COMMUNITY GROCERY STORE ACCESSIBILITY

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Tarrant County Goals



- Observe the county and find patterns between the living conditions of the community based on grocery store locations in low-income area
 - See if there's a correlation between income areas and obesity in Fort Worth
 - Encourage planners to address and identify the areas who most need affordable, fresh and healthy food

DATA COLLECTED

- US Census Tract levels for 2019's Median Household Income and Fort Worth Obesity levels feature layer
- Obesity rates are calculated by the total number of cases in 2019 by the population (crude prevalence)
- Grocery Store feature layer from Google maps
- Affordability of surrounding stores-based on Google and Yelp reviews
- Food Pantry sketch layer from Tarrant Area Food Bank and Google Maps
- Bus Stops feature layer from Trinity Metro website

METHODOLOGY

- Choropleth map shows levels of Obesity and Median Household Income levels •
 - Higher Levels=Dark Purple •
 - Lower Levels=Light Purple
 - Obesity and Median Household Income are classified using Quantile
 - 5 classes •
- Grocery Stores and Food Pantries were Geocoded on an excel work sheet with fields of •
- Facility Name •
- City •
- State
- Zip Code •

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- Grocery Store symbols are sized based on affordability •
 - More expensive stores are marked by larger grocery cart symbols, information found from Yelp
 - Grocery cart symbols are correlated with the number of "\$" on Yelp; The more "\$", the more expensive the store, and therefore the larger the grocery cart symbol. •



Walmart Supercenter on N Beach St Department Store · \$ · 5.57mi Open · 🚼 🚼 🚼 😒 😒 65 on Yelp 8520 N Beach St · (817) 514-9793

Pkwy



Walmart Supercenter on Anderson Blvd Department Store · \$ · 5.82mi Open · 🚼 🚼 😒 😒 67 on Yelp 8401 Anderson Blvd · (817) 276-9021

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Walmart Supercenter on Airport Fwy Department Store · \$ · 5.86mi Open · 🔀 🚼 🖄 😒 34 on Yelp 3851 Airport Fwy · (817) 759-2047



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 Studied area shows that lower income areas have a lot more food pantries when compared to areas with higher incomes in Tarrant County

There are an abundance of bus stops in lower income areas, specifically east of Fort Worth, with little to no grocery stores in the vicinity.



Areas with higher levels of obesity have an abundance of food pantries, while more expensive/higher quality grocery stores are located in areas with low obesity.

Communities with lower income rates have high obesity rates, with the assumption that the nearby grocery stores quality is not benefitting the lower income populations' health

CONCLUSION

- The studied project shows that a lack of accessible grocery stores may impact the health of the community
- Lower income communities are surrounded by low quality foods that can lead to obesity and other complications
- There is an abundance of food pantries in lower income and high-density bus stop areas
 - Grocery store giants should consider building in these areas due to the amount of bus stops

THANK YOU