



Ann Arbor meets Spin

analyzing e -scooter travel behavior

Presentation to Micromobility SubCommittee
January 31, 2020

Presentation Contents

- ▣ Mobility Metrics
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Mobility Metrics

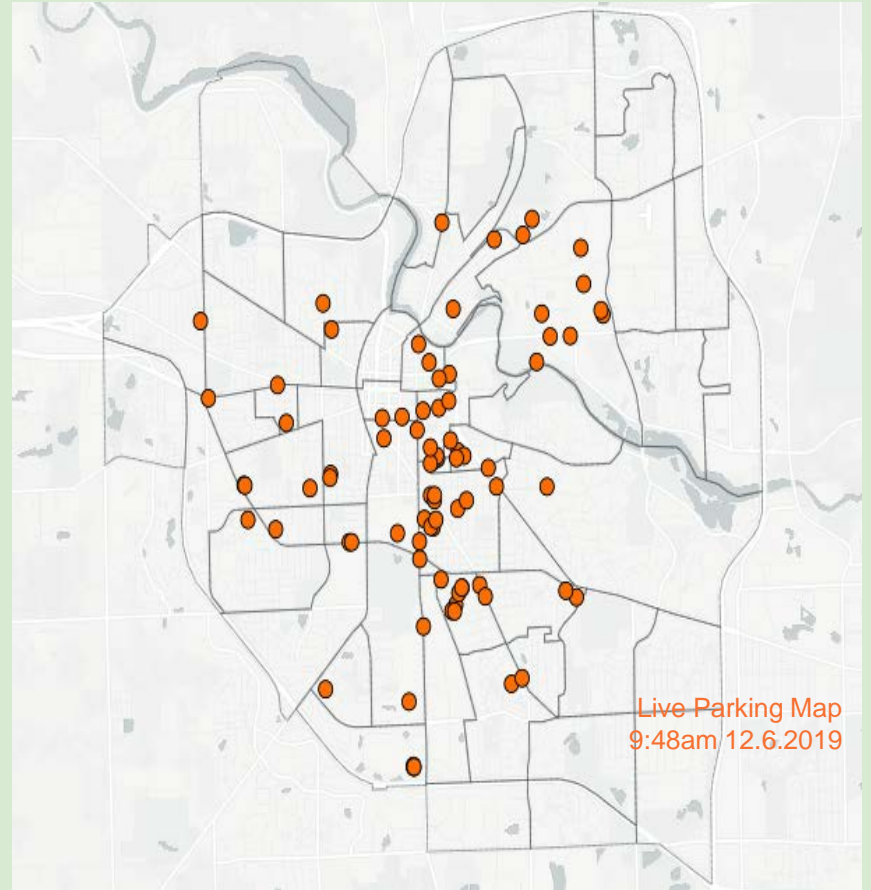
Mobility Metrics Overview

Since implementation...

