

A COMMUNITY TOOL TO MAP AND MEASURE RURAL FOOD ACCESS

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OBJECTIVE

The objective of this project is to develop an interactive tool to map and measure food access in rural areas in order to identify underserved areas and explore relationships between food access, nutrition, and health outcomes.

Many rural residents have limited access to food retailers and food assistance programs, but previous efforts to map food access have often focused on urban and suburban geographies. Additionally, previous research has often examined food retailers OR community food assistance programs rather than factoring in access to both resources.

METHODS

We are developing an interactive web map that depicts access to food retailers and community food assistance programs (e.g., food pantries). We are using location data and conducting a network analysis to map travel times to different types of food retailers and food assistance programs.

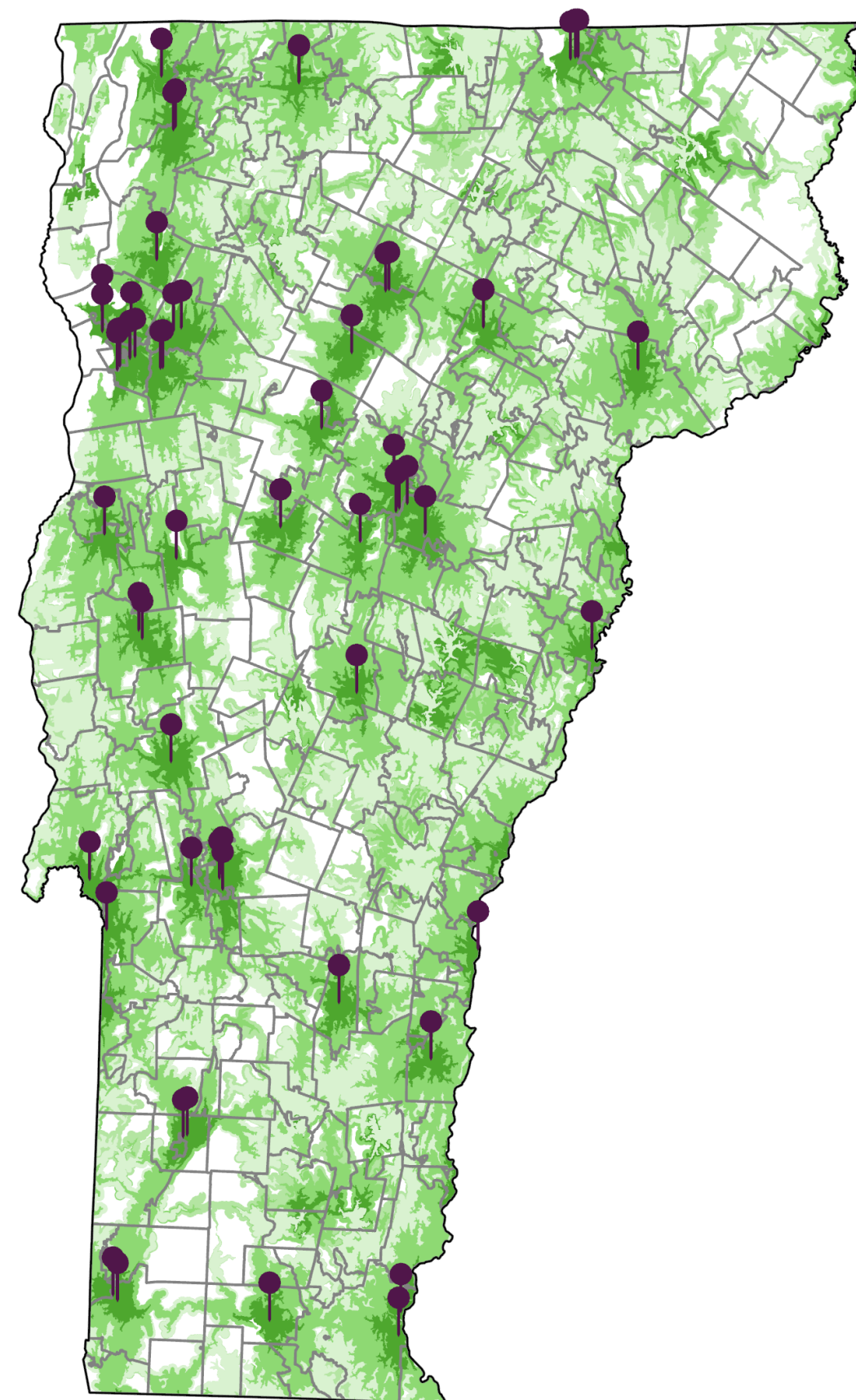
Then, we are creating a food access score (low to high) for each zip code area based on proximity to and density of food retailers and community food assistance programs. The score factors in how long people have to drive to reach food resources based on the existing transportation infrastructure.

