



Health Services in Fort Worth

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Introduction

- Our project goal is to outline hospital accessibility in Fort Worth
- We formulated this question to see what areas and demographics may be missing some accessibility to these health services.
- This topic could help streamline what is missing from the health system, and could be used to determine possible areas for growth

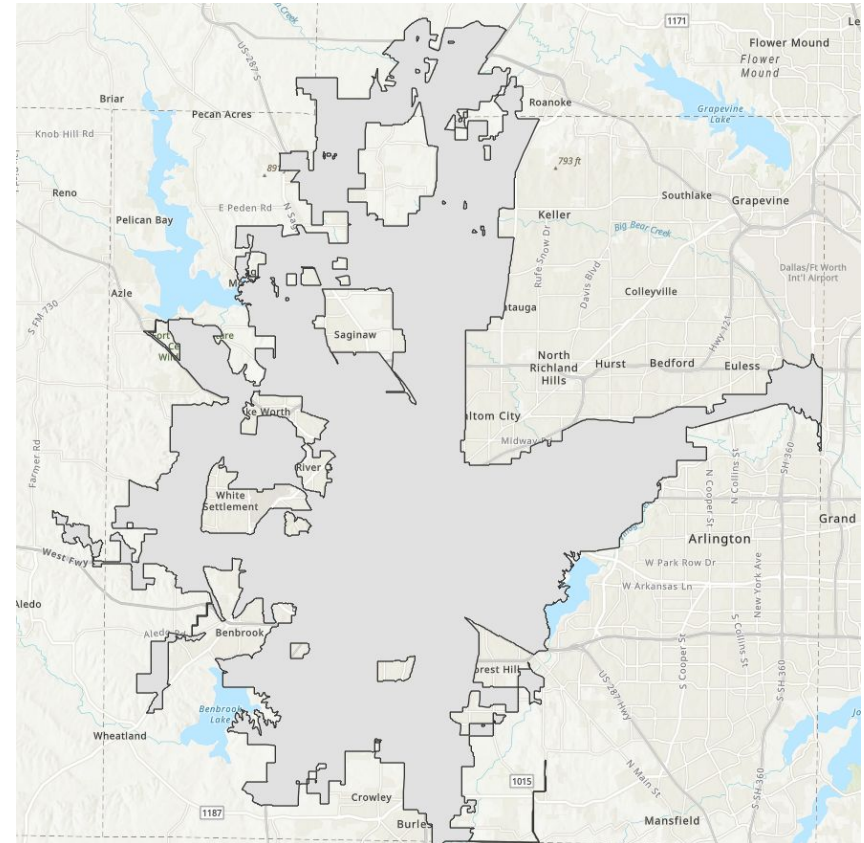


Study Area

- Our study area is Fort Worth, Texas

Data Collection

- American Community Survey Data for block groups (Income, Population, and Age data)
- Hospital Locations from City of Fort Worth
- Care Center Locations from Google Maps
- Bus Stop Locations from Trinity Metro





Methodology



- Created our own CSV files for Urgent Cares and imported them into ArcGIS Pro
- Used ArcGIS Pro's network analysis service area tool to generate drive time polygons
- Used block group centroids to assign drive times to each block group to allow for comparison with other block group data
- Used ArcGIS Insights to
 - Create multiple easily comparable choropleth maps using Jenks natural breaks classification
 - Create several charts for deeper analysis of trends in our data
 - Find a count of bus stops in each drive time polygon

