

INTRODUCTION

The Flint Leverage Points Project (FLPP) studied the food system of Flint to identify leverage points for positive change in accessibility to healthy and affordable foods. Part of this research included mapping the current transportation routes, bus stops, and bus stop access. This was overlaid with qualitative data on food stores identified by residents and Nutrition Environment Measures Survey in Stores (NEMS-S) survey data to better understand food as well as transportation access in Flint.

Methods

- Identification of 28 different food stores by Flint residents through 12 stakeholders' workshops (N = 80).
- Mapping stores with transportation routes to understand access.
- Used Nutrition Environment Measures Survey in Stores (NEMS-S), which is an externally validated survey that aims to assess the price, quality, and availability of healthy foods in stores to understand accessibility.
- Collection of NEMS-S data of the 28 food stores, compared with previous data from a city-wide NEMS-S collected in 2016 and qualitative descriptions to explain change among stores.

RESULTS

Impacts for Transportation

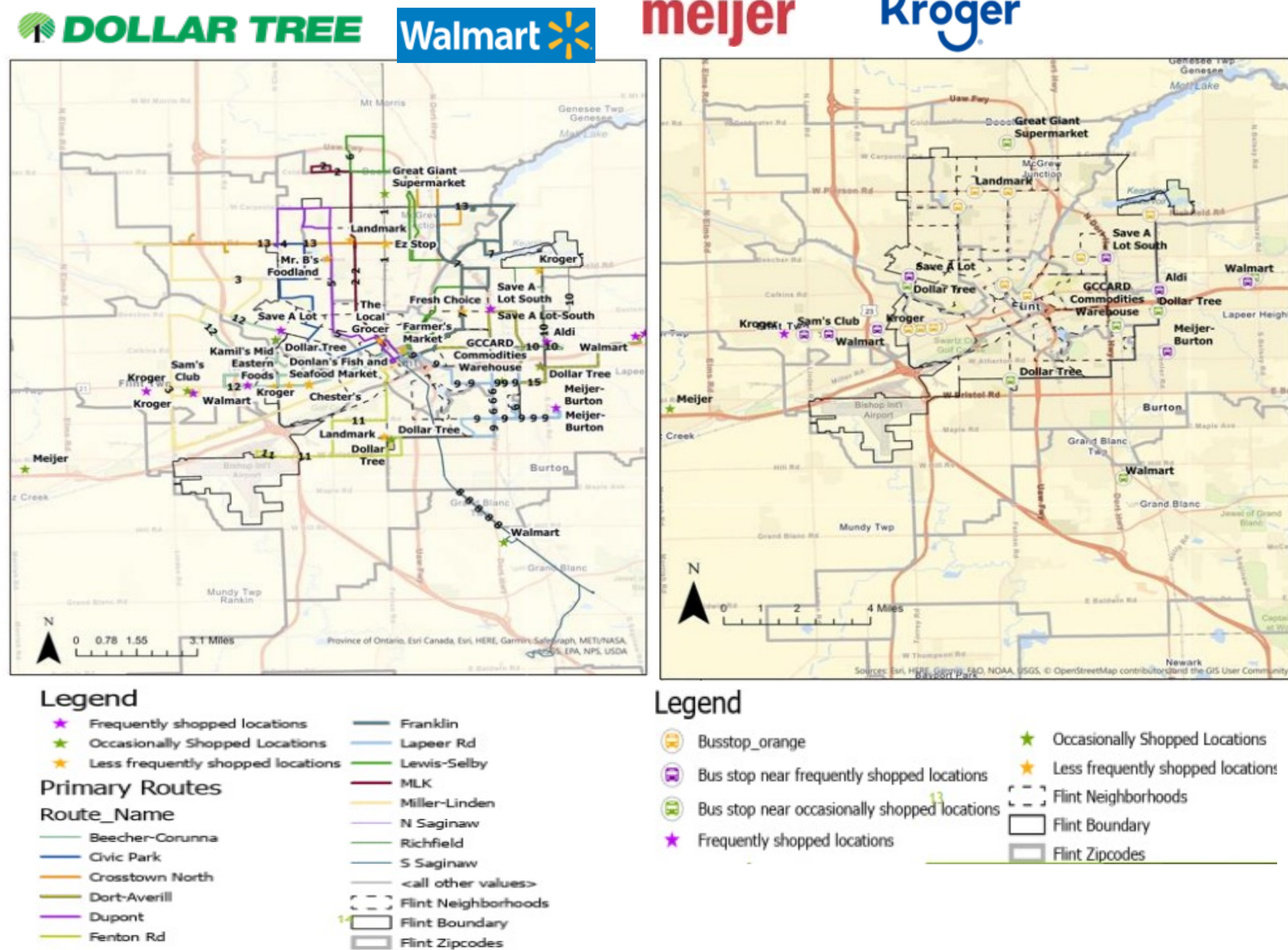
- Stores are serviced by only a single bus route which limits the residents who can access the store without making a transfer. Residents of North Flint need to transfer bus lines to reach most frequently shopped stores.
- Bus transfer with groceries is a major barrier to using public transportation to access food.
- Flint residents describe the difficult reality of navigating bus stops distance in the snow, with small children, and while carrying lots of heavy bags of food.
- 20 out of the 28 stores bus stops around/near stores were not covered, nor lit, which limits participants ability to feel safe shopping in the evenings.

NEMS-S

- 11 out of the 29 stores earned fewer points in 2022 than in 2016. The most prominent changes occurred in the food categories of: "Dairy," Fruits/Vegetables, and "Grains".
- These stores also tended to be stores where residents said they shop occasionally or shop less frequently.
- Out of the 28 stores surveyed, 19 of the stores received the full five points for lead mitigating foods.
- Five stores with a high score points of 71-91 were located within Flint city limits with only one being on the boundary providing greater quality and accessibility to the residents.
- Residents of North Flint do not have direct access to higher scoring NEMS-S stores.

CONCLUSION

Our findings highlight that improving transportation access to stores with high-quality NEMS-S scores is important because, currently, there are no direct bus routes to these stores for residents of North Flint. Transportation planners should examine bus routes to ensure all neighborhoods have direct bus routes to at least one, and ideally several different "frequently shopped" locations to improve access to quality, affordable food. Policymakers can support this work through funding and advocacy to create changes needed for a more equitable food system in Flint.



REFERENCES

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Bus stop near a store with high scoring frequently shopped NEMS-S score outside of the City of Flint
Credit: Google Maps



Bus stop near with a moderate NEMS-S score. Credit: Google Maps

