

Data Dictionary & Final Report

| Field Name | Description |
|-------------------|--|
| Community: | Name of the community area |
| GEOID: | Unique community area ID |
| Pctage_Covered: | % of community area covered within 0.5 miles of supermarkets |
| SVI_2022: | Social Vulnerability Index (CDC Composite Score for 2022) |
| POV_2019_2023: | Poverty rate (% of residents living below poverty line- 2019-2023) |
| Fruit_Veg_Access: | % of population with easy access to fruits and vegetables |
| Intersect_Area: | Area within supermarket buffer (square miles) |
| Total_Area: | Total area of community (square miles) |

Report:

The GIS analysis of food access across Cook County revealed significant spatial disparities that correlate closely with indicators of social vulnerability and poverty. While northern portions of Cook County generally demonstrated high levels of supermarket access, communities in the south and west experience notably low access, with many residents living beyond 0.5 miles from a full-service grocery store. These same areas also show more Social Vulnerability Index scores and higher poverty rates, compounding the public health risks associated with limited access to affordable and nutritious food. The overlap of limited food access with social and economic disadvantage highlights a systemic equity issue that requires targeted intervention. Possible solutions include incentivizing supermarket development in underserved areas, expanding mobile grocery services and food delivery programs, supporting local farmers' markets, and investing in transportation infrastructure to improve connectivity between vulnerable communities and existing food sources. Utilizing GIS analysis provides clear, spatially-driven evidence that can inform policymakers, health officials and community organizations to develop strategies to reduce food access inequities and improve overall community health outcomes.