Score Components:

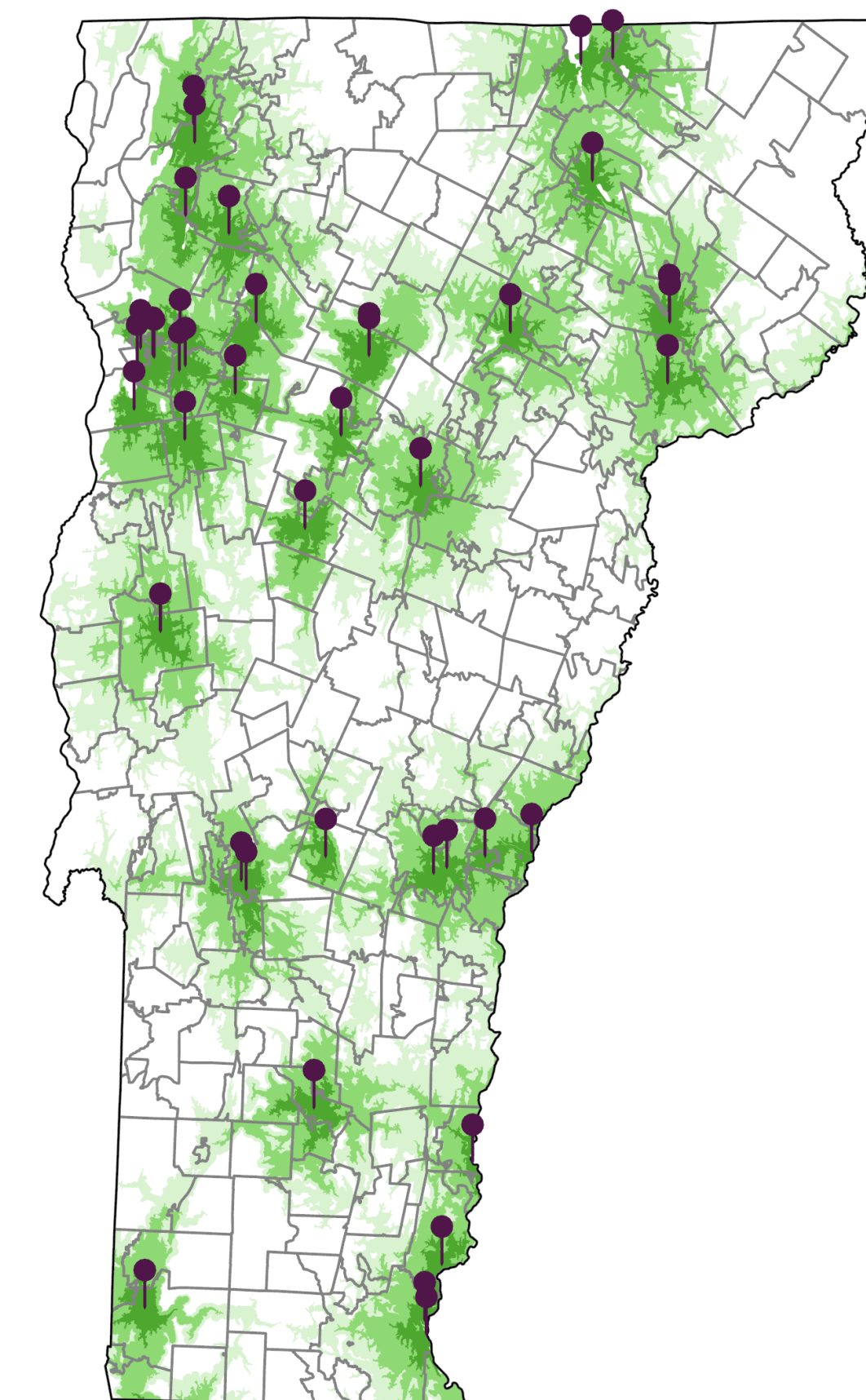
- Type of food retailer (large grocery, medium grocery, small grocery, dollar stores, and convenience/general stores)
- Retailer acceptance of SNAP and/or WIC food assistance programs
- Type of community food assistance program (food pantry, meal program, mobile pantry, little free pantry)
- How frequently the food program provides service (e.g., multiple days per week, weekly, monthly, etc.)

