



# Food Equity in Prince George's County

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UNIVERSITY OF  
MARYLAND

ENVIRONMENTAL SCIENCE AND POLICY PROGRAM

## Outline

Project Goals

Updated Methods

Findings and Results

Policy Recommendations

Future Work

Questions



## Project Goals

Identify challenges and opportunities, and provide recommendations for creating a healthy, equitable, and sustainable food system that ensures every Prince Georgian has access to nutritious, affordable, sustainably grown, safe, and culturally appropriate food.

### Goals:

- Provide the Maryland-National Capital Park and Planning Commission (M-NCPPC) with an updated interactive map showing priority areas of access
- Identify food trends in the data and report on the associated demographic patterns
- Recommend future food endeavors and plans for the next capstone group to continue this work



## Updated Spatial Analysis Methods

Established vulnerability classifications in four levels (Jenks Natural Breaks)

- Low, Moderate, High, Very High

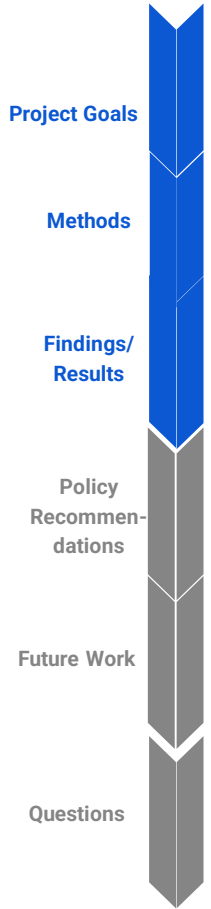
Created 0.5 mile buffers for spatial join and intersect operations

Created a model to produce Kernel Density Estimation

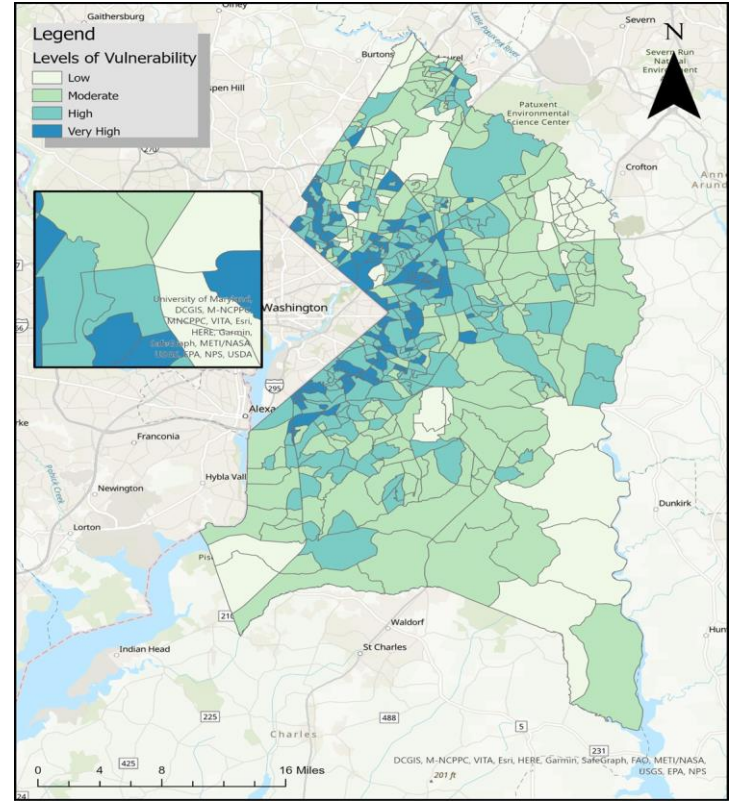
- Extracted “Very High” vulnerability block groups
- Clipped Kernel Density maps to “Very High” block groups to view “hot spots”