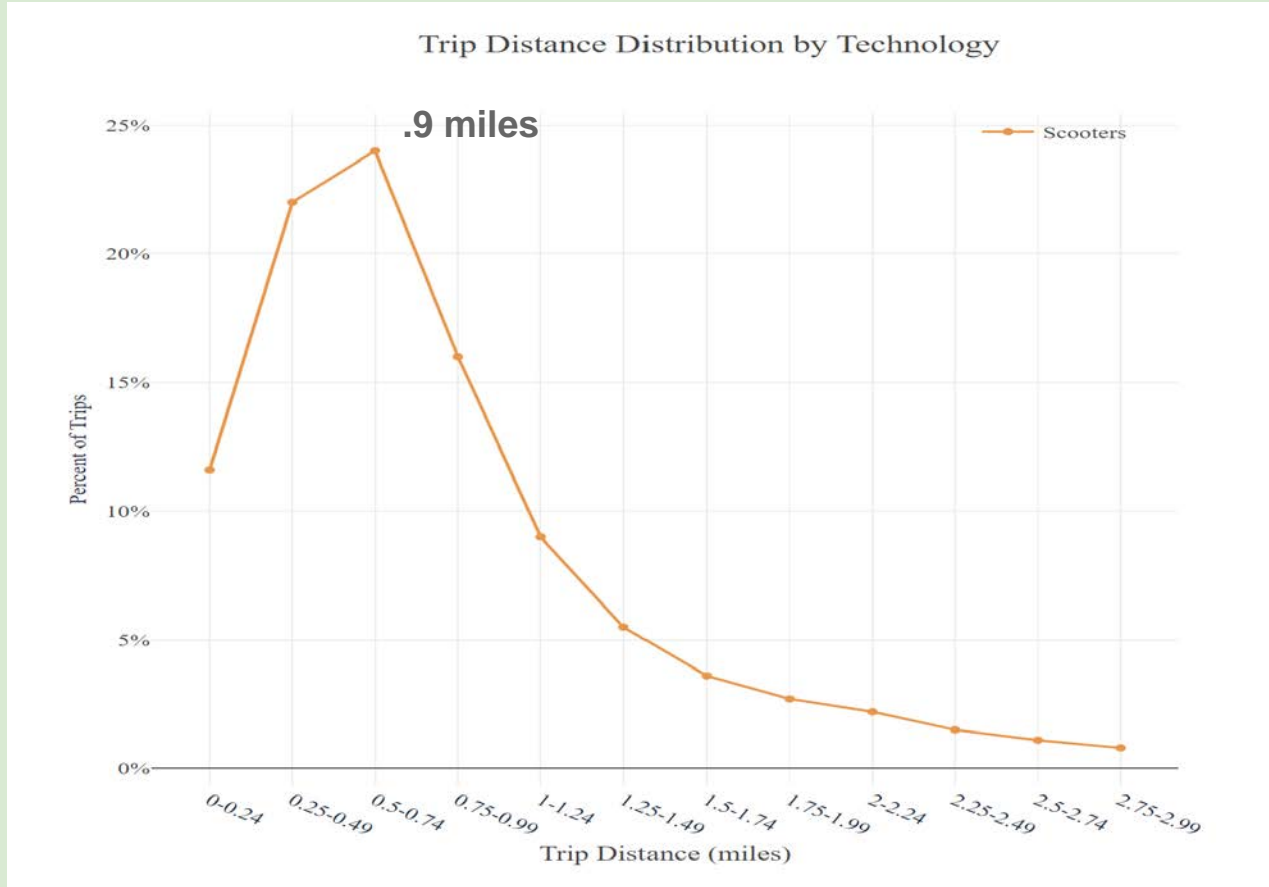
97,257 total trips

87,002 total trip miles

1.2 million total trip minutes

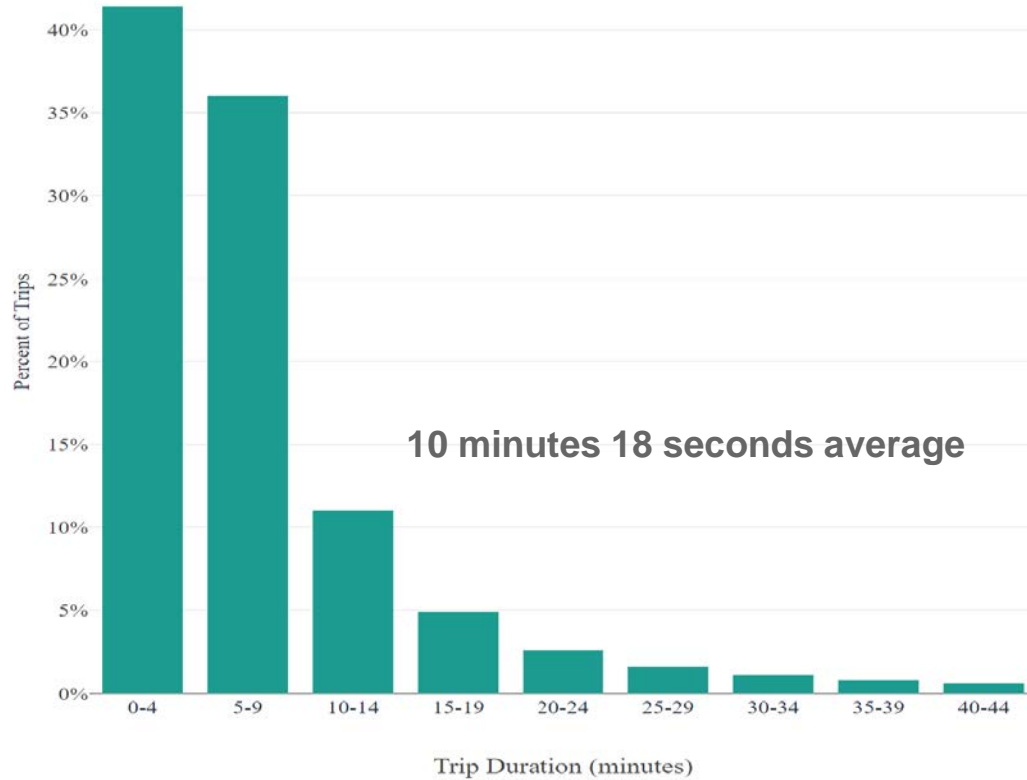


Trip Distance Distribution

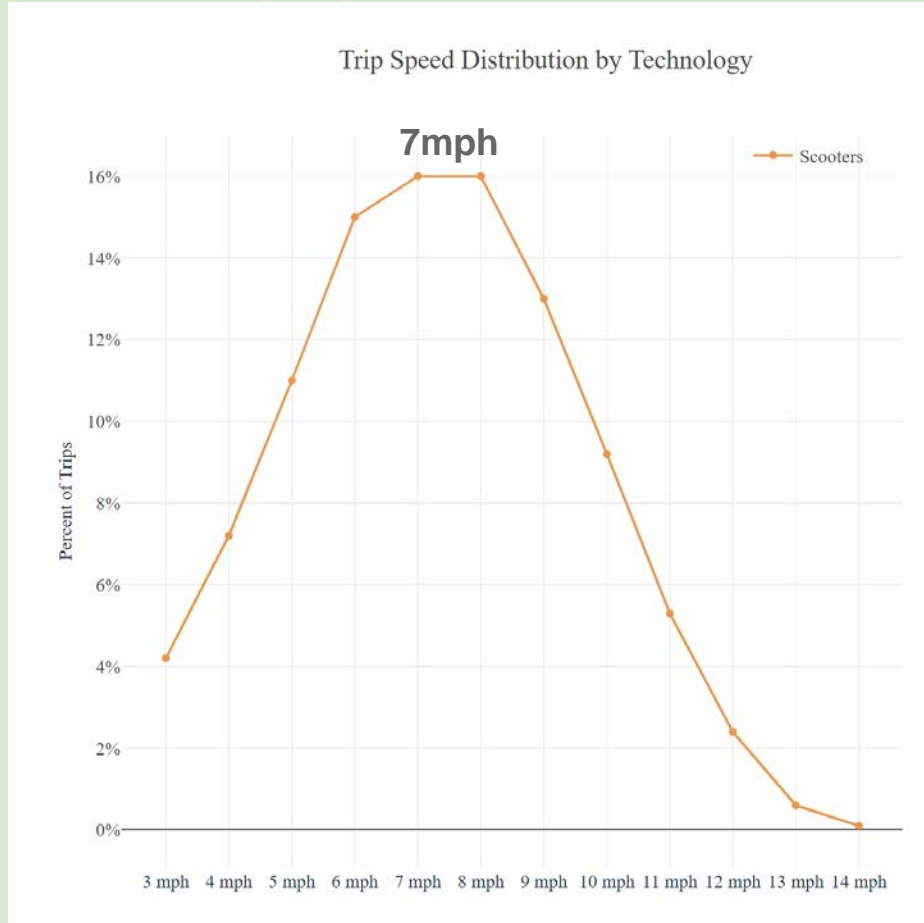


Trip Duration Distribution

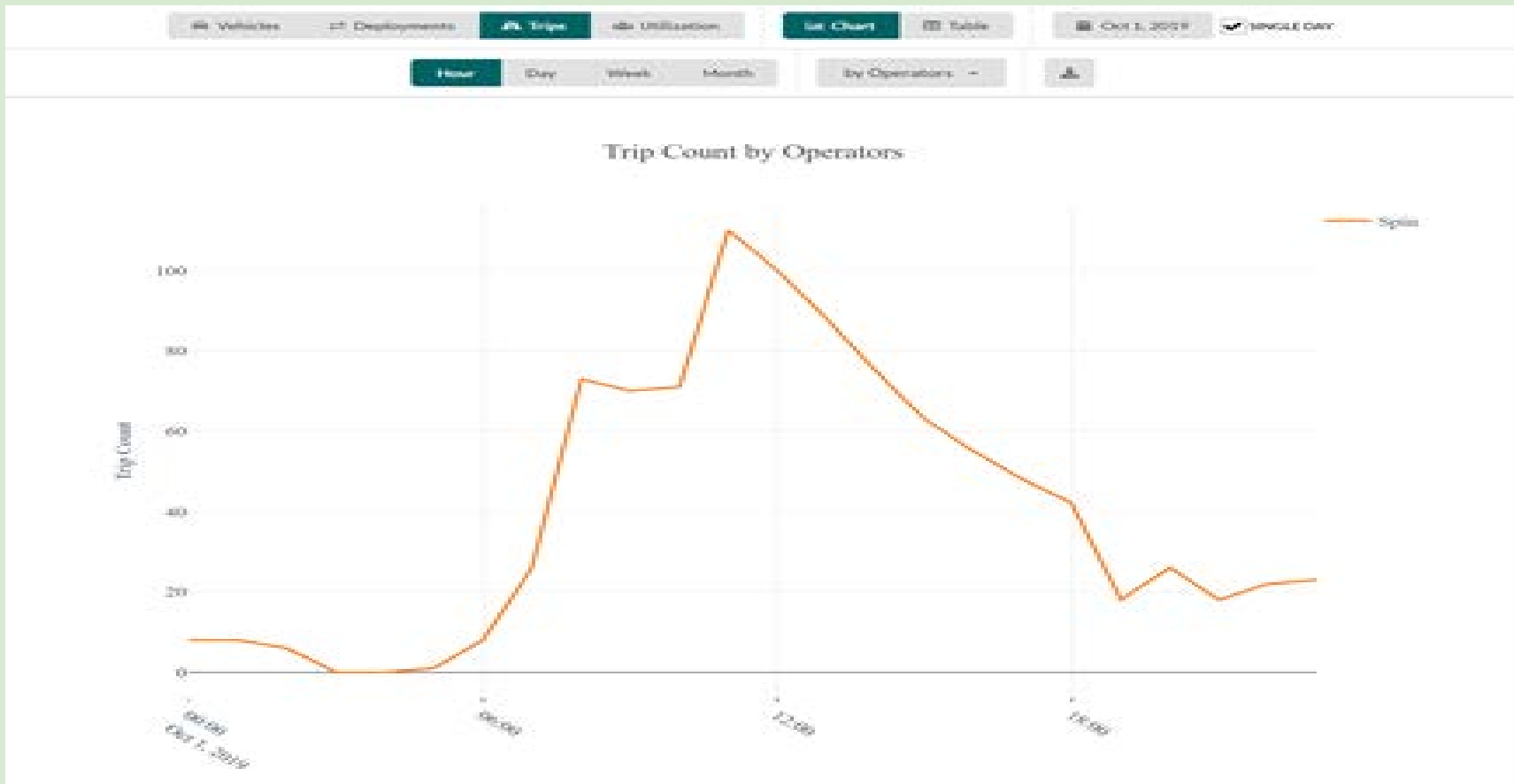
Trip Duration Distribution for Micromobility Trips (All Vehicle Types)