PRELIMINARY RESULTS

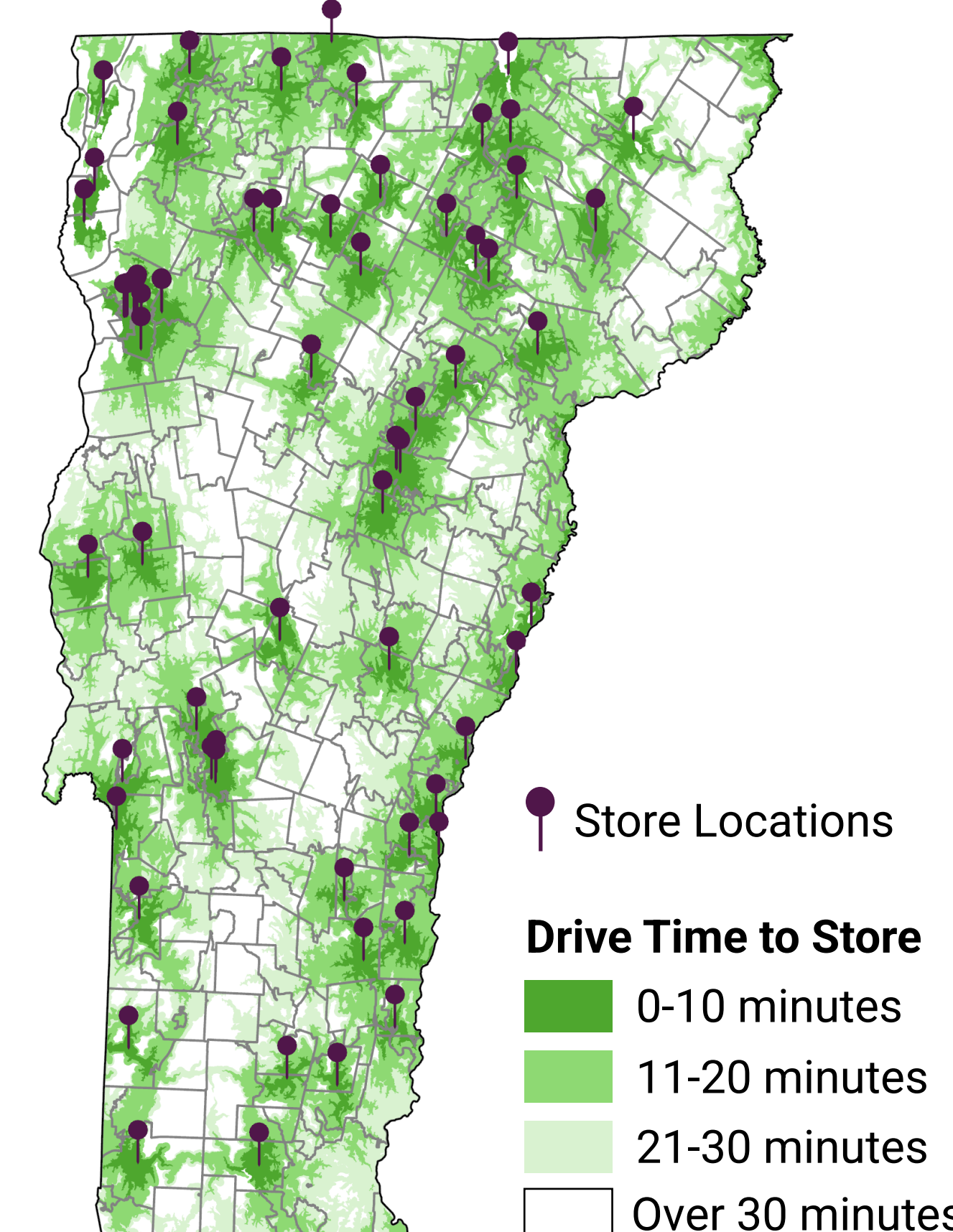
Large Grocery Stores



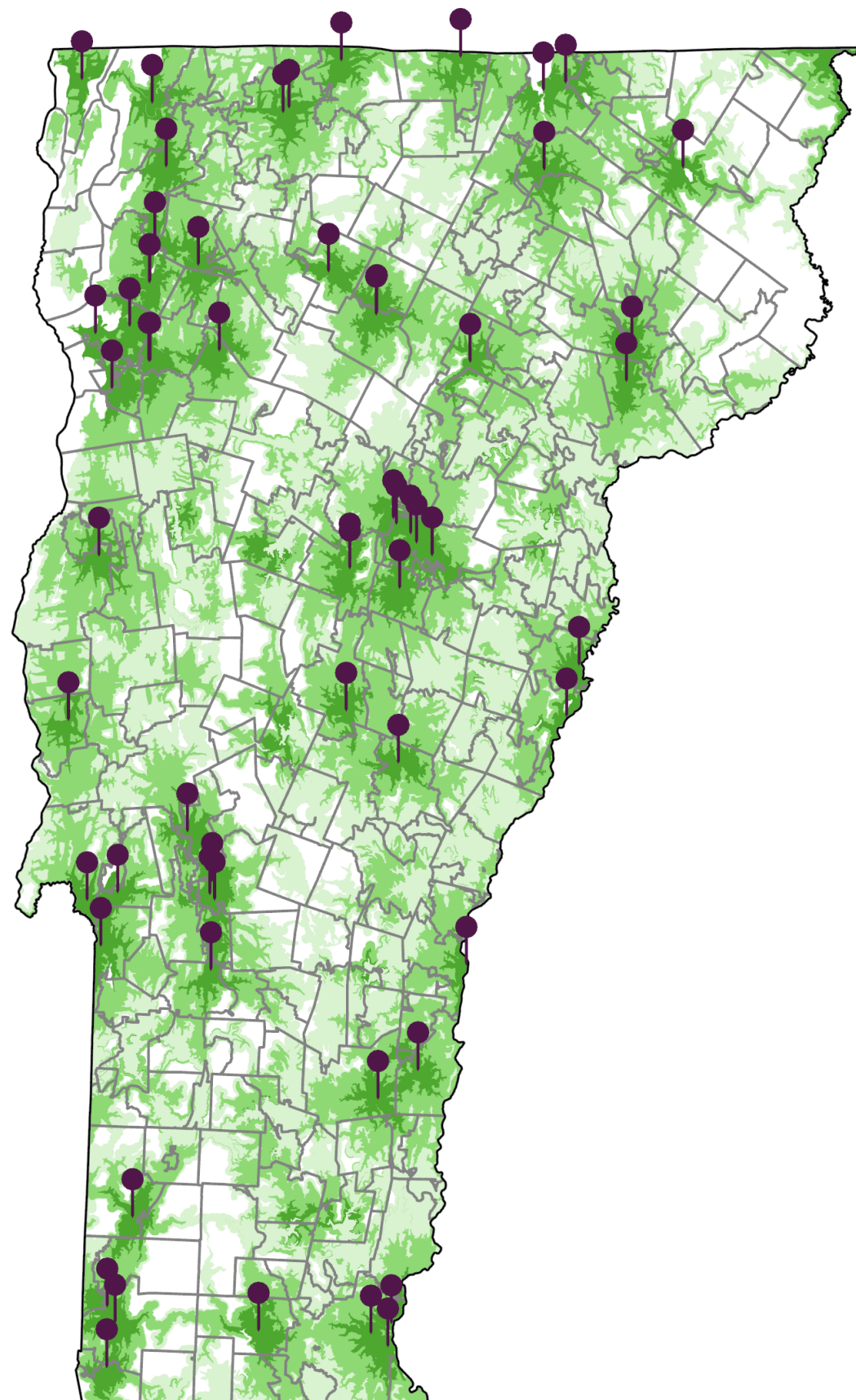
Medium Grocery Stores



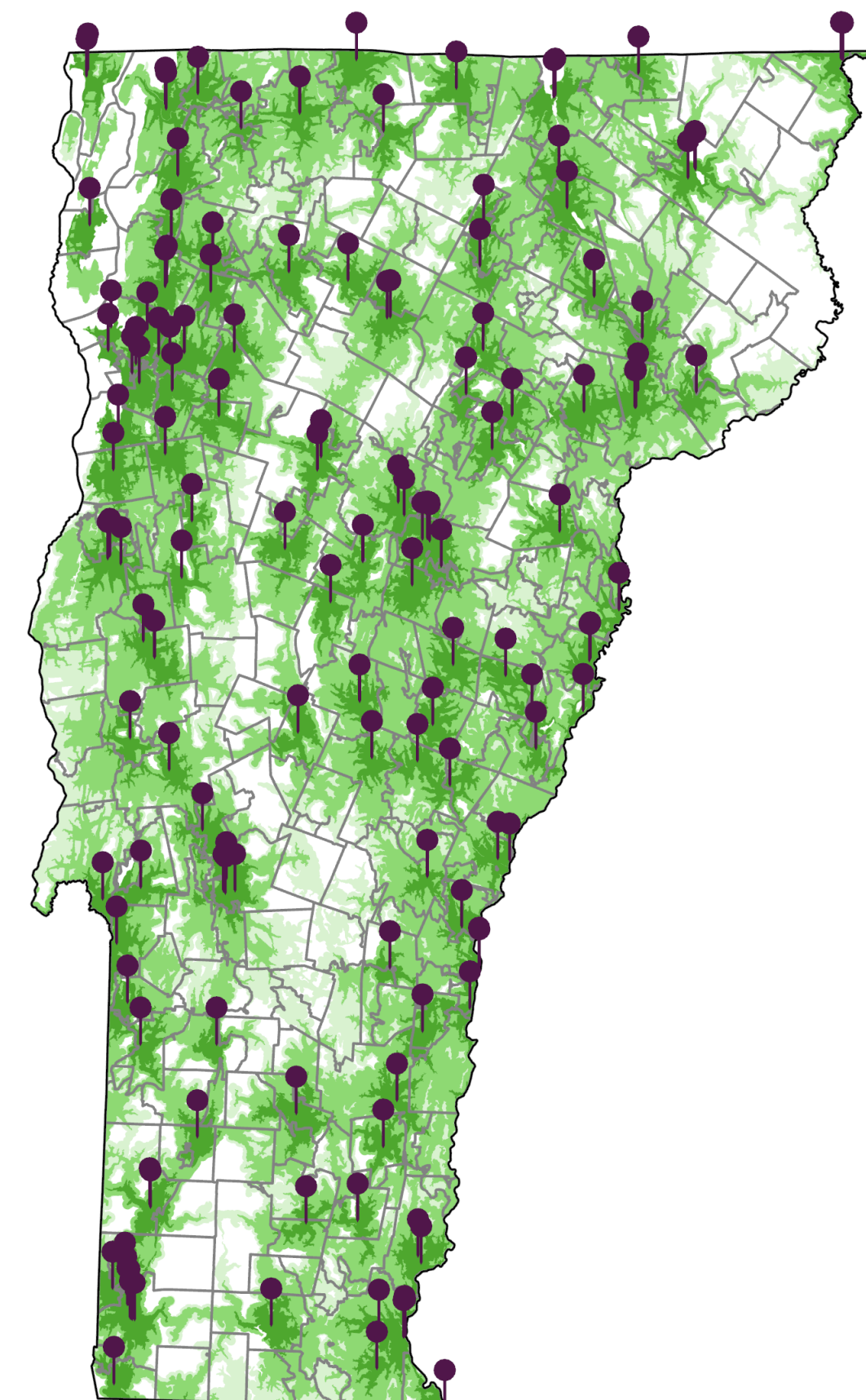
Small Grocery Stores



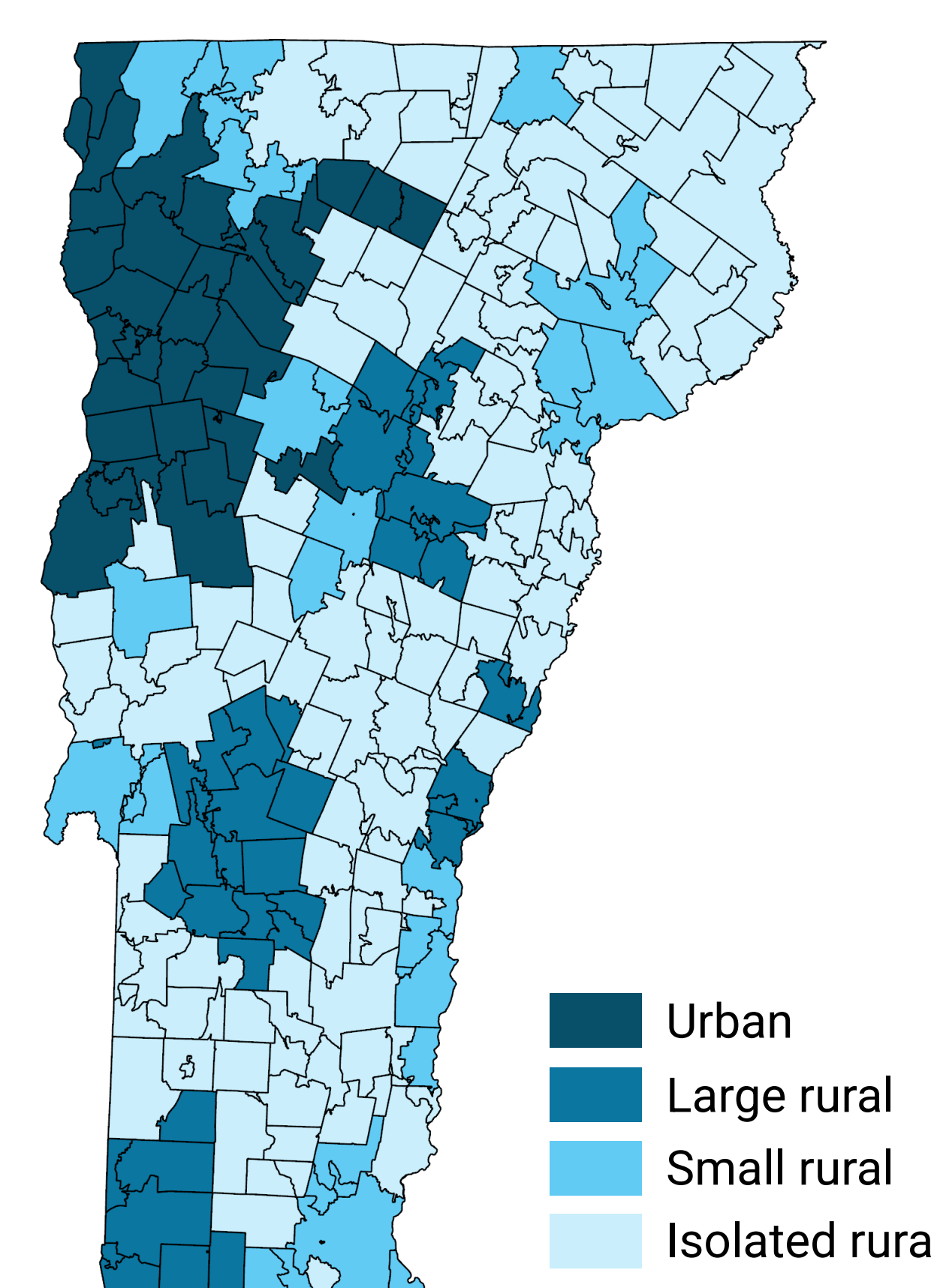
Dollar Stores



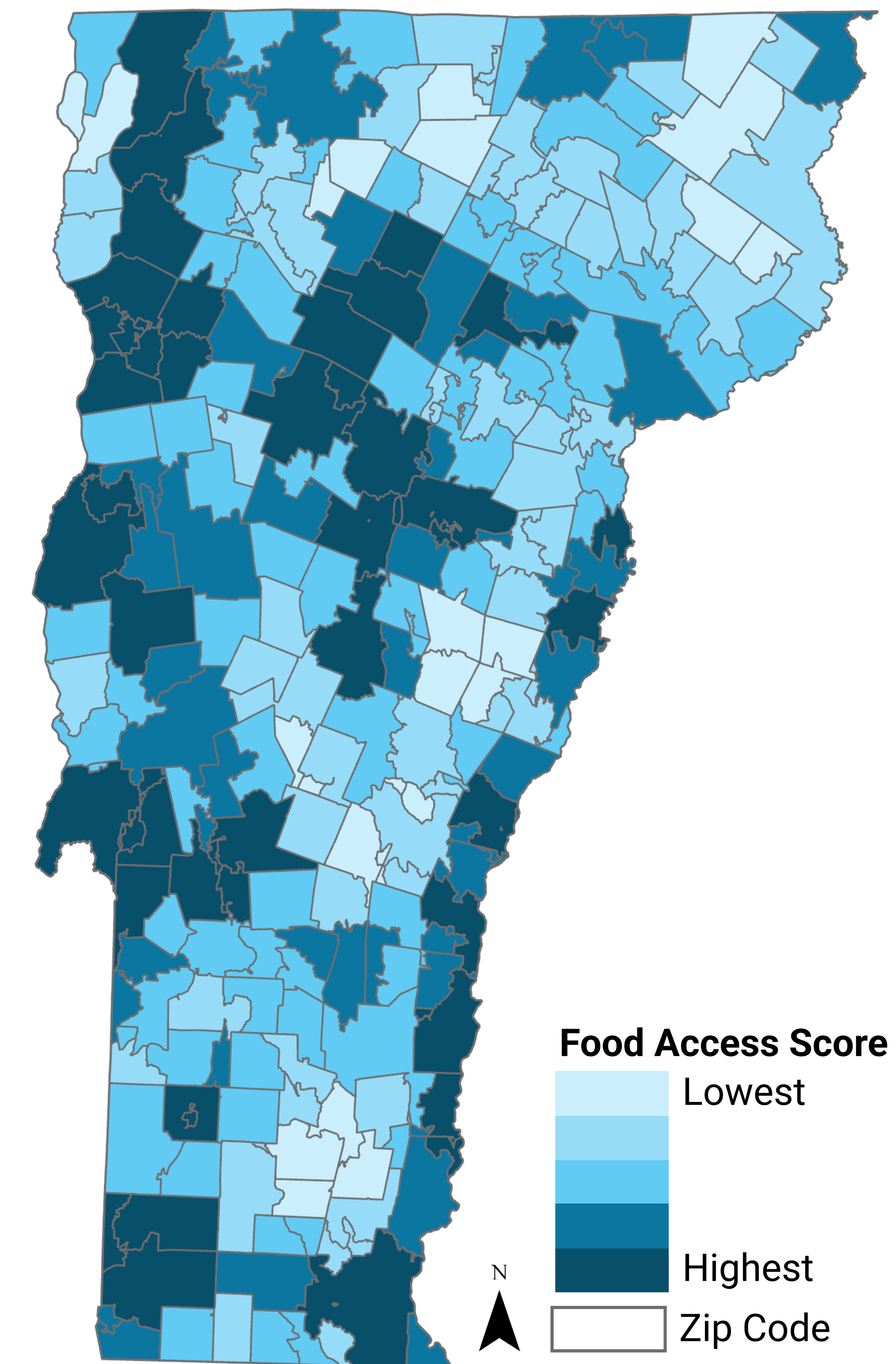