Drive Times

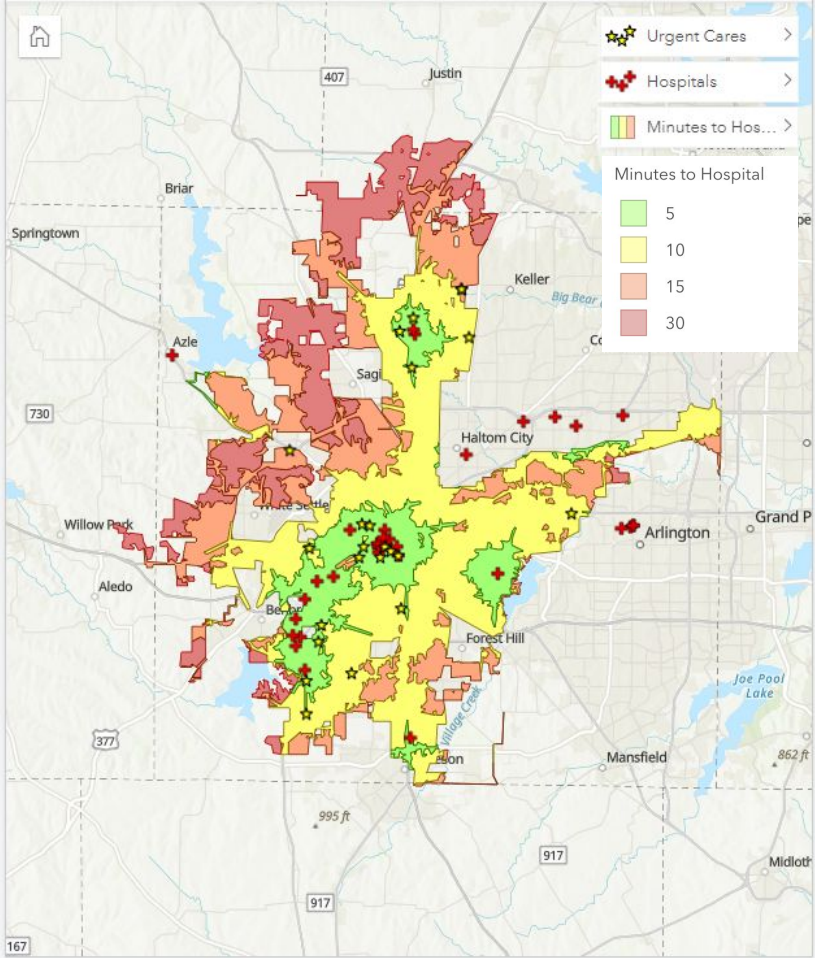
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- Urgent Cares >
- Hospitals >
- Minutes to Hos... >