Trip Speed Distribution

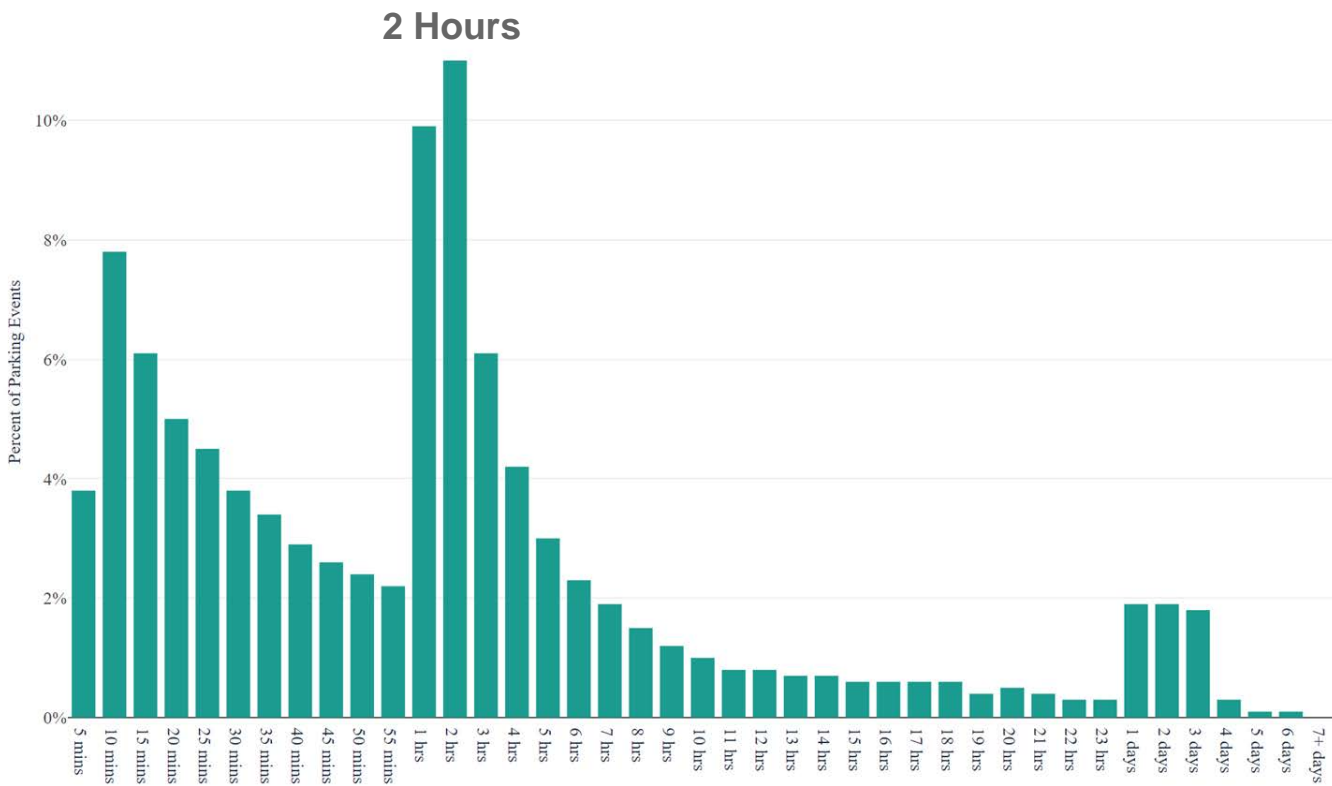


Trip count by time of day



Parking Duration

Dockless Parking Distribution (All Vehicle Types)



Mobility Statistics

Daily Metrics

Oct 30, 2019

# Trips	Total Trips Distance	Total Trips Duration	Avg Trip Distance	Avg Trip Duration
669	506 mi	6,292 mins	0.76 mi	9 mins 24 secs

Weekly Metrics

Oct 21, 2019 - Oct 27, 2019

# Trips	Total Trips Distance	Total Trips Duration	Avg Trip Distance	Avg Trip Duration
4,389	3,602 mi	40,114 mins	0.82 mi	9 mins 8 secs

Monthly Metrics

Sep 1, 2019 - Sep 30, 2019

# Trips	Total Trips Distance	Total Trips Duration	Avg Trip Distance	Avg Trip Duration
33,663	29,476 mi	331,690 mins	0.88 mi	9 mins 51 secs

Metrics

Oct 1, 2019 Oct 30, 2019 Single Day

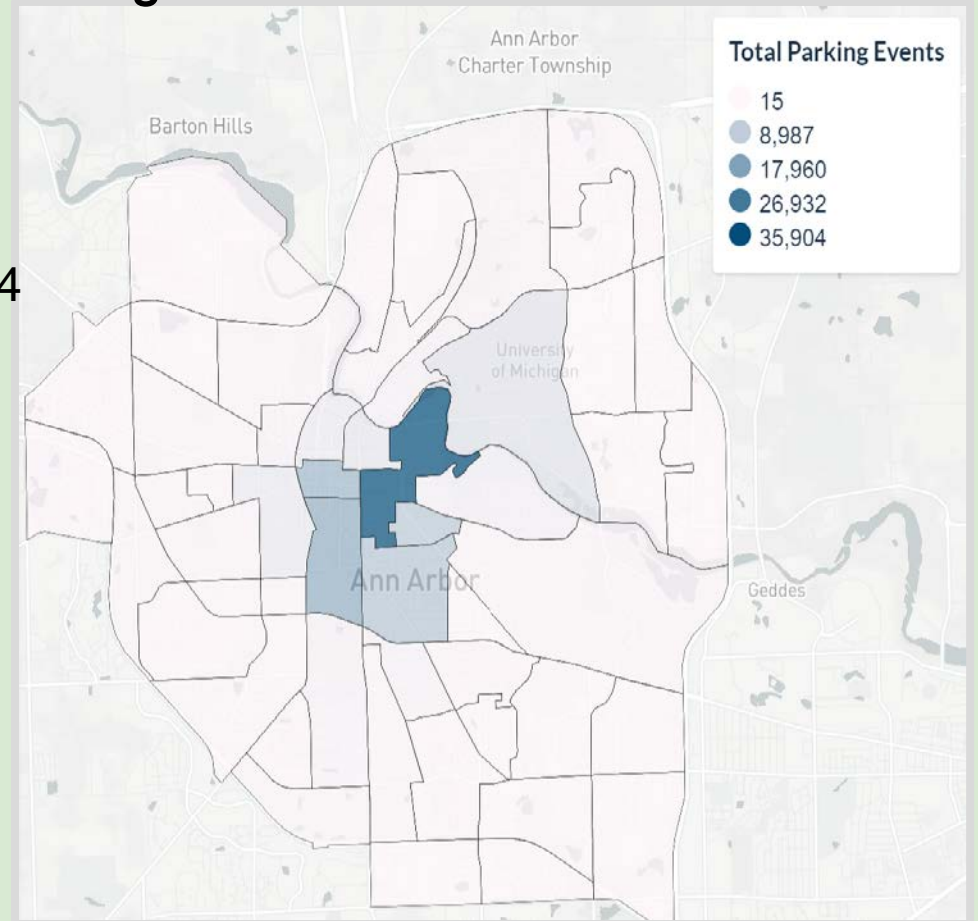
# Trips	Total Trips Distance	Total Trips Duration	Avg Trip Distance	Avg Trip Duration
25,816	22,247 mi	247,275 mins	0.86 mi	9 mins 34 secs



Where are they being used?