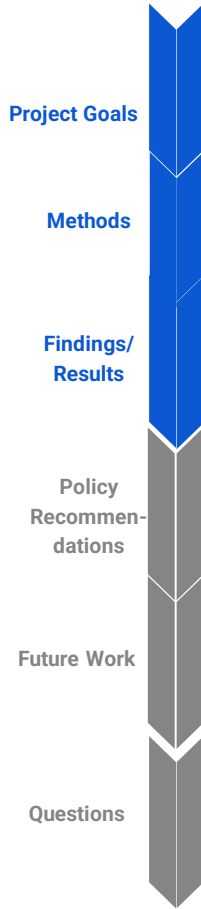
# Findings and Results



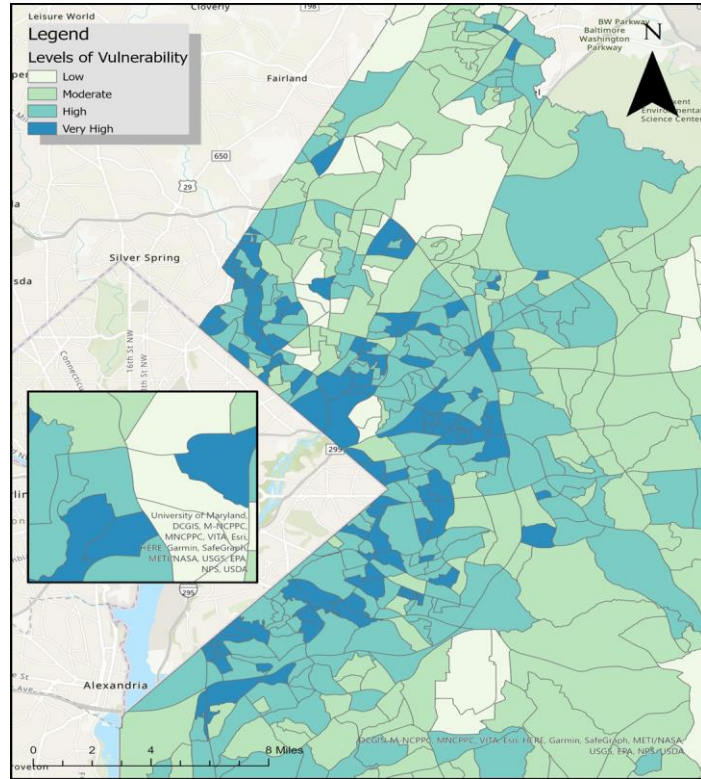
## Levels of Vulnerability in Prince George's County



Full Extent



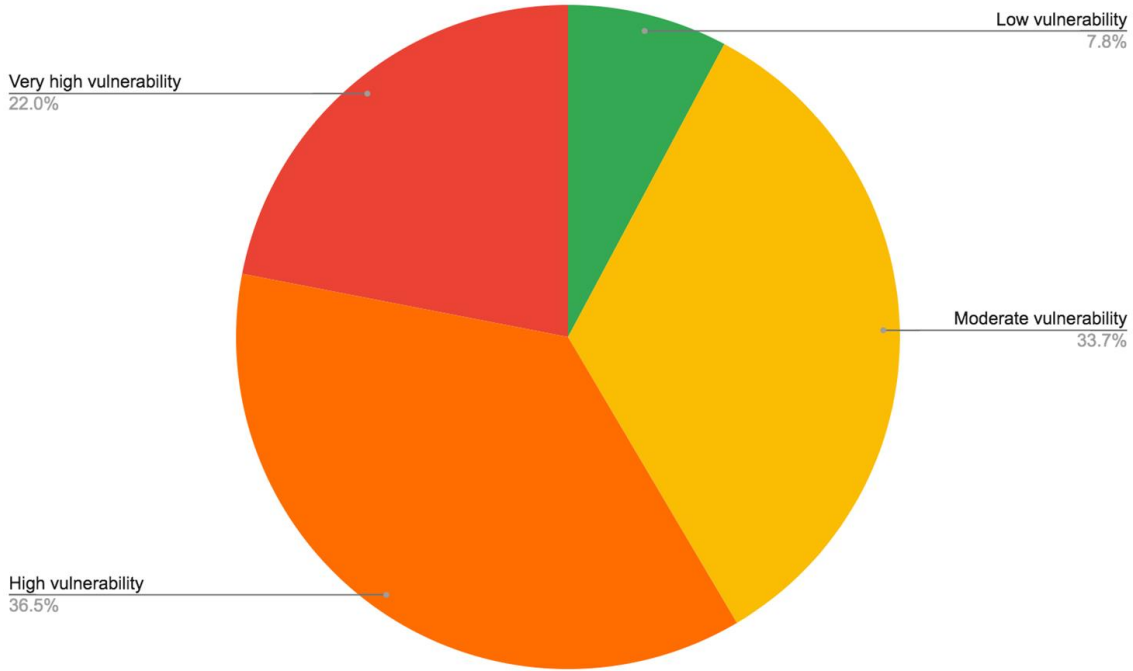
### Levels of Vulnerability in Prince George's County



