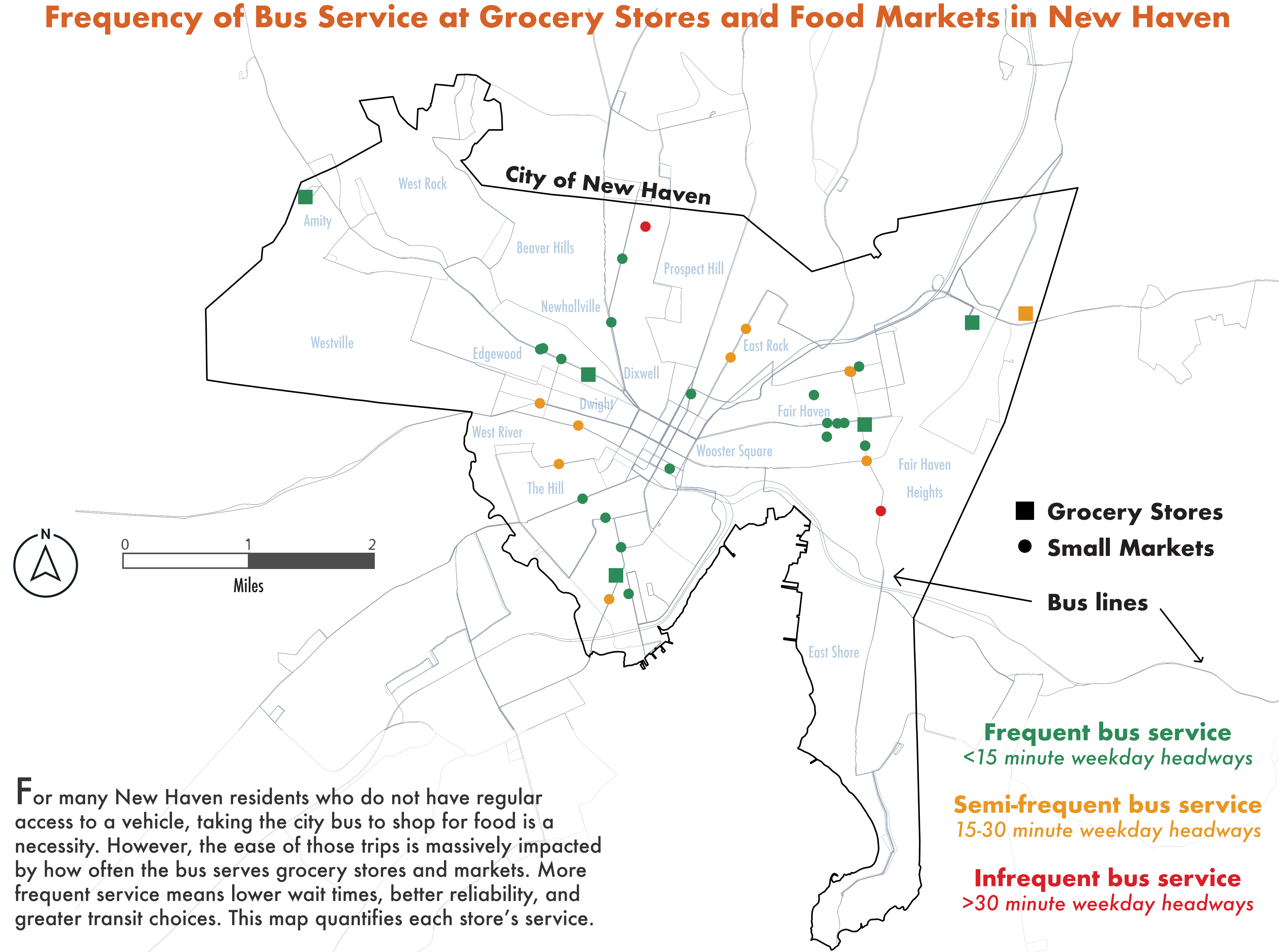


Riding to Groceries

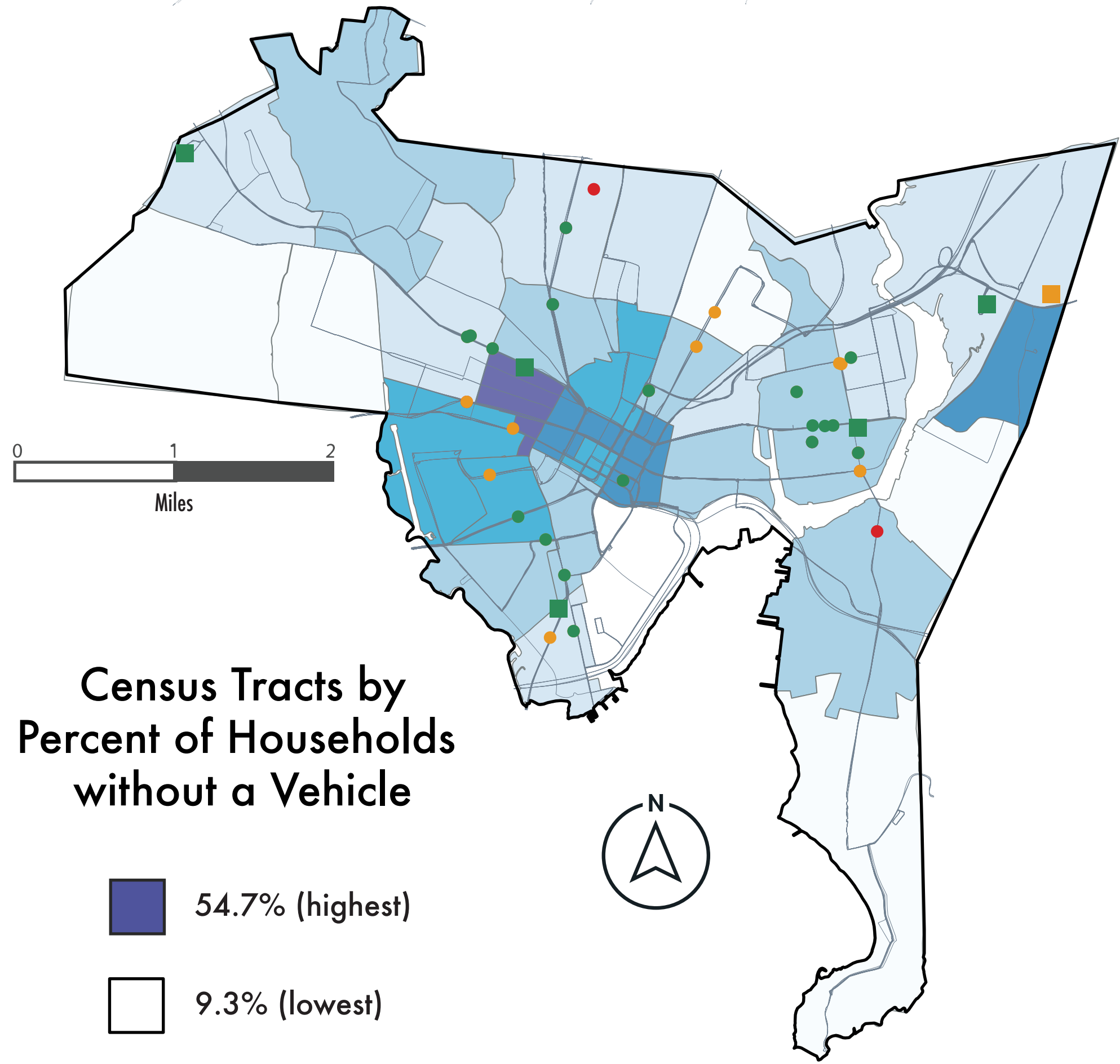
Frequency of Bus Service at Grocery Stores and Food Markets in New Haven



For many New Haven residents who do not have regular access to a vehicle, taking the city bus to shop for food is a necessity. However, the ease of those trips is massively impacted by how often the bus serves grocery stores and markets. More frequent service means lower wait times, better reliability, and greater transit choices. This map quantifies each store's service.

To quantify transit service frequency, this map measures the average headway (maximum wait-time) between buses at the busiest stop within 1/4 mile of a given store. Since stops often feature multiple bus lines, a rider may need to wait longer than this mean headway figure for their particular bus route. Nonetheless, by providing a general picture of how often any New Haven bus stops near these stores, this map quantifies the overall frequency of transit service to food stores.

Various transit studies have found that 15 minutes is the headway threshold below which riders feel comfortable riding without checking the schedule. Thus, 15 minutes was set as the cutoff for "Frequent" service with the other categories based on it. While this map does not analyze the connectivity of each store's stop to the wider bus network and residential areas, the entire bus network is shown in grey, with the line thickness corresponding to the number of overlapping routes.



The above map overlays the service frequency data with census tracts by percent of car-less households—the darkest-shaded areas are most likely to have residents reliant on transit for groceries. This layer reveals where high-frequency bus service to stores is most needed. It appears that, outside of Fair Haven Heights, the system serves those areas of need relatively well.

One challenge of making this map was curating the list of stores and ultimately categorizing them as "grocery stores" or "small markets." The list was compiled manually with Google Maps as the main source. The "grocery store" label is reserved for large stores with a wide variety of products, while "small markets" include everything from corner marts to culturally-specific stores. Stores that are more similar to convenience stores or delis were excluded, especially those that sell limited ingredients for cooking.