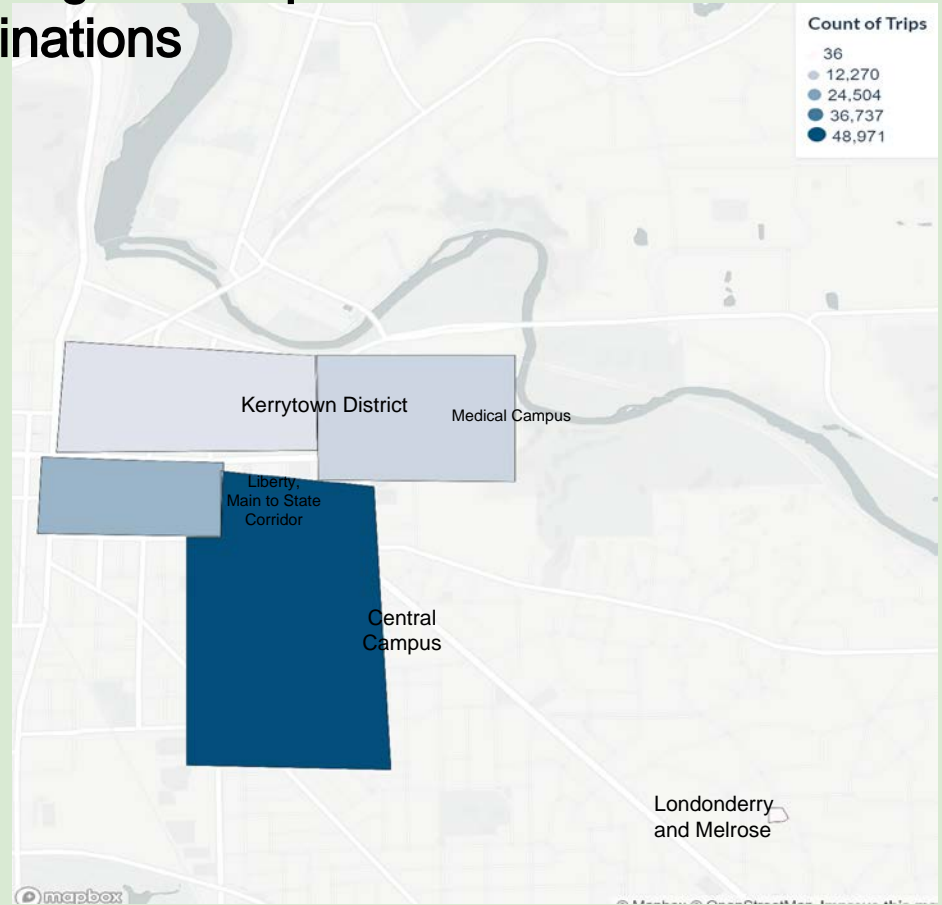
Parking Areas

- Central Campus Medical - 35,904
- South Central - 15,140
- Downtown - 13,360
- Burns Park - 10,062
- South University - 9,449
- North Campus - 4,072



Total Trip Origins & Trip Destinations

Central Campus - 48,971
Liberty, Main to State Corridor - 19,555
Medical Campus - 9,890
Kerrytown District - 5,971
Londonderry and Melrose - 36





Trip Origins and Trip Destinations

Daily Origins

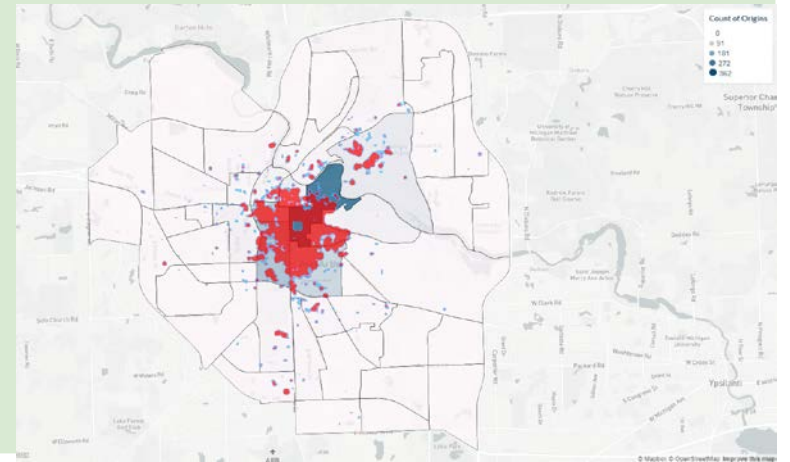
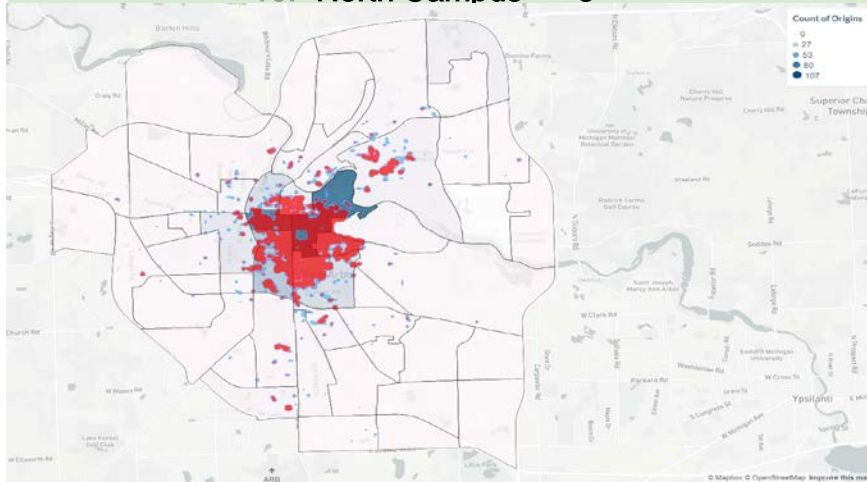
by Neighborhoods and Season

Summer

1. Central Campus Medical - 107
2. Downtown - 95
3. South Central - 39
4. South University - 32
5. Burns Park - 22
6. North Central - 21
7. Old West Side - 13
8. Old Fourth Ward - 10
9. Northbury -Chapel Hi - 7II
10. North Campus - 5

Fall

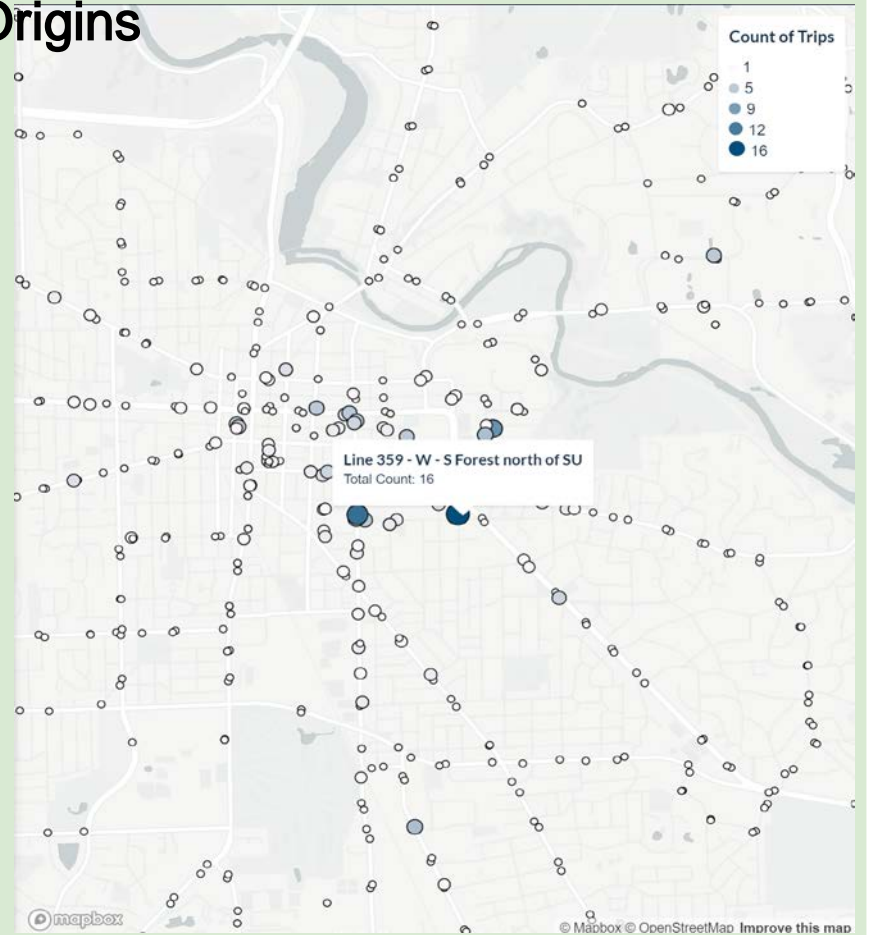
1. Central Campus Medical - 362
2. South Central - 150
3. Burns Park - 95
4. Downtown - 95
5. South University - 95
6. North Campus - 38
7. Old Fourth Ward - 27
8. Old West Side - 20
9. Geddes Arboretum - 19
10. North Central - 16