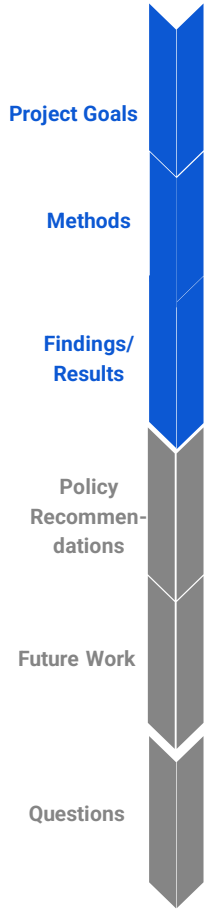
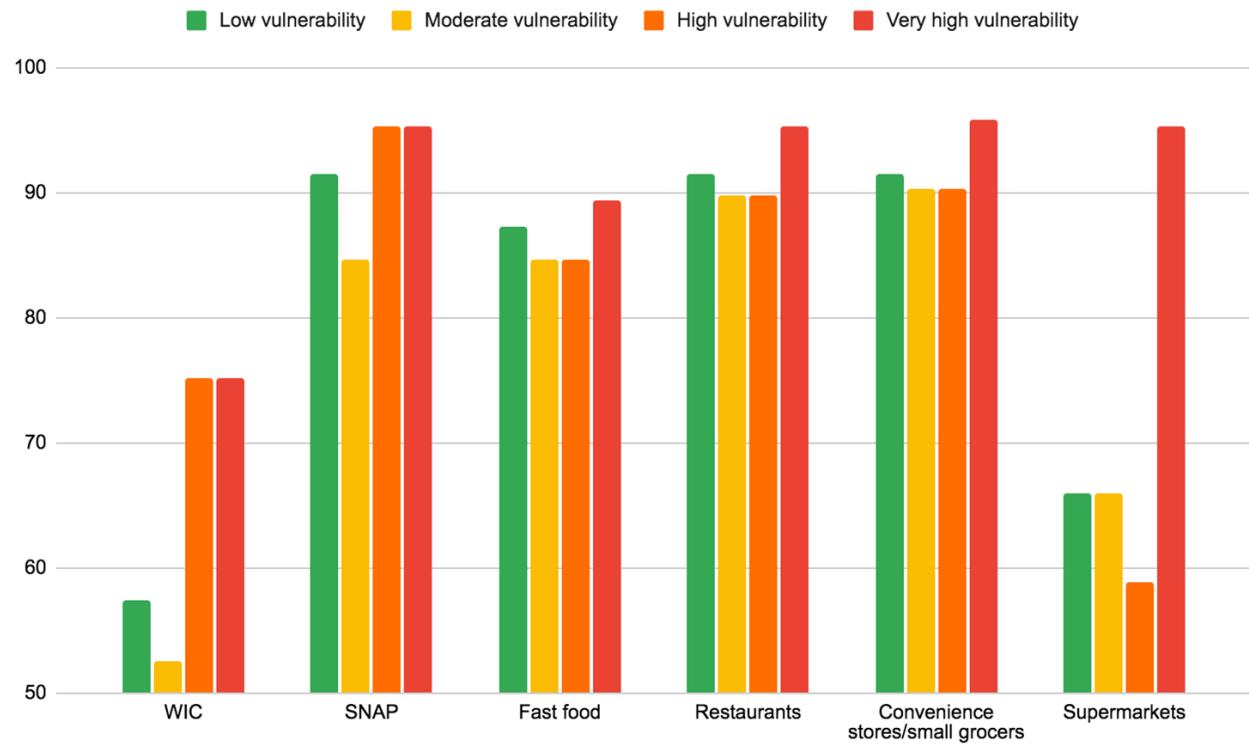
Most Vulnerable Block Groups Zoomed In



