



# Identifying Potential Mobile Market Stops

An Analysis of Food Access Within Greenville, South Carolina

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## I. Abstract

Within Greenville County, as in most communities, there exist areas of poverty and unemployment. Many of these areas are characterized by low food access. Food access is determined by proximity to a grocery store, farmer's market, or other venue providing a wide variety of nutritious foods for purchase. In addition to community gardens, mobile markets can be used to increase the food access of a community. Mobile markets are vehicles which bring produce and other goods into neighborhoods; allowing residents to purchase these foods without traveling far from home. Greenville neighborhoods lacking food access would benefit from a mobile market service. The intent of this project is to determine potential locations where a mobile market route would be most beneficial to underserved residents.

## II. Introduction / Review of Literature

The Greenville County Food Access Assessment (2012) identified "food deserts" or areas of low food accessibility within Greenville County. This assessment provided the origins of this project. Impoverished areas often lack a supermarket and many residents rely on convenience stores or gas stations for food. However, these stores are not likely to carry produce or other nutritious items. In addition, many residents of these communities do not own cars and must rely on public transportation when grocery shopping. Thus, means must be devised in order to provide these areas with adequate food access. Raja, et al. (2008) offers a framework for mapping neighborhood demographics and the socioeconomic disparities that contribute to food accessibility within communities. The authors conducted an analysis of neighborhood food access using spatial analysis and GIS tools. They hypothesize that "people belonging to different racial groups have access to different neighborhood food destinations." The research showed clear evidence of racial disparities in food access. The authors found "an absence of supermarkets in neighborhoods of color when compared to white neighborhoods."

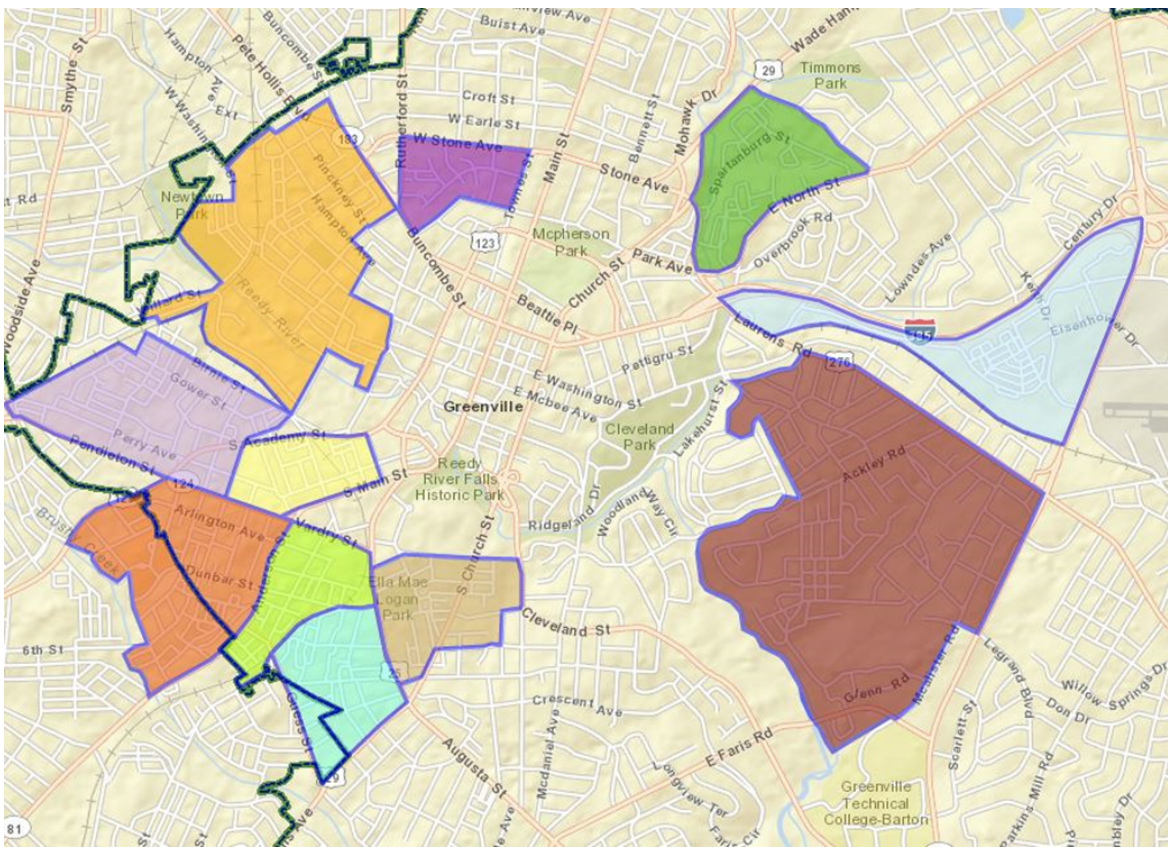
The implications of this study coincide with the need for ideas that increase food access; namely community gardens and mobile food markets. In areas with low food accessibility, mobile markets can serve as an alternative to grocery stores. Flachs (2010) analyzes the economic impacts of gardens and mobile markets as well as the large returns they can bring to aspiring growers and owners. They provide opportunities for low-income residents as well as training for young entrepreneurs wishing to start their own businesses. Furthermore, markets, much like parks, serve as communal gathering places, where residents can congregate and communicate with other neighbors. The literature suggests that mobile market are undoubtedly positive assets to underserved communities.

