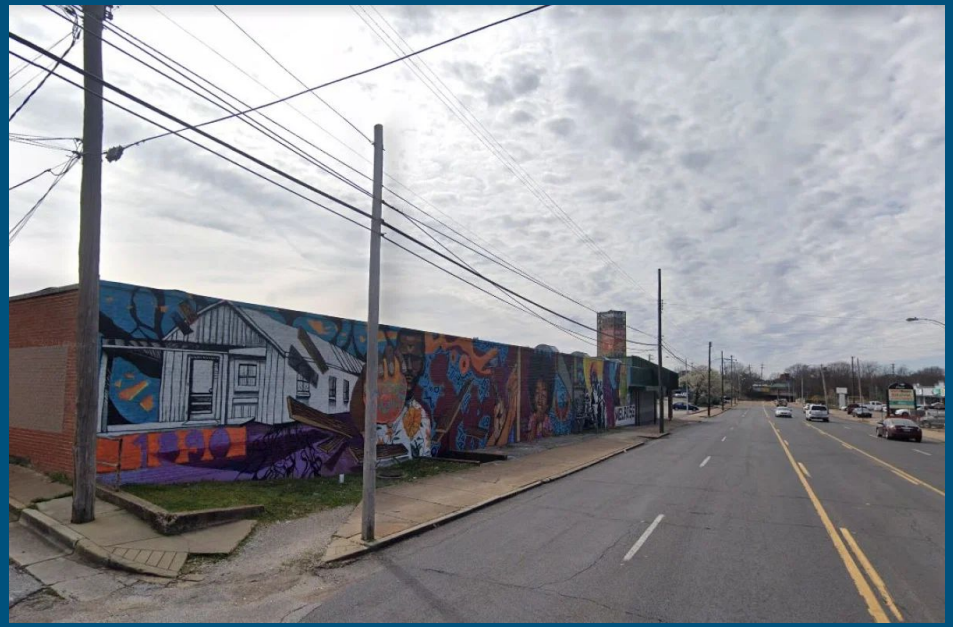
A Greener Justice

Finding the space
for urban pocket parks

The problem

Access to urban green space improves human wellbeing & community engagement.

Poor neighborhoods tend to have fewer parks.



The solution

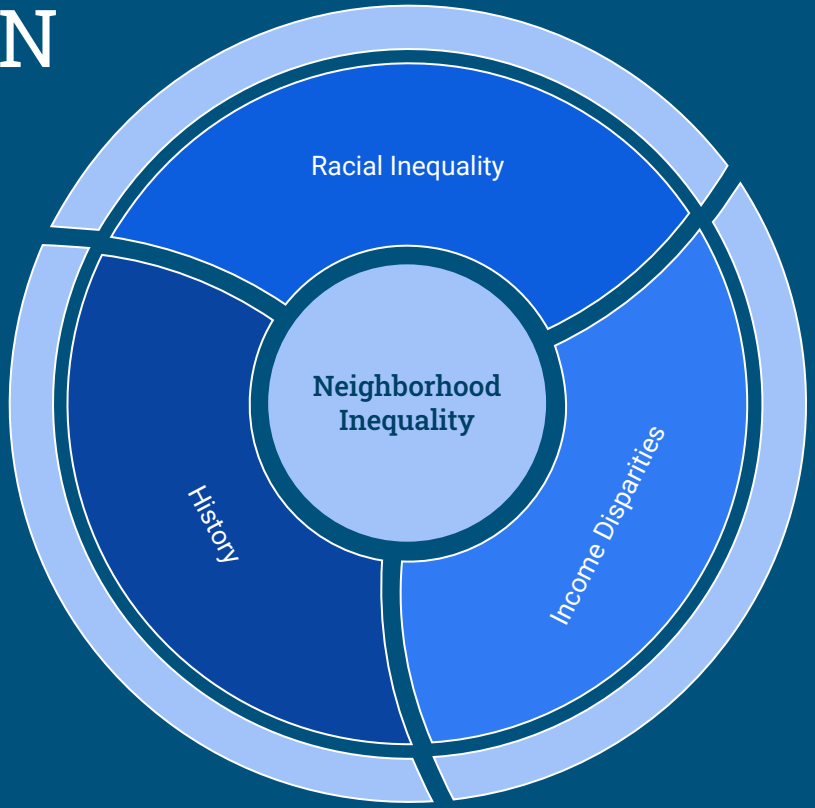
Pocket parks

Provide safe and comfortable locations for community engagement.