# Total Population of Prince George's County by Vulnerability Classification

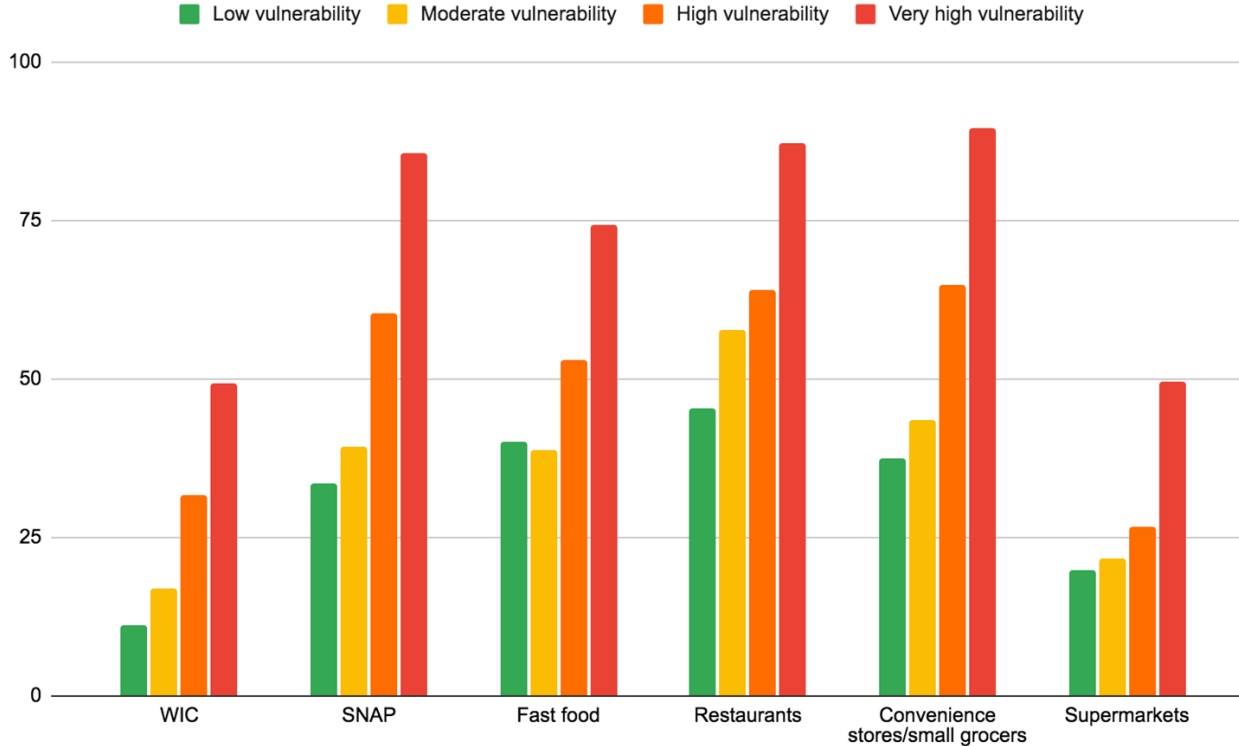
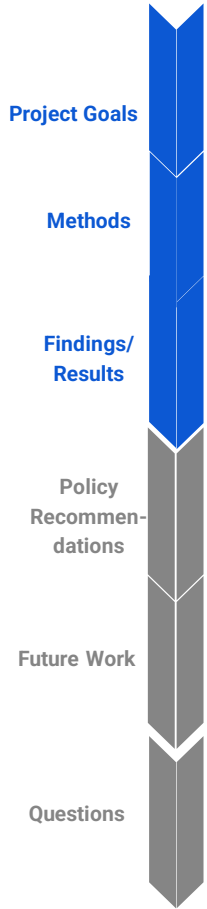


