“Isn’t West Oakland Past Due?”: Locating Potential Sites for a Grocery Store in West Oakland

QUESTION
Understanding the high need for healthy food access in West Oakland, a low-income, high minority population, what is the most suitable area for a full service grocery store?

STATEMENT OF PROBLEM
The neighborhood of West Oakland has 27 small markets and liquor stores but no full service grocery store. As such, it is considered a food desert, a geographic area which lacks access to healthy, fresh and affordable food. In recent years, various community organizations and NGOs, notably People’s Grocery and Mandela Foods have sought to fill the gap with proposals for grocery stores.

METHODOLOGY
We use 3 different analysis to site the most suitable area for a full service grocery store in West Oakland.

DATA SOURCES:
Oakland Data set 2000

METHOD 1: INTERPOLATION, INVERSE DISTANCE WEIGHT
Map A: Population Density and Convenience Stores
Map A is an interpolated map that shows the population density in West Oakland. It displays the concentration of people in the area, with darker shades indicating higher population density. The map highlights the areas with a higher concentration of people, which can be potential locations for a grocery store. The map also includes convenience stores, which are often found in areas with high population density.

RESULTS:
According to the data, West Oakland’s population density is high, indicating a high demand for access to healthy food. However, the map shows that there are limited full service grocery stores in the area.

KEY WORDS
Convenience stores, population density, census data

METHOD 2: SUITABILITY ANALYSIS
Map B: Population Density and Food Stores
Map B is a suitability analysis map that uses various factors to determine the most suitable areas for a grocery store. The map includes factors such as population density, proximity to public transportation, and access to fresh food.

RESULTS:
The analysis shows that the most suitable areas for a grocery store are those with high population density, good transportation access, and proximity to fresh food sources.

KEY WORDS
Population density, transportation access, fresh food sources

METHOD 3: NETWORK ANALYSIS, LOCATION-ALLOCATION
Map C: Network Analysis
Map C is a network analysis map that uses transportation data to determine the accessibility of potential locations for a grocery store. The map shows the distance and travel time from various points in West Oakland to potential locations.

RESULTS:
The analysis shows that the most accessible locations for a grocery store are those that are close to major streets and highways, with low travel times.

KEY WORDS
Transportation data, network analysis, travel times

LIMITATIONS
- Some areas may be more suitable than others due to the availability of transportation infrastructure.
- The analysis may not fully consider the local context and community input.

CONCLUSIONS
The results showed that there are substantial areas that are suitable for full service grocery stores, and that the convenience stores and other limited markets in the areas are inadequate in meeting the population demand of West Oakland. The key takeaway is that the new proposed site of a grocery store owned by People’s Grocery (the blue square in Method 3) actually lies in an unsuitable area, according to our analysis. Further research might look at the differences between our criteria and People’s Grocery.