Bus Stops As Destinations and Origins

The most frequented bus stops and lines with scooters ending and starting trip within 0 meters of are

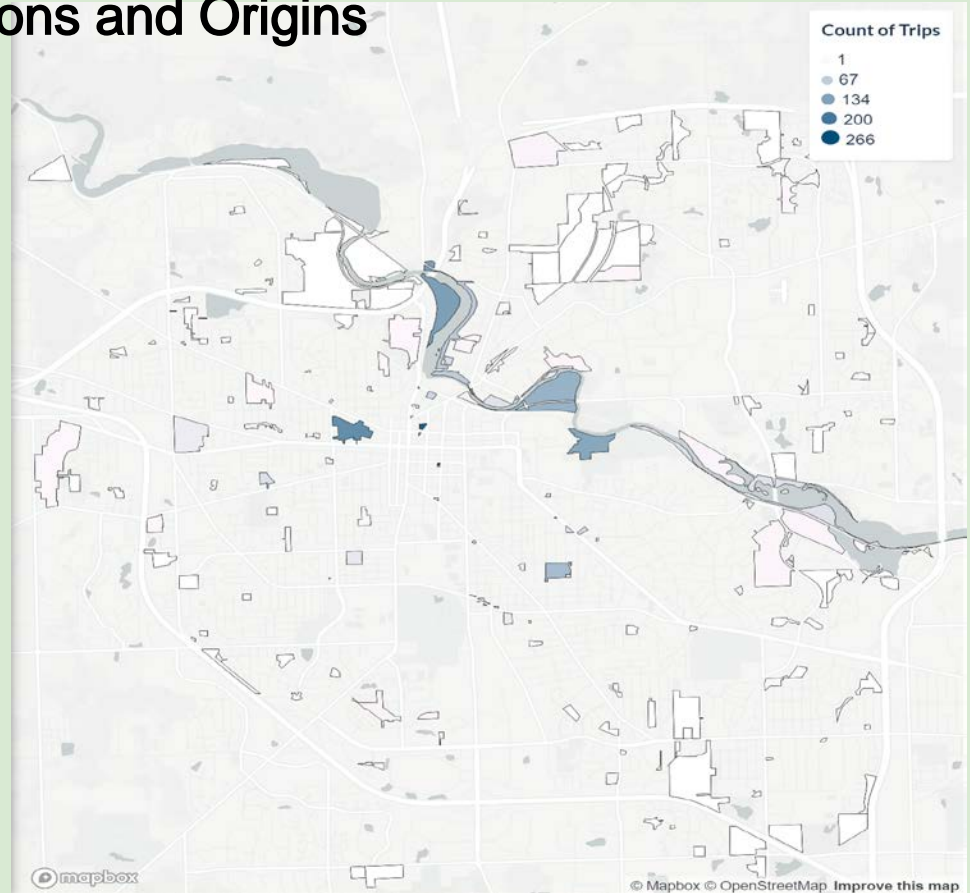
1. Line 359 W - S Forest North of South University
2. Line 6 E - E State St North of South University
3. Line 36 E - S State Street North of South University
4. Line 18 S - S Washington Heights at Observatory



Parks: As Destinations and Origins

The most frequented parks with scooters ending and starting trip within 5 meters of are

1. Liberty Plaza - 266 trips
2. Farmers Market - 238 trips
3. West Park - 164 trips
4. Bandemer Nature area - 137 trips
5. Arboretum Nature Area - 125 trips

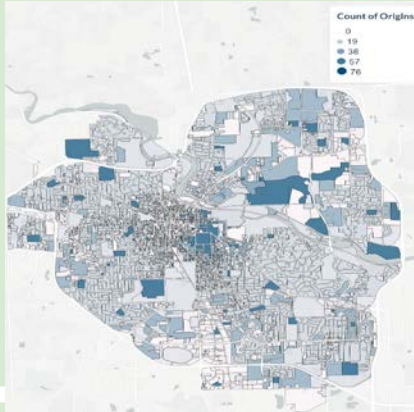


Total Daily Count

Destinations & Origins by Land Use

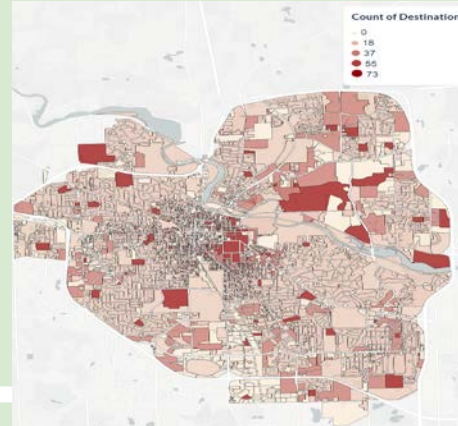
Origins

1. Education - 76
2. Group Housing - 47
3. Multiple Family - 37
4. Single Family - 16
5. Hospital - 14
6. Parking - 11
7. Residential/Non -Residential Mixed - 11
8. Mixed Use - 10
9. Outdoor - 10
10. General Retail - 10



Destinations

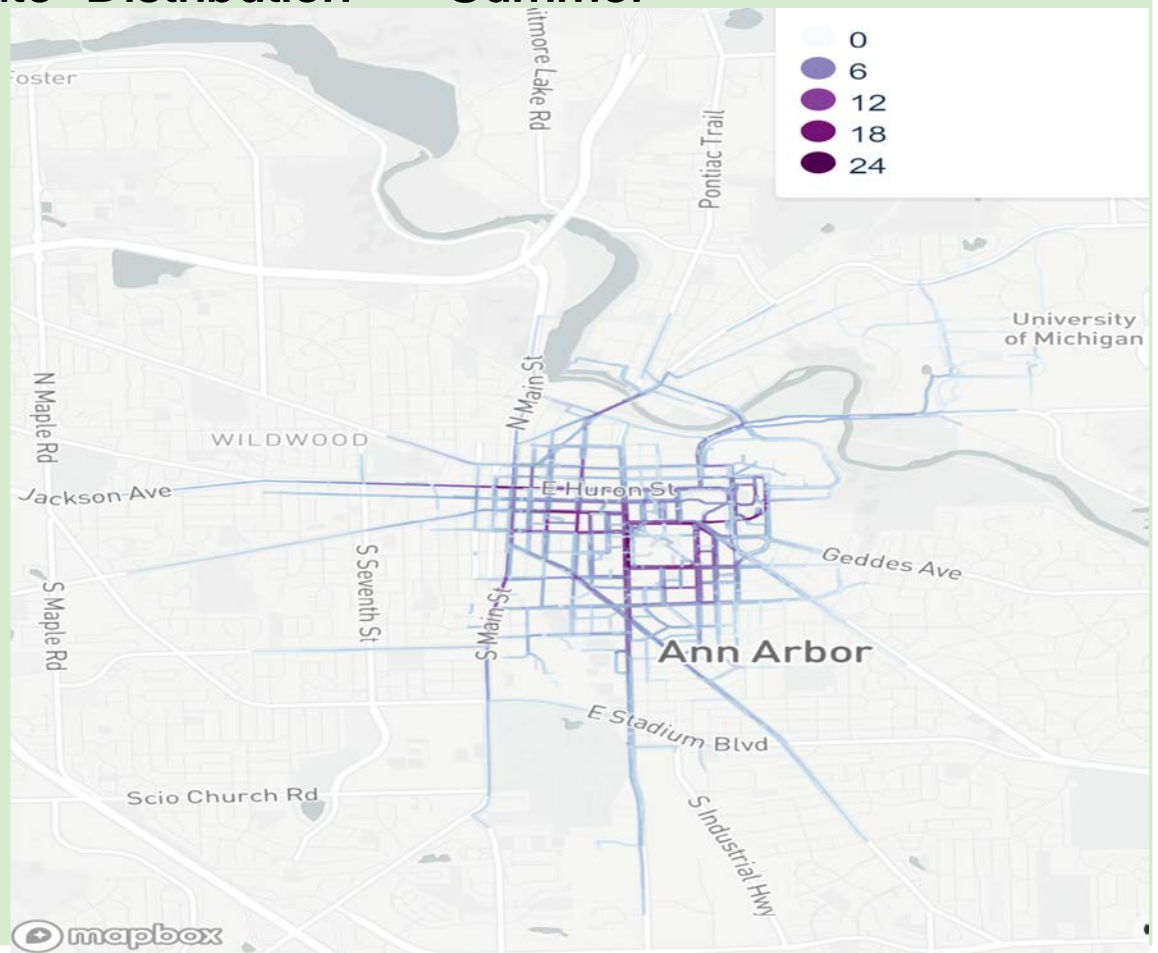
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10. Parking - 10