Cost-effective solution for developed communities.

Now is the time.
Memphis is the place.

Memphis, TN


Racial Inequality
Neighborhood Inequality
History
Income Disparities

Goal

Characterize Memphis neighborhoods by outdoor recreational features

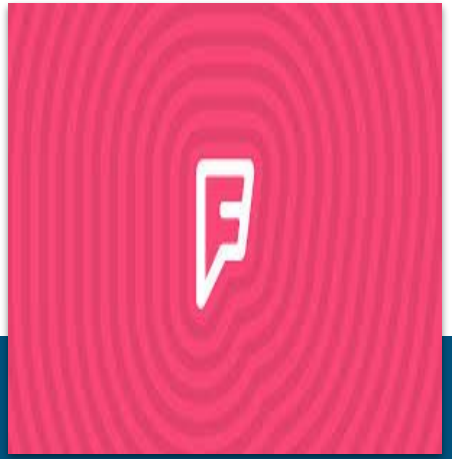
&

Determine pocket park priority locations.

Data Sources

tripsavvy

Memphis neighborhoods & zip codes



FOURSQUARE

Venues in neighborhoods

Memphis Data

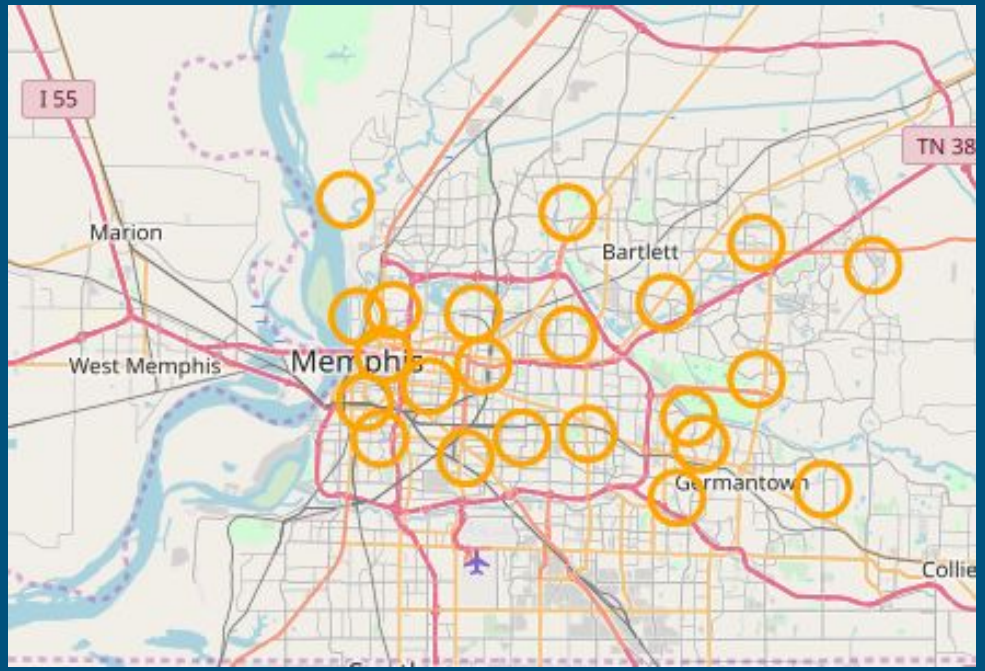
Community centers in neighborhoods.

