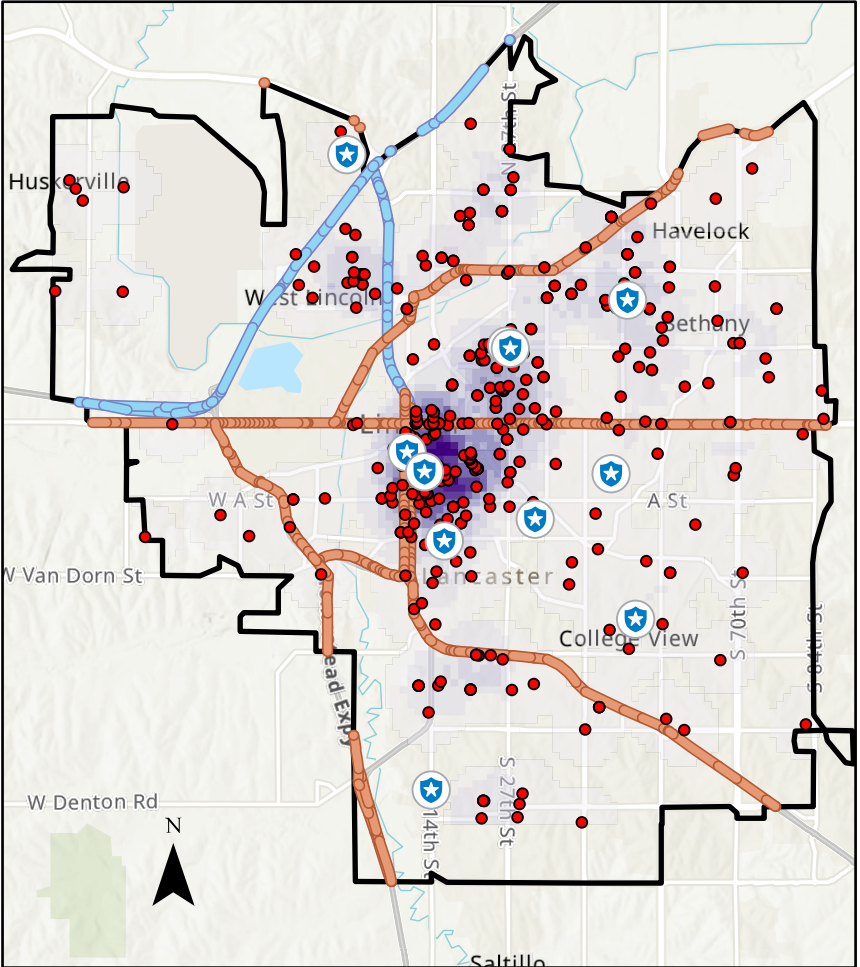
Shop lifting



Burglaries



Assault



Crime Rates Over a 24 Hour Period