Routes

Route Distribution - Summer



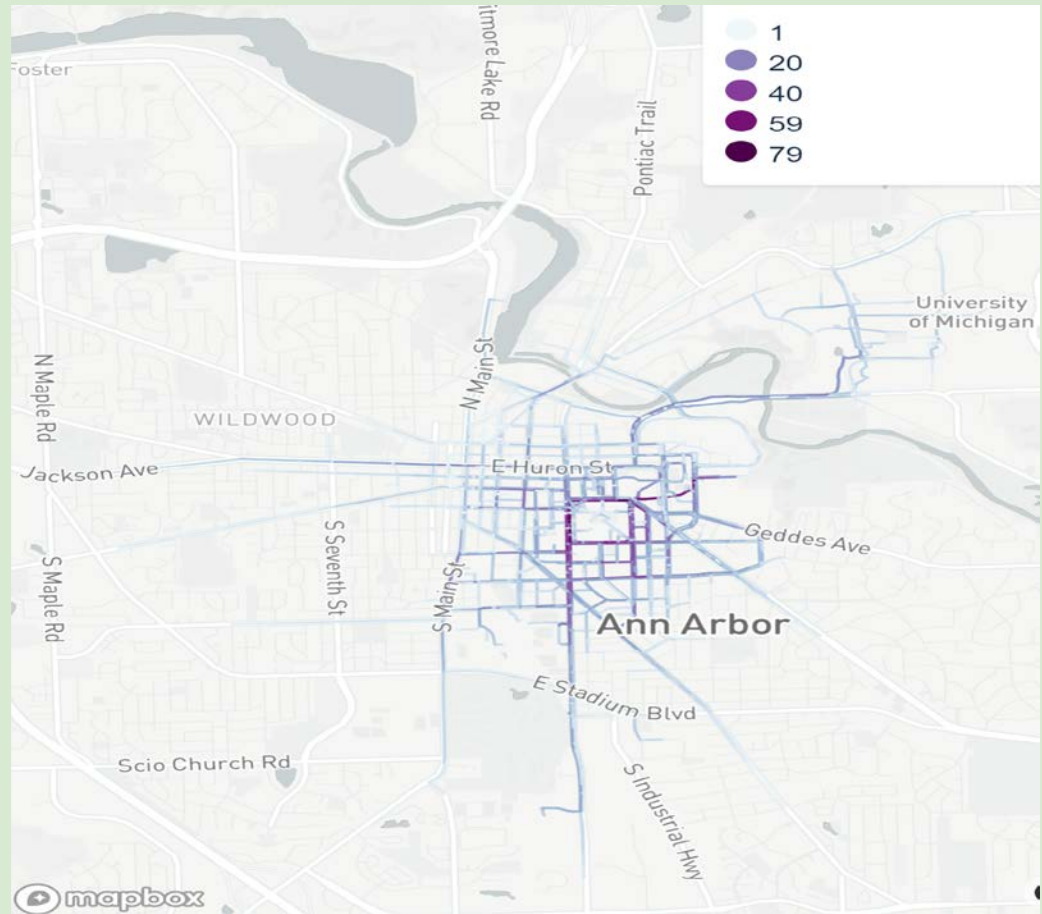
Summer

1. East Liberty Street - 1,241
2. South Division Street - 1,123
3. West Huron Street - 1,036
4. South University Avenue - 986
5. East William Street - 953
6. East Huron Street - 948
7. South State Street - 895
8. South Fifth Avenue - 816
9. South Main Street - 809
10. Packard Street - 677

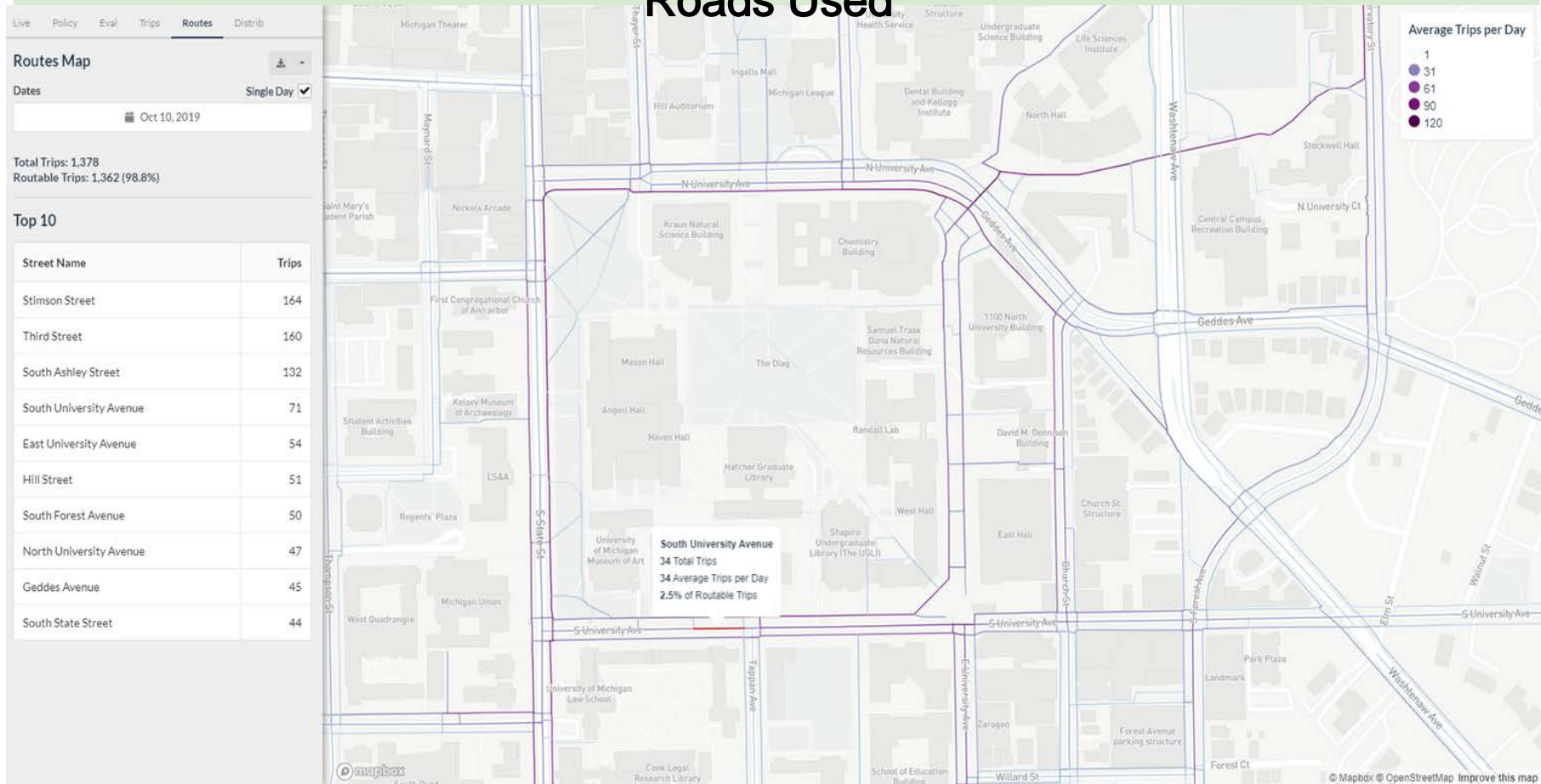
Route Distribution - Fall

Fall

1. South University Avenue - 2,500
2. East University Avenue - 1,956
3. South State Street - 1,888
4. North University Avenue - 1,741
5. Geddes Avenue - 1,699
6. East Madison Street - 1,447
7. South Division Street - 1,320
8. South Forest Avenue - 1,314
9. Hill Street - 1,304
10. East Liberty Street - 1,272