Methodology

Acquire Data	Explore the Neighborhoods	Determine Park Location	Map Community Centers	Cluster Neighborhoods
Scrape trip savvy for neighborhood and zip code data.	Map the neighborhoods and select an appropriate radius to do a foursquare venue search.	Generally categorize neighborhoods by those that do or do not have outdoor parks.	Evaluate which neighborhoods lack parks and community centers	Cluster neighborhoods using venue categories and geographical location.

Mapping

1,500 m radius for Foursquare search

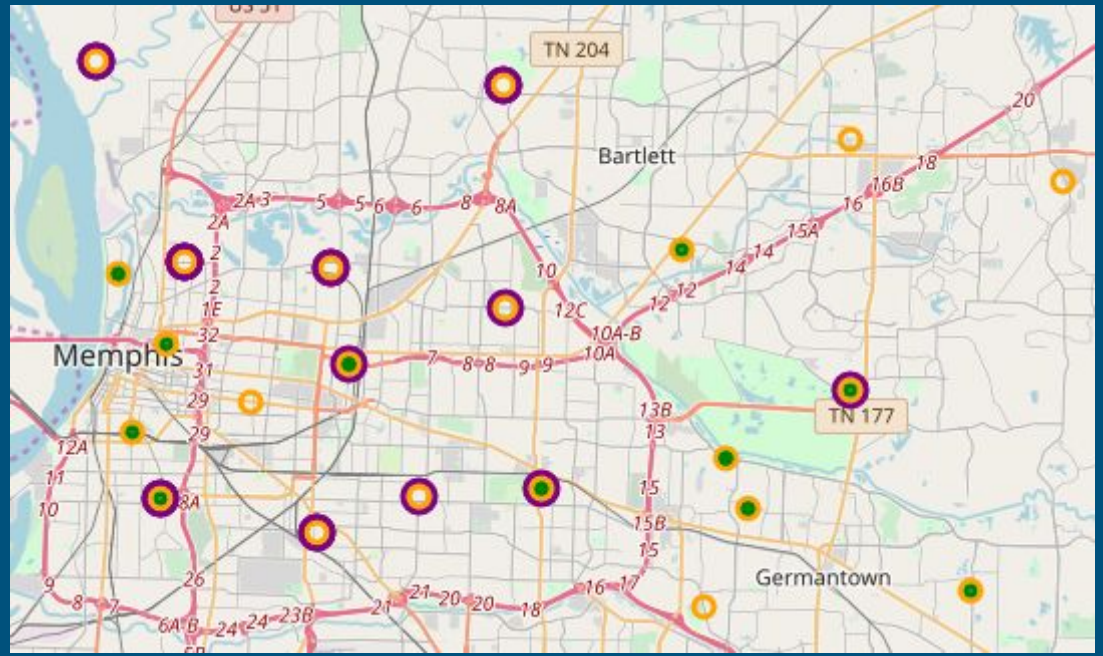


Mapping

Orange: Neighborhoods of interest

Green: Park in neighborhood*

Purple: Community center in neighborhood*



* At least 1

KMeans Cluster:

0- Restaurants

1- Frayser (only one Foursquare category)

2-No free amenities

3- Zoo (free part of year)

Neighborhoods with no parks	Number of Community Centers	KMeans Cluster	DBSCAN Cluster
Cordova	0	0	0
Midtown	0	0	1
North Memphis	3	2	1
Kingsbury	2	3	1
University of Memphis Area	1	0	1
Orange Mound	2	0	1
East Memphis	0	0	2
Berclair	2	0	3
Frayser	2	1	-1
Raleigh	2	0	4
Bartlett	0	0	5

DBSCAN Cluster:

By Geography. Most of the 1’s within loop except Berclair.

Proposed Areas

Pocket parks priority locations:

*Midtown

*Cordova

*Bartlett

*East Memphis

*Frayser

Data Limitations & Future Directions

Foursquare was not ideal for parks in Memphis: existing parks not listed (such as Audubon in the University district)

Income by Zip Code would enhance inferences.

Dataset with vacant land/public lots for specific pocket park locations desirable.