### Percent of Block Groups at each Vulnerability Level with Access to Food Locations





### Percent of Residents at each Vulnerability Level with Access to Food Locations



### Percent of Population with Access to Food Locations by Vulnerability Level

Project Goals

Methods

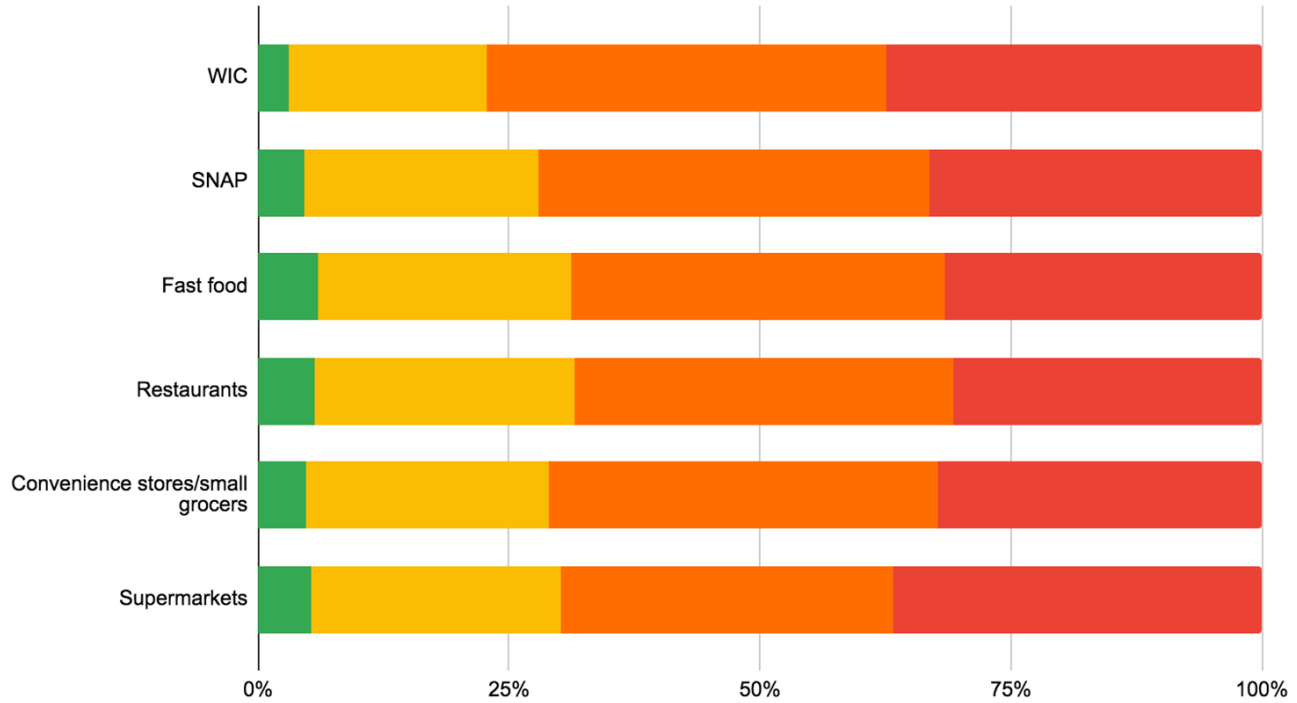
Findings/  
Results

Policy  
Recommendations

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■ Low vulnerability  
 ■ Moderate vulnerability  
 ■ High vulnerability  
 ■ Very high vulnerability