Minutes to Hospital

- 5
- 10
- 15
- 30



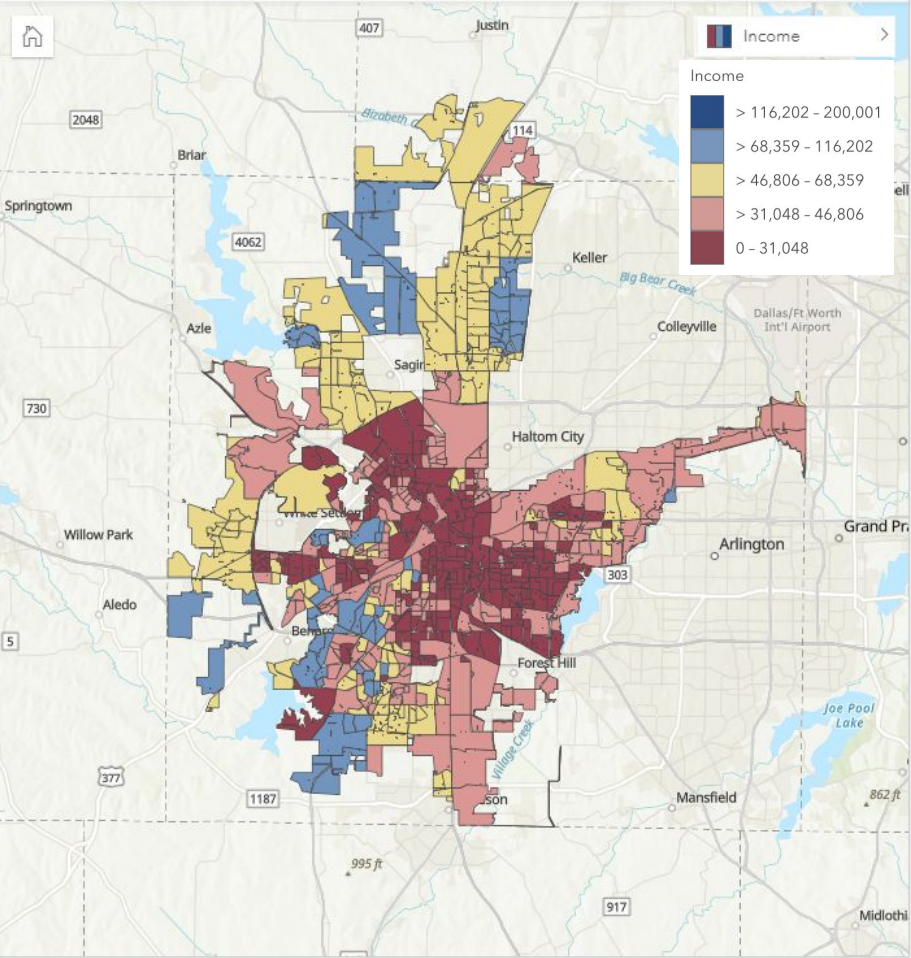
Income

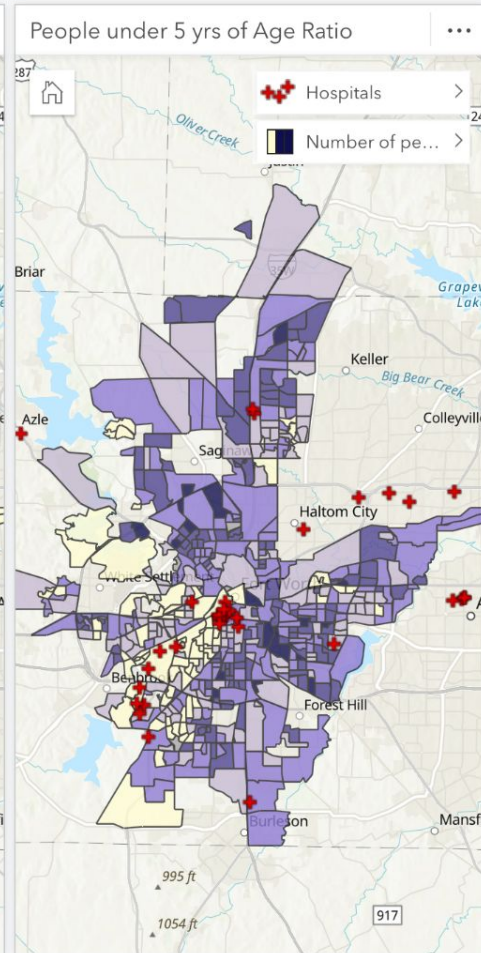
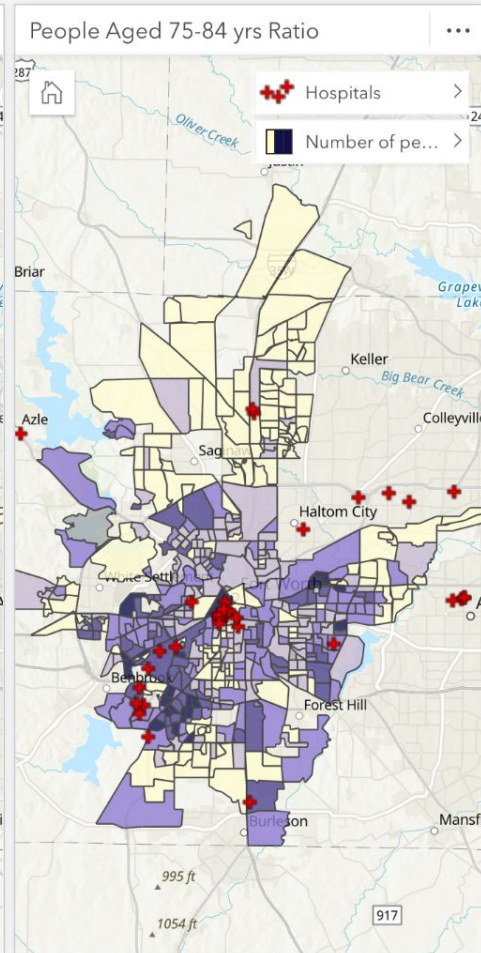