## III. Methodology

The ultimate goal of this project was to determine mobile market stops. First, the process began by analyzing the data gathered by Dr. Alicia Powers and her researchers. This data included 1,713 food establishments, both stores and restaurants, within Greenville County. However, a localized study area was needed for this analysis. The City of Greenville's special emphasis neighborhoods were chosen because they are sites of extensive focus and redevelopment by the City. From these neighborhoods, distance and driving time to the nearest supermarket was calculated. Nicholtown, West Greenville, and Sterling were chosen due to their distance from grocery stores. After determining driving distances, stop locations had to be identified. Potential stops included churches, community centers, schools, parks, etc. where the mobile market can park and be easily accessed by residents from the surrounding neighborhood either by walking, biking, or driving. Greater emphasis was placed on stops located within close proximity to existing bike lanes. The greatest concentration of potential stops in each neighborhood was then used to create a route map.

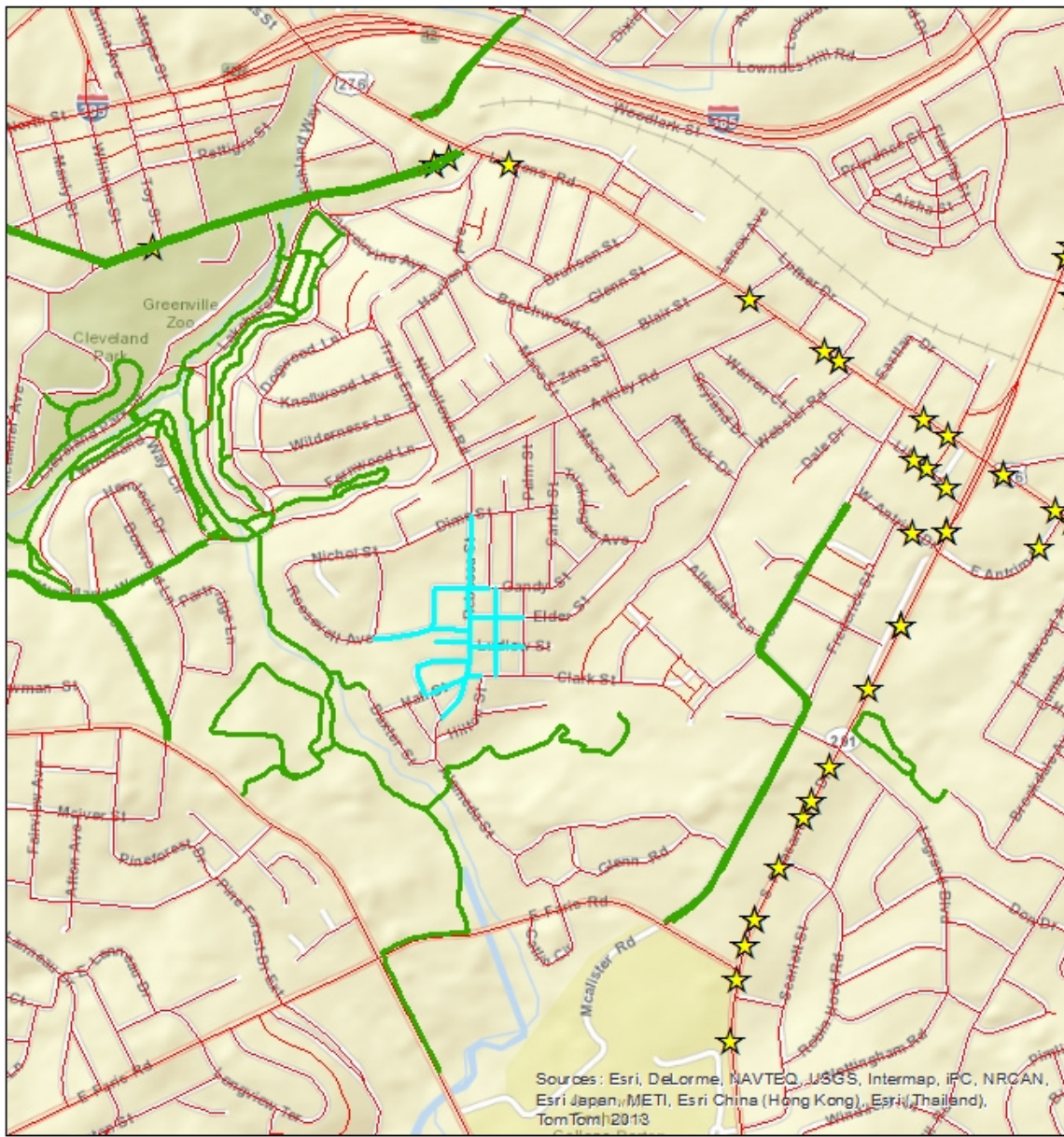


Hub City Mobile Market- Spartanburg, SC

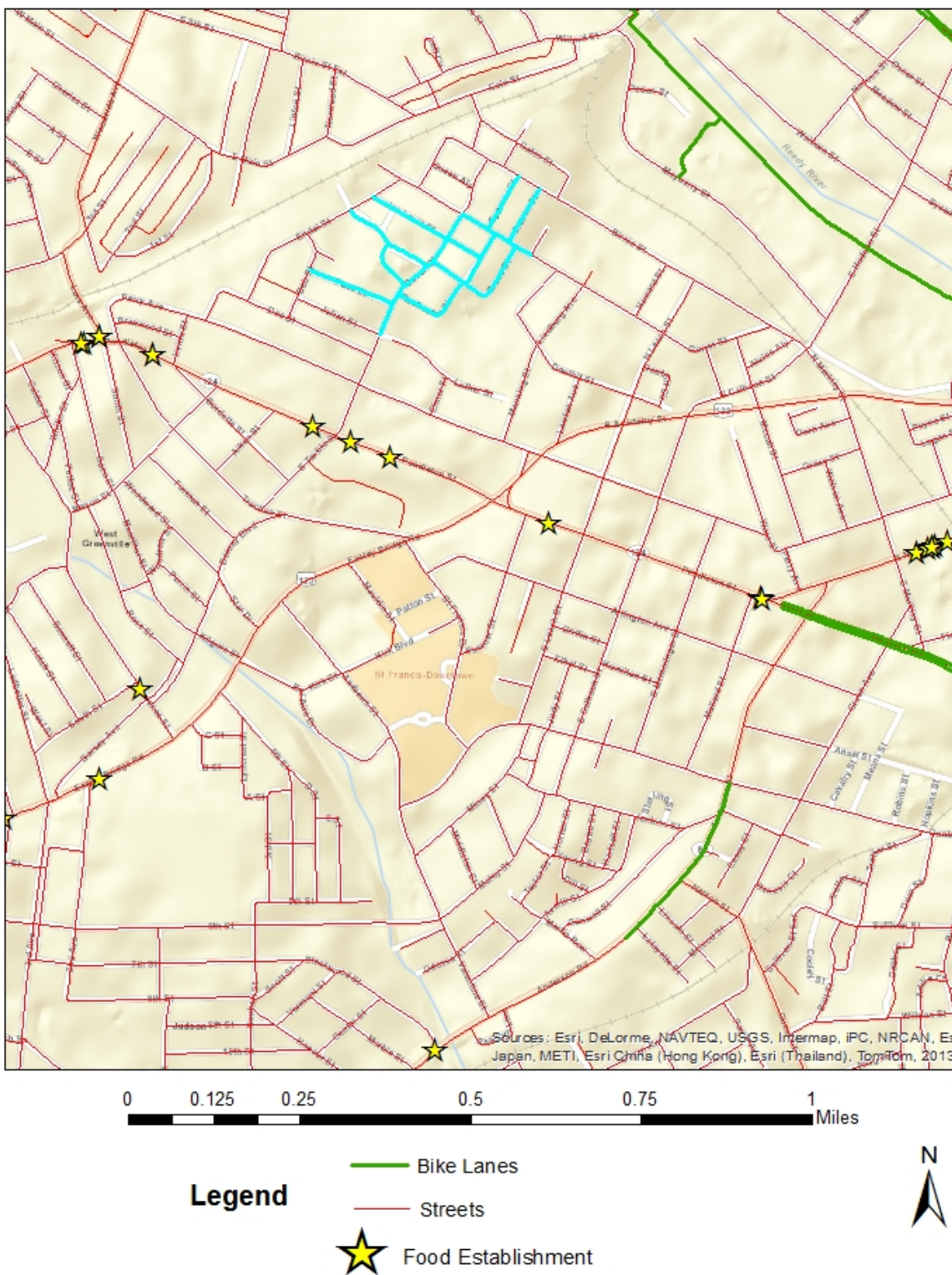


Special Emphasis Neighborhoods- City of Greenville

Potential Route in the Nicholtown Neighborhood



Potential Route in the Sterling/West Greenville Neighborhood



## IV. Results and Discussion

Within the Nicholtown neighborhood, the best location for a mobile market to operate was determined to be along the length of Rebecca Street, from Dime Street to Clark Street. The Nicholtown Community Center, located at 112 Rebecca St, serves as an anchor for the community. Rebecca Street is also home to two churches, Hope Baptist Church and Mt. Hebron Baptist Church, with another two churches situated within another block. In addition, Rebecca Street is within close proximity to Cleveland Park and the Swamp Rabbit Trail, a popular recreation corridor.