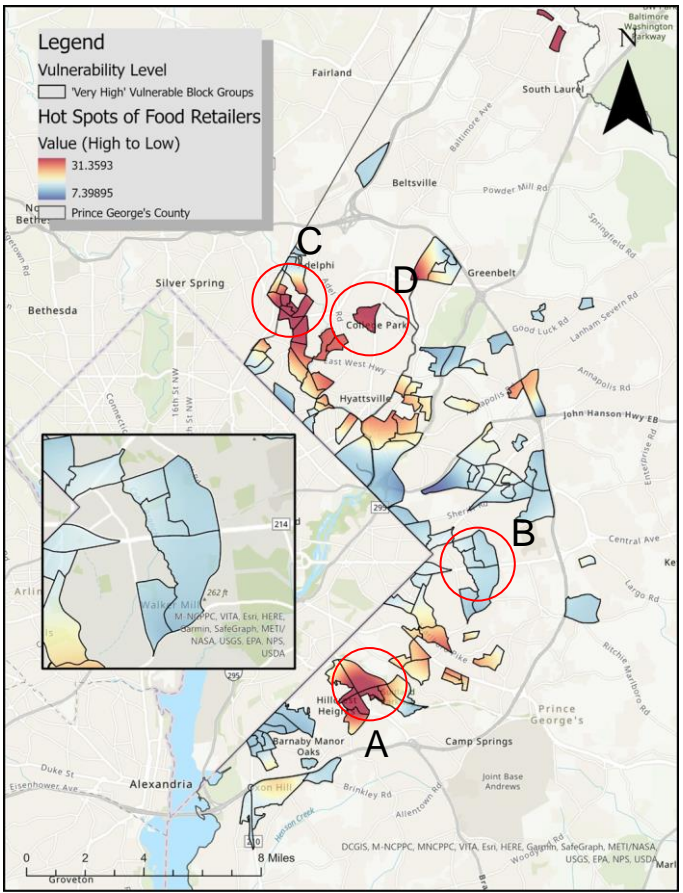
## Priority Areas

Trends in four regions:

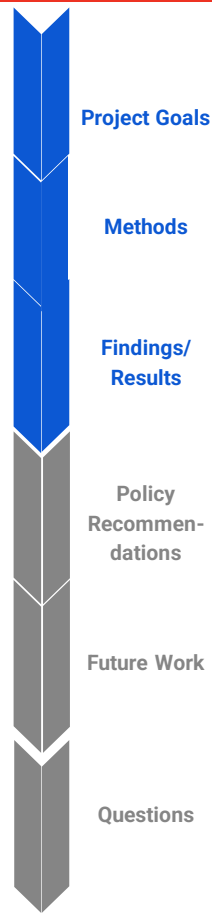
- A - Parkland Terrace and Marlow Heights along Suitland Parkway
- B - Walker Mill, Yorkshire Knolls, and Carmody Hill
- C - Langley Park and Adelphi area
- D - College Park area mainly within University of Maryland's campus extension

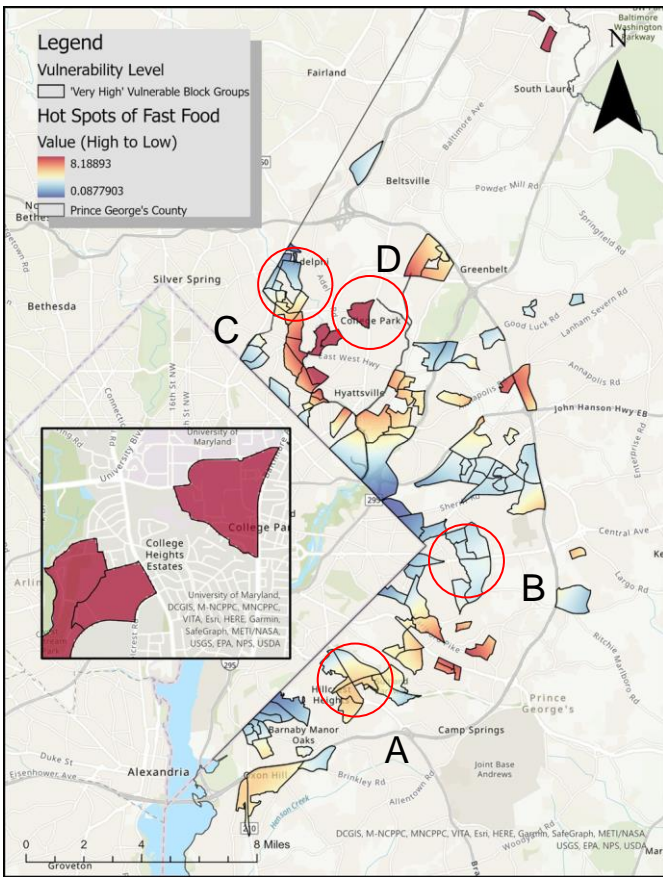
Hot Spot Density Analysis of “Very High” Vulnerability Block Groups