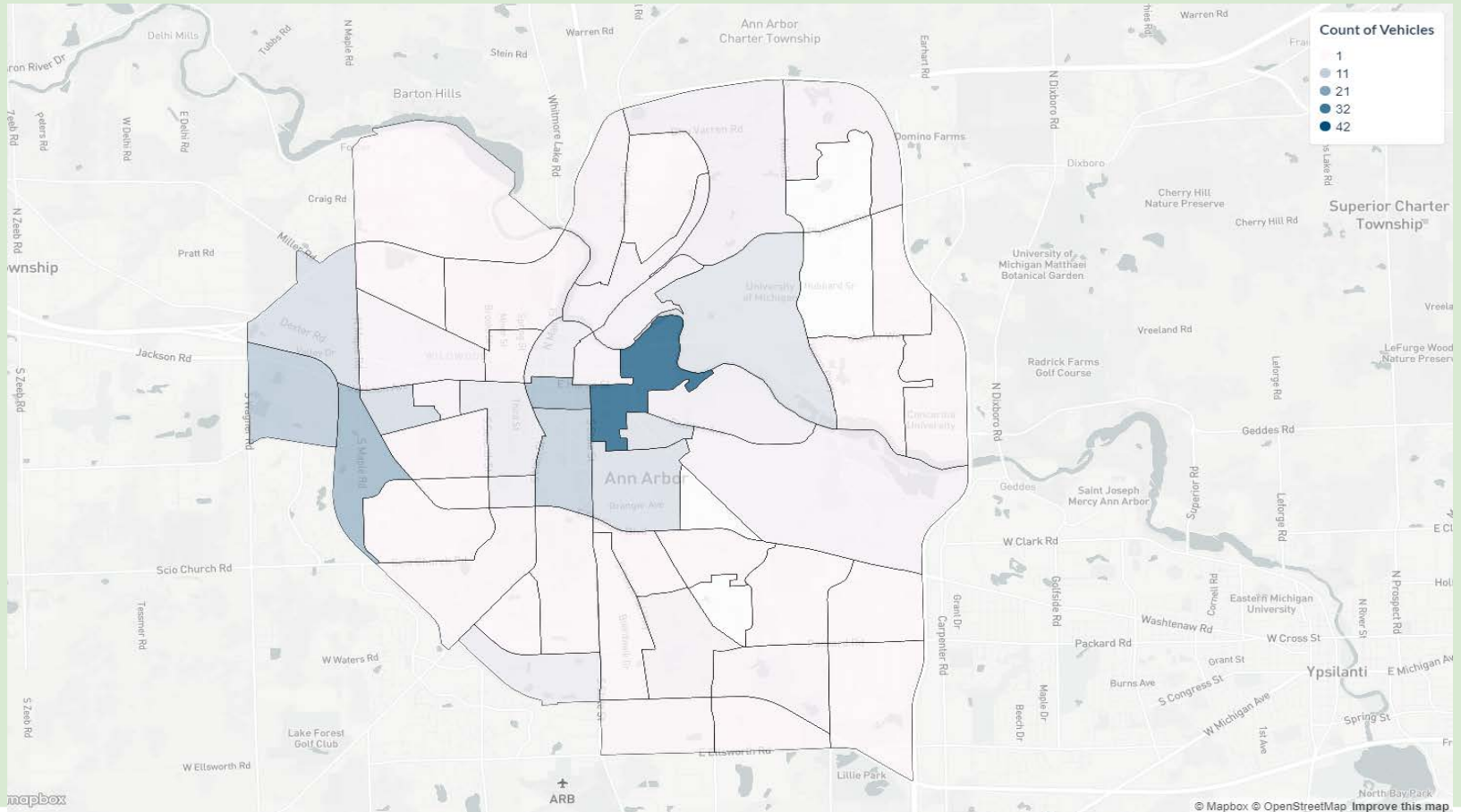
Roads Used



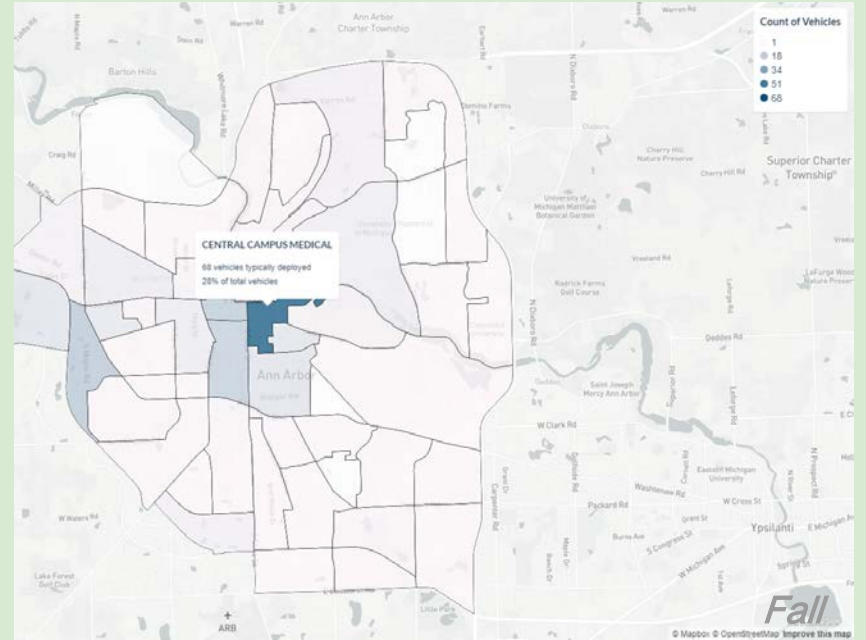
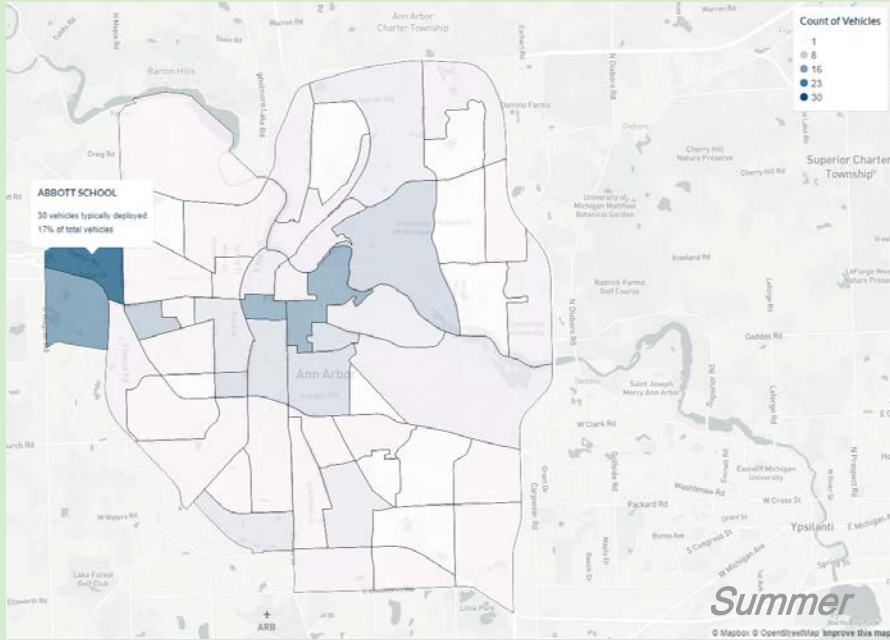