Within the Sterling and West Greenville neighborhoods, the best location for a mobile market was determined to be along Queen Street, from Gower Street to Julian Street. Much like Nicholtown, this location is within proximity to a community center and a church. The West Greenville Community Center, located at 8 Rochester Street, is one block from Queen Street. Antioch Baptist Church, located at 12 Pack Street, fronts Queen Street as well. West Greenville is also accessible to the Swamp Rabbit Trail from South Hudson Street.

Following the methodology, Rebecca Street and Queen Street were chosen because of their proximity to the community centers of each neighborhood, the churches located along each corridor, and the variety of transportation options available within the area. While mobile markets are unable to canvas an entire neighborhood, they are best suited for well-traveled residential corridors and can reach a maximum number of residents when appropriately placed. In the future, proposed bicycle lanes will traverse Academy Street and Pendleton Street, which currently bisect the Sterling/West Greenville community. Bicycle lanes and other transportation options, such as the Greenville bus system, allow residents greater access to the services of mobile markets.

## V. Conclusion

The results of this project demonstrate a clear need for increasing food access within the Nicholtown and Sterling/West Greenville neighborhoods. Although the goal of a community master plan should be to locate a full-service grocery store within these communities, a network of community gardens and mobile markets goes a long way to increase food access and quality of life for