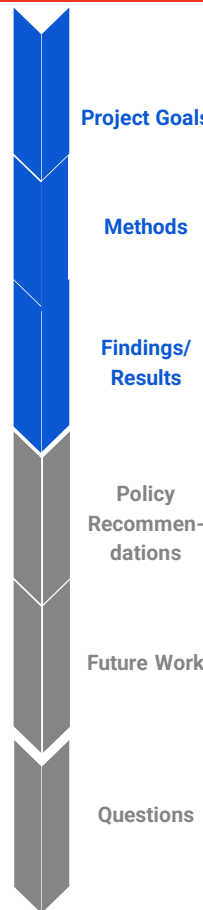


# Hot Spots of all food retailers in Prince George's County

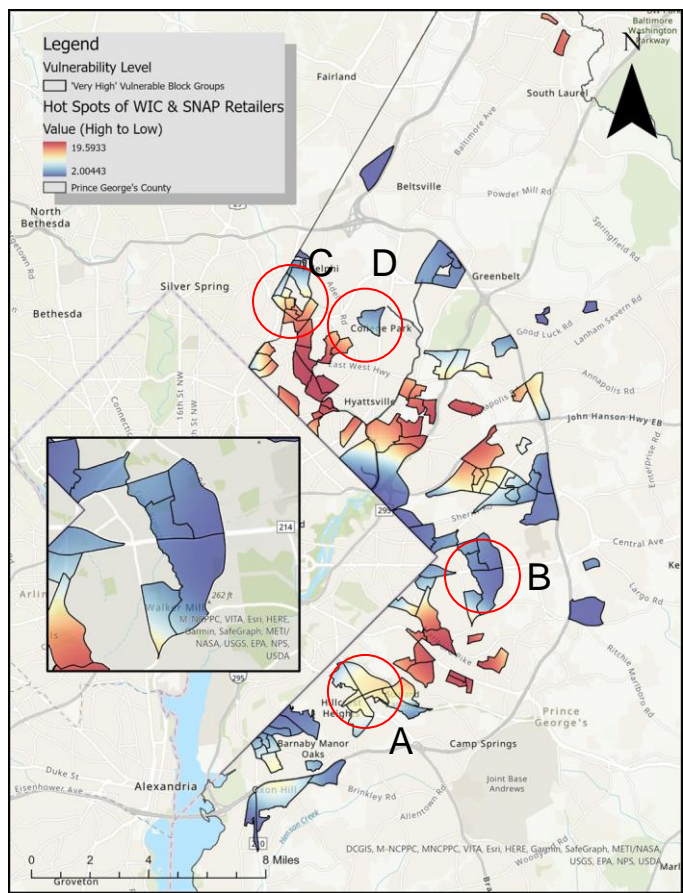




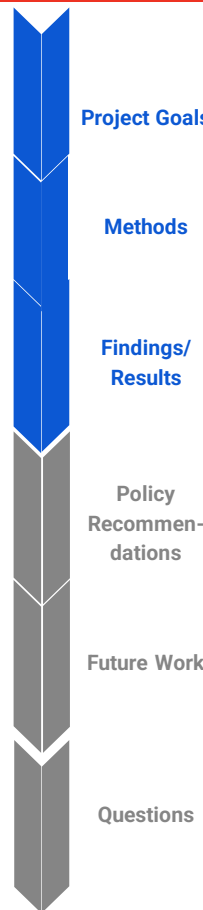
# Hot Spots of fast food retailers in Prince George's County