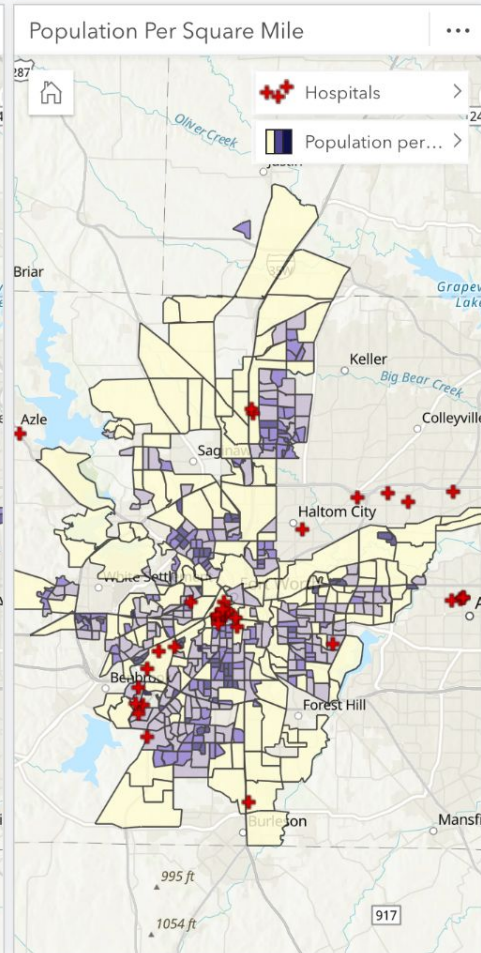
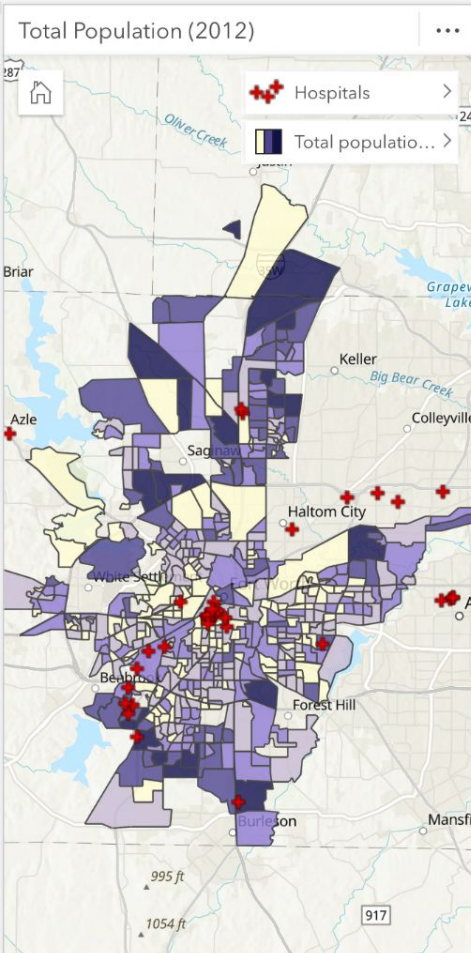
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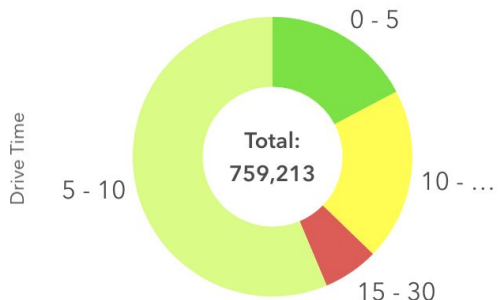
Income