residents. Residents appreciate the ability to purchase fresh produce and other products within walking distance of their homes. This is especially helpful to the elderly and those who lack transportation. The presence of a mobile market should also be considered a step toward creating a healthy community. They offer healthy and nutritious foods as opposed to the processed foods offered by the convenience stores within these areas.

Often understated, a mobile market also provides residential job opportunities and positive local economic impacts. City of Greenville officials, as well as non-profits and entrepreneurs, should utilize the results of this project in order to establish a mobile market to serve the neighborhoods of Nicholtown, Sterling, and West Greenville, with the ultimate goal of increasing food accessibility in these areas. Indeed, the residents of Nicholtown, Sterling, and West Greenville, in addition to every underserved community, deserve access to healthy and nutritious foods.

## VI. Future Research

While a successful mobile market is certainly a community asset, there are greater issues at hand in these communities. In addition to food access, future research should address issues of poverty within these neighborhoods. Furthermore, residents should be surveyed in order to adequately determine the demand for a mobile market. Further study should also determine the size and ability of community gardens in these areas to provide for residents. Where gardens are lacking in capacity, there is likely a demand for mobile markets. Analysis of sidewalk locations within the neighborhoods will be also a better determinant of routes that are pedestrian accessible.

## VIII. Acknowledgements

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## VII. References / Data Sources

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