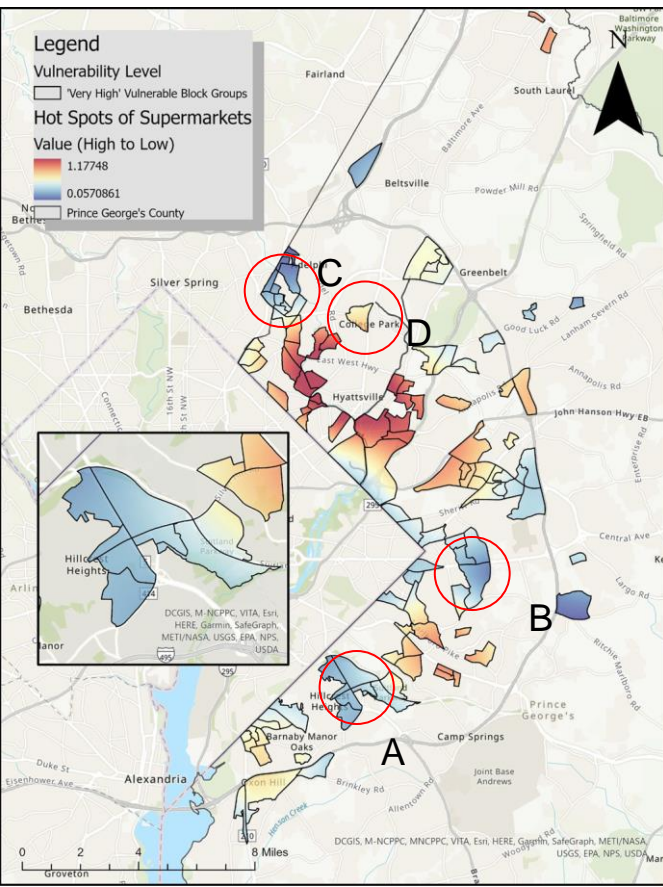




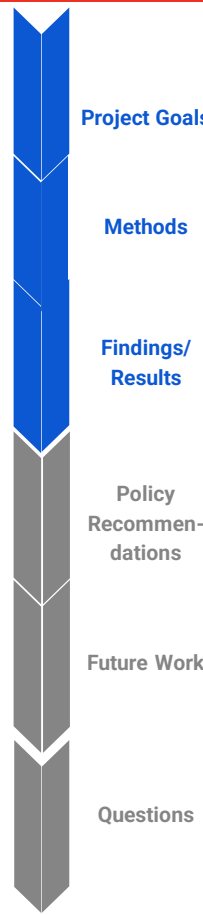


# Hot Spots of WIC vendors and SNAP retailers in Prince George's County





# Hot Spots of supermarkets in Prince George's County





# Policy Recommendations: Fast Food Food Access

## Reduce access to fast food

- Zoning ordinance to limit franchise expansion
- Fast food/soda tax
  - Maryland currently has 6% soda tax
  - Revenue to fund food equity programs

## Fast Food Hot Spots

- D - College Park
- Chillum
- Berwyn Heights
- North Hyattsville and Brentwood
- Suitland and Forestville



<https://youngmenshealthsite.org/guides/fast-food/>

## Policy Recommendations: Supermarket Access

Increase access to supermarkets and farmers markets

- Expand supermarket locations
- Improve accessibility: bus routes, walking paths

Areas of limited access to supermarkets

- A - Parkland Terrace, Marlow Heights
- B - Walker Mill, Yorkshire Knolls, Carmody Hill
- C - Langley Park, Adelphi

Food Swamps (High Fast Food + Mid/Low Supermarkets)

- A - Parkland Terrace, Marlow Heights
- D - College Park
- New Carrollton



<https://dcist.com/story/21/03/10/md-prince-georges-grocery-liquor-stores-bill/>

## Policy Recommendations: WIC Vendors Access

### Expand number of WIC vendors

- Average 66.4% access across all block groups
- Less Vulnerable
  - Average 55% access in least and moderately vulnerable
- More Vulnerable
  - Average 77.8% access in vulnerable and most vulnerable

### Areas of limited access to WIC vendors

- B - Walker Mill, Yorkshire Knolls, Carmody Hill
- DC border near Fairmount Heights



<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnant-people.html>

# Policy Recommendations: Small Business Support

## Grant/loan programs

- Prince George's County COVID-19 Business Recovery Initiative (formerly Relief Fund)
- Provide additional small business stimulus

## Community engagement

- Publicly promote local businesses
- Outreach to local businesses



<https://www.worthingtonlibraries.org/about/news/2020-03/libraries-remain-closed-until-further-notice>



## Policy Recommendations: Support Urban Agriculture

Create tool to map urban farms

Institute school, community gardens

Expand existing urban agriculture programs

- SNAP to Health - SNAP vendors at farmers markets
- Urban agriculture tax credit ordinance
- Bloomin' PGC



<https://www.pgscd.org/urban-agricultural-conservation/urban-ag-property-tax-credit/>



## Future Work

- Update sources with more accurate data
- Culturally appropriate analysis of food sources
- Public transportation data to provide an accessibility layer
- COVID-specific data; its disruption of the food system
- Deeper analysis of sub-locales (narrow generalizations)
- Public health layer of relationship between access to fast food and prevalence of nutritional diseases
- Community outreach



<https://www.trafficechnologytoday.com/features/white-paper-how-ai-and-iot-can-reshape-public-transit-in-the-covid-era.html>



# Questions?



<https://theknow.denverpost.com/2019/05/09/farmers-markets-denver-spring/214543/>