- > 116,202 - 200,001
- > 68,359 - 116,202
- > 46,806 - 68,359
- > 31,048 - 46,806
- 0 - 31,048



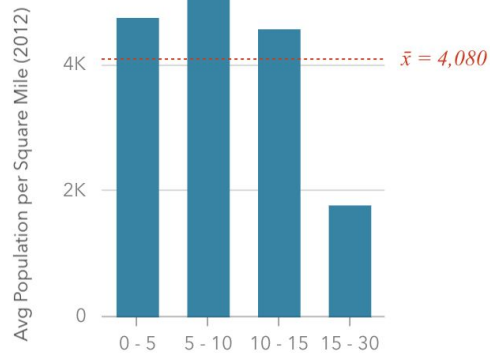


Population vs Drive Time



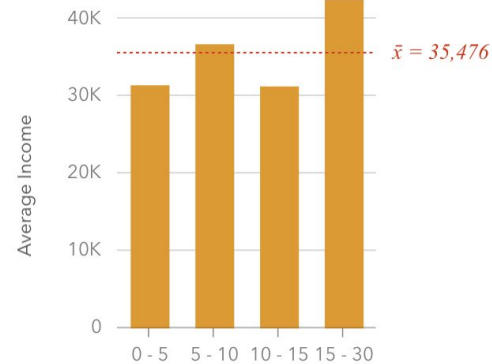
Sum of Total population (2012)

Population Density



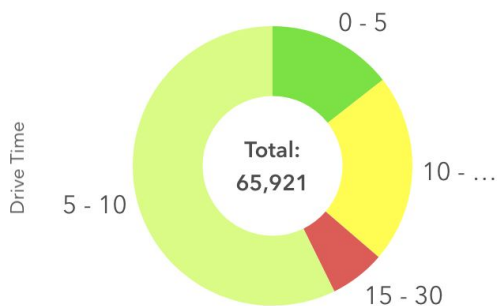
Drive Time

Income vs Drive time



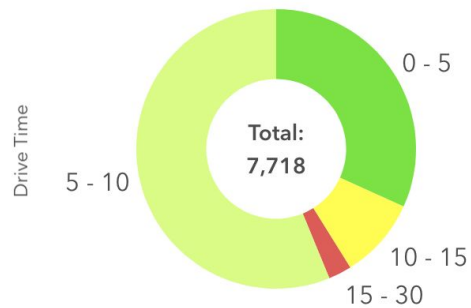
Drive Time

People Under 5



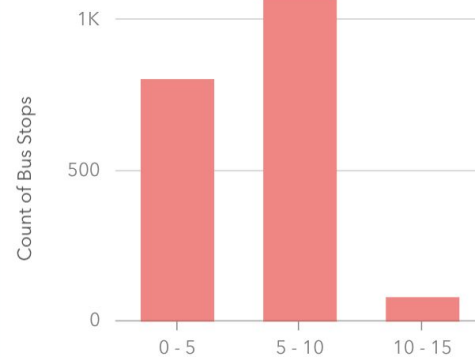
Sum of Number of people under age 5

People 85+



Sum of Number of people 85 years of age an...

Bus Stops



Drive Time



Results

- The northwestern area of Fort Worth is missing a hospital location to complete coverage
 - This area has a relatively concentrated population and the income is the middle to high
 - Improving accessibility to health centers in this area would assist greatly, as from our data there is only one urgent care near the area
- A higher percentage of the older population lives close to hospitals relative to the general population

Conclusion

- The addition of a hospital in the northwestern part of Ft. Worth would grant much more health accessibility, this would be significant for the residents
- Further studies could include what kinds of care would be needed in the hospital based on the demographic for the area
- ArcGIS Insights improved data analysis quality
- [ArcGIS Insights](#)

