Practice Based Experience: Looking at How Grocery Store Locations Impact Food Insecurity

South Carolina State Food Policy Quarterly Meeting
April 27, 2021
Acknowledgments

• Sisters of Charity Foundation of SC staff, Board members, partners
• Dr. Melinda A. Merrell, RMHRC
• Carrie Draper, Ashley Page, and Zachary Herrnstadt, SC Food Policy Council
Overarching Assumptions

• Poverty IS a challenge in our nation, state, and communities.
• We need a better definition in South Carolina of what defines and what causes* poverty in our state.
• The final product should be accessible to all.
Poverty in South Carolina

## Social Determinants of Health

### Economic Stability
- Employment
- Income
- Expenses
- Debt
- Medical bills
- Support

### Neighborhood and Physical Environment
- Housing
- Transportation
- Safety
- Parks
- Playgrounds
- Walkability
- Zip code / geography

### Education
- Literacy
- Language
- Early childhood education
- Vocational training
- Higher education

### Community and Social Context
- Social integration
- Support systems
- Community engagement
- Discrimination
- Stress

### Health Care System
- Health coverage
- Provider availability
- Provider linguistic and cultural competency
- Quality of care

### Health Outcomes
- Mortality
- Morbidity
- Life Expectancy
- Health Care Expenditures
- Health Status
- Functional Limitations

Food Insecurity

• Economic condition defined by lack of access to enough food to consistently support a household’s nutritional needs

<table>
<thead>
<tr>
<th>S.C. Food Insecurity Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
</tr>
<tr>
<td>2020 Projected</td>
</tr>
</tbody>
</table>

Source: Feeding America 2019-2020
Grocery Store Locations Impacting Food Insecurity

• Identified all available grocery stores in South Carolina as of December 2020.
• Dataset: Data Axle Reference Solutions
• Excluded any gas stations, convenience stores
Analysis completed in Tableau
896 grocery stores open as of December 31, 2020
## Example Dataset

<table>
<thead>
<tr>
<th>FIPS</th>
<th>County</th>
<th>% Population 18 years and younger</th>
<th>% Population 65 and older</th>
<th>% White</th>
<th>% Black/African American</th>
<th>% American Indian and Alaska Native</th>
<th>% Hispanic or Latino (of any race)</th>
<th>Median Income</th>
<th># Closed Grocery Stores Since 2016</th>
<th>Total Grocery Stores 2020</th>
<th>Rank For Grocery Store Closures</th>
<th>2018 Food Insecurity Rate</th>
<th>2018 Child Food Insecurity Rate</th>
<th>2018 # of Food Insecure Persons</th>
<th>2019 Overall Food Insecurity Rate</th>
<th>2019 Child Food Insecurity Rate</th>
<th>2020 Projected Overall Food Insecurity Rate</th>
<th>2020 Projected Child Food Insecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>45079</td>
<td>Richland</td>
<td>21.5%</td>
<td>12.3%</td>
<td>44.9%</td>
<td>46.9%</td>
<td>0.2%</td>
<td>2.9%</td>
<td>5.2%</td>
<td>$54,767</td>
<td>12</td>
<td>58</td>
<td>1</td>
<td>11.2%</td>
<td>13.5%</td>
<td>45,630</td>
<td>9.4%</td>
<td>14%</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

### Sources:
- American Community Survey 2015-2019;
- Data Axle Reference Solutions-Author Analysis;
- Feeding America 2018-2020
Future Steps

• Datasets can be used to look at racial/ethnic compositions in comparison to grocery store by county
• Look at the gaps where potential grocery stores can be built for communities to have better access to healthy food options
• Advocate for children suffering from food insecurity
Thank You!

Allyson Malbouf
MPH Candidate 2021

amalbouf@email.sc.edu
Graduate Assistant
Rural & Minority Health Research Center
University of South Carolina
References

• Bradshaw, T. (2007). Theories of Poverty and Anti-Poverty Programs in Community Development. Community Development. 3(1), 7-25.