Deployments

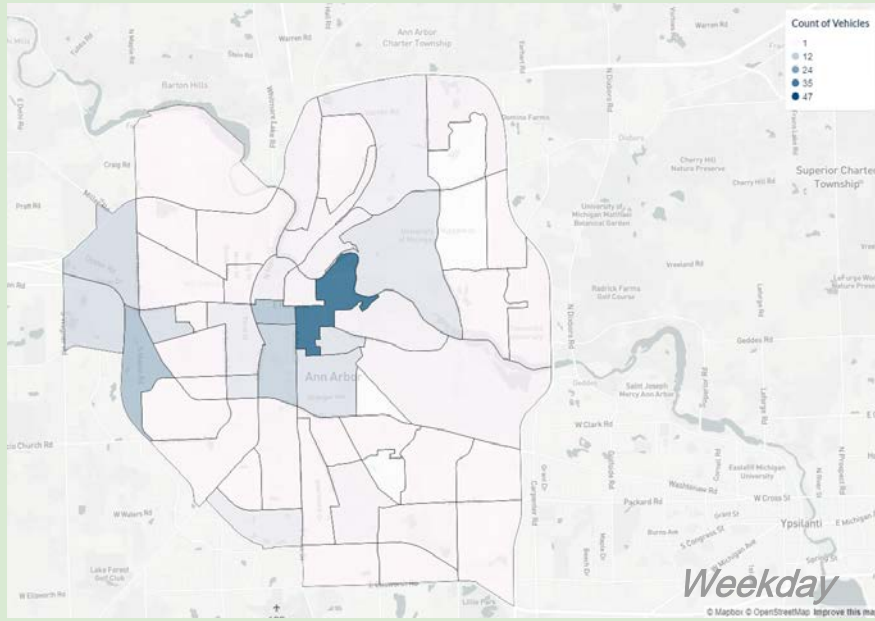
Total Average Daily Deployments Neighborhoods



Daily Deployments by Neighborhood & Season



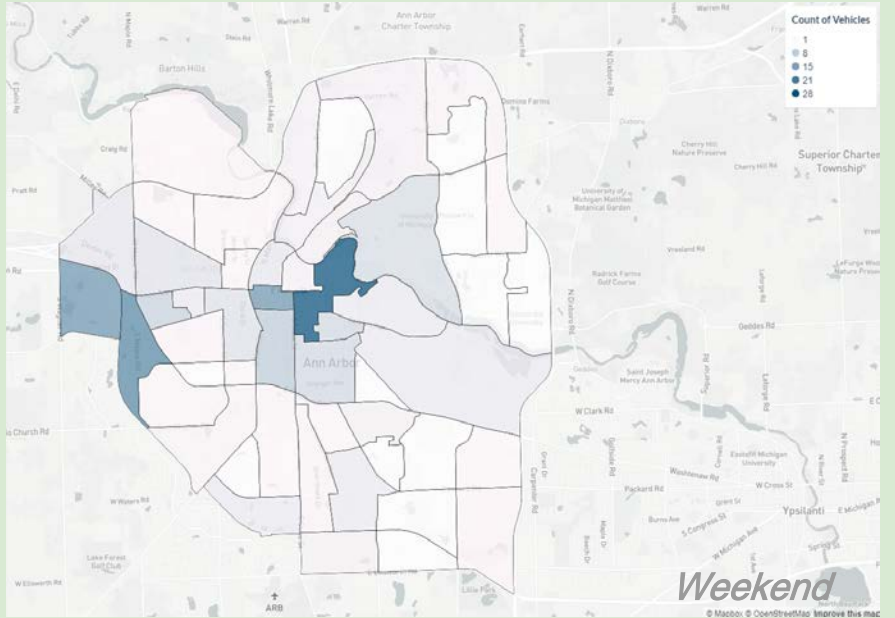
Daily Deployments by Neighborhood & Type of Day



Central Campus Largest Deployment Area

Weekday - 47 daily deployments

Weekend - 28 daily deployments



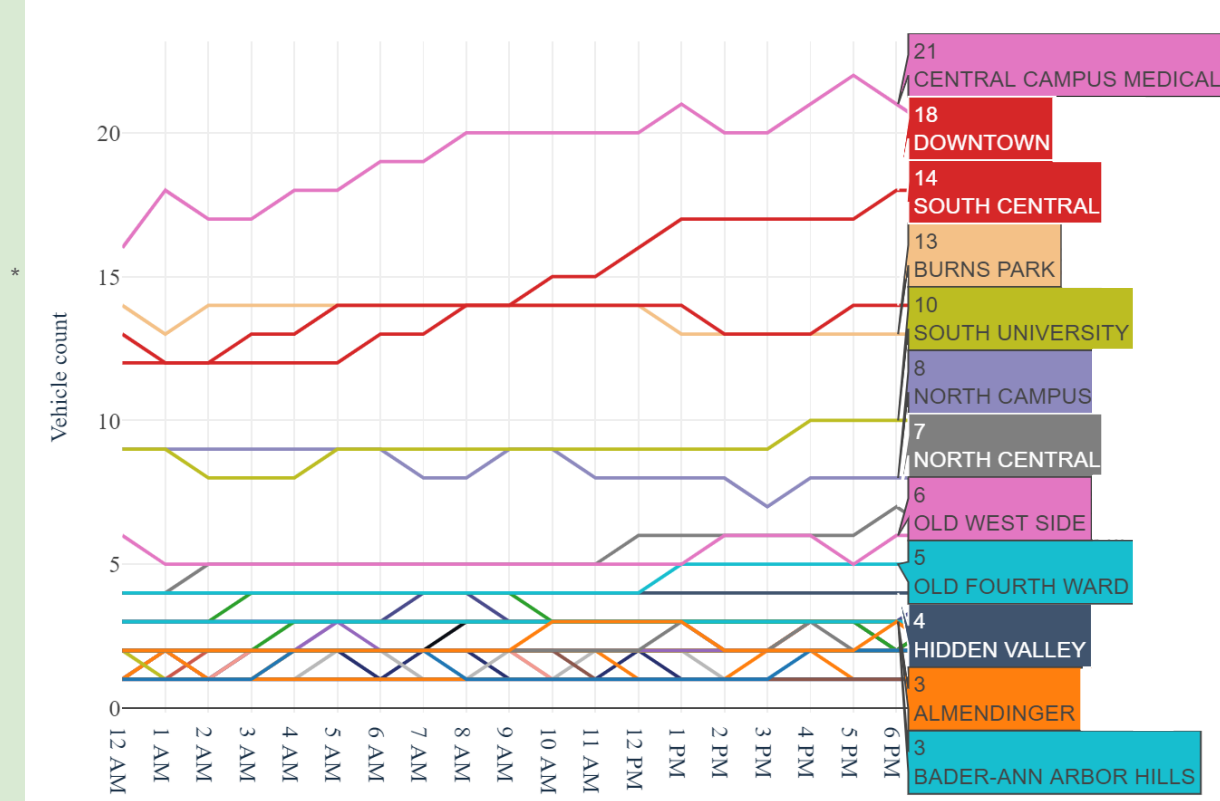


Vehicles by Hour

Count of Vehicles at 6pm*

Number of vehicles by district by hour

*6pm as it is one of the most dangerous non-motorized times of day for injuries and fatalities





Questions?
Thank you!