

Remaking Transit in Sioux Falls

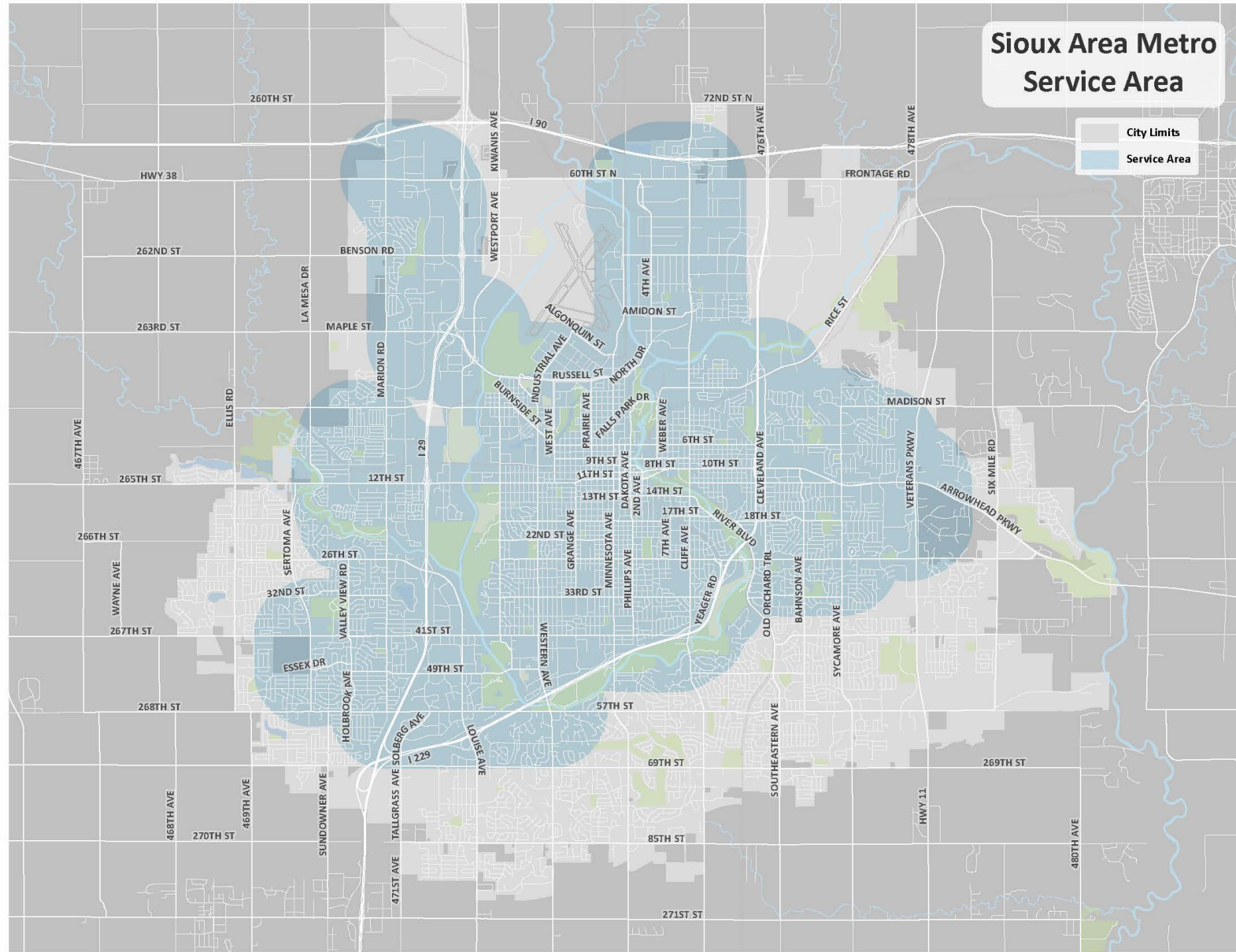
Lessons Learned from SAM On Demand and the Future of Transit Services



CITY OF
SIOUX FALLS

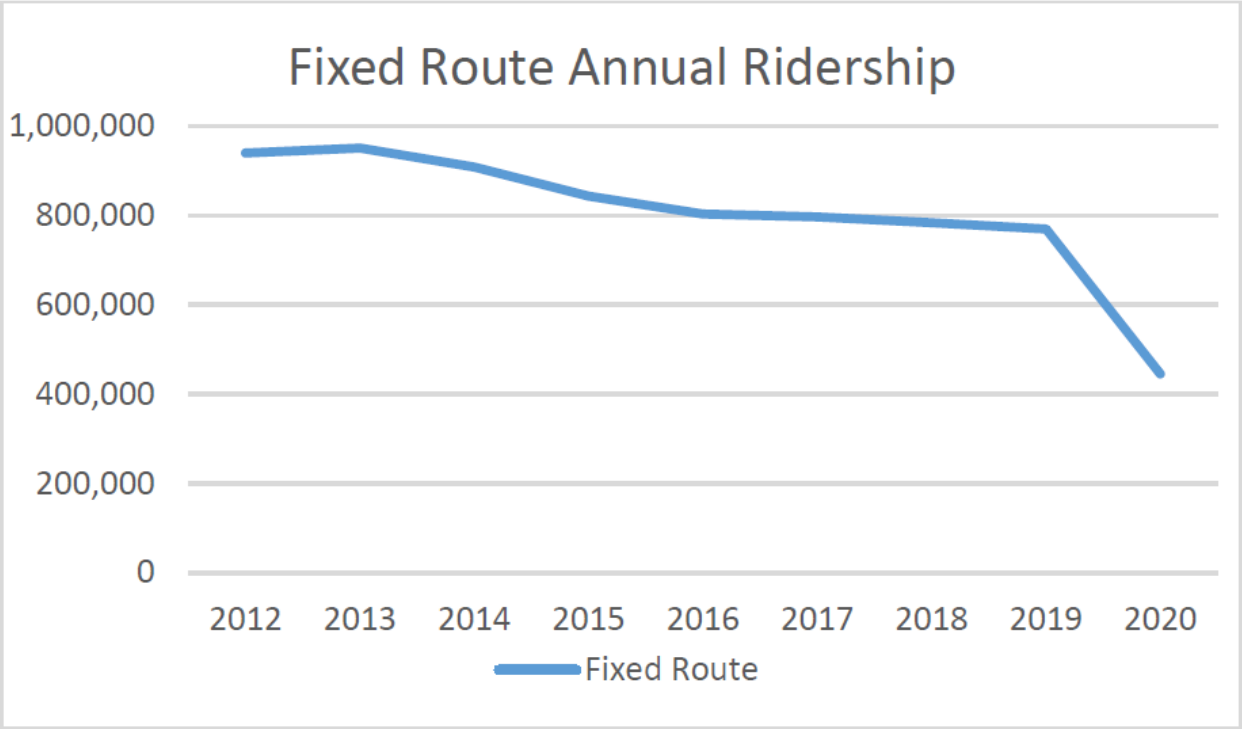
➤ SAM Service Area Compared to Sioux Falls City Limits

- The blue area Represent $\frac{3}{4}$ of a mile from each fixed-route
- Only 59.5% of the City is covered by transit services

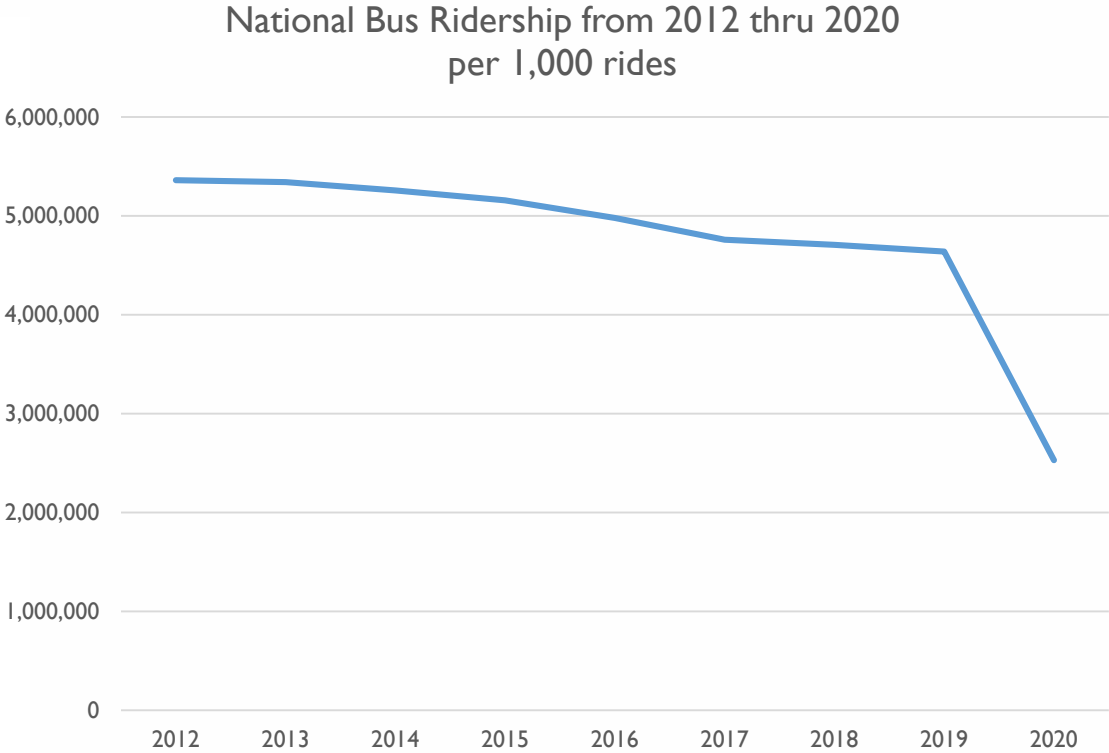


Transit Ridership Trends – 2010 thru 2020

Sioux Falls Ridership Trends



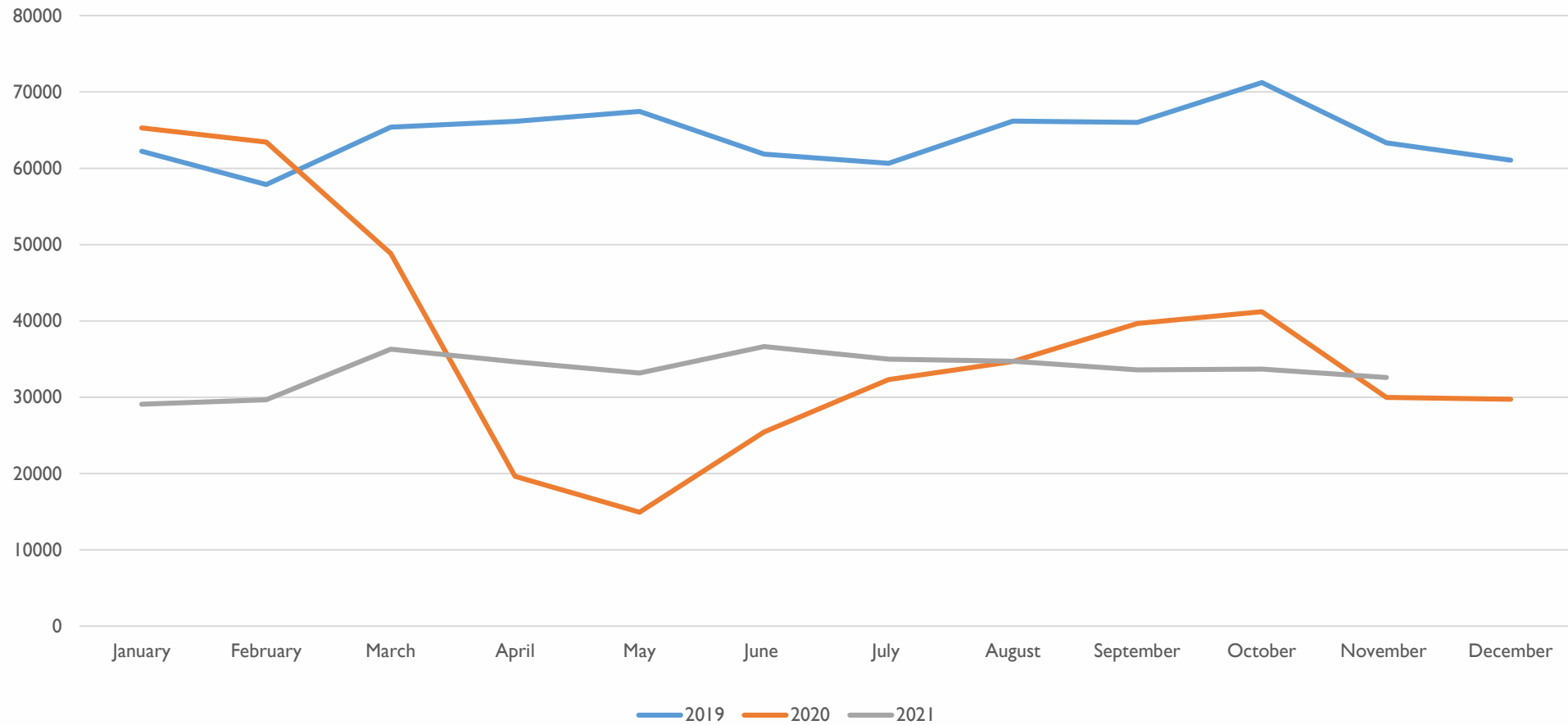
National Ridership Trends