Food Pantries



Rurality



Preliminary Food Access Score for Vermont



IMPLICATIONS & NEXT STEPS

- Preliminary results indicate that food access score varies significantly by location. Low food access areas exist in both rural and urban areas, but rural areas, especially isolated rural, were more likely to experience low access to both food retailers and food assistance programs.
- Next, we are expanding the map to Maine, New Hampshire, and Northern New York. Rural communities in these areas face similar challenges to rural residents in Vermont due to the similar topography, climate, and transportation constraints.

- We are building on these preliminary results by incorporating other types of food retailers and incorporating other methods of transportation.
- Future work will combine the mapping project with data on diet, health, and food security to demonstrate the impact of limited food access on these critical outcomes.
- The tool will be publicly available and updated annually. Stakeholders include local and state governments, the food retail industry, hunger relief organizations, and research communities.

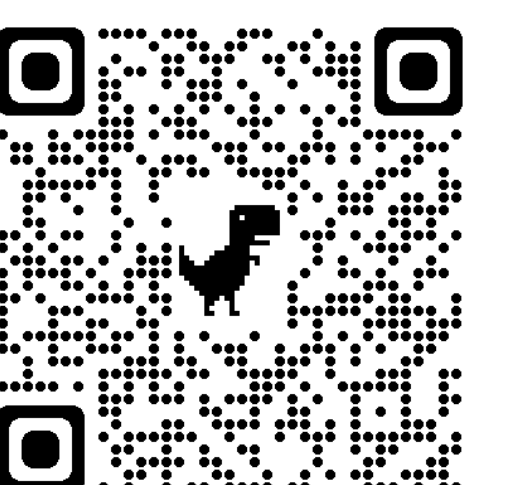
ADDITIONAL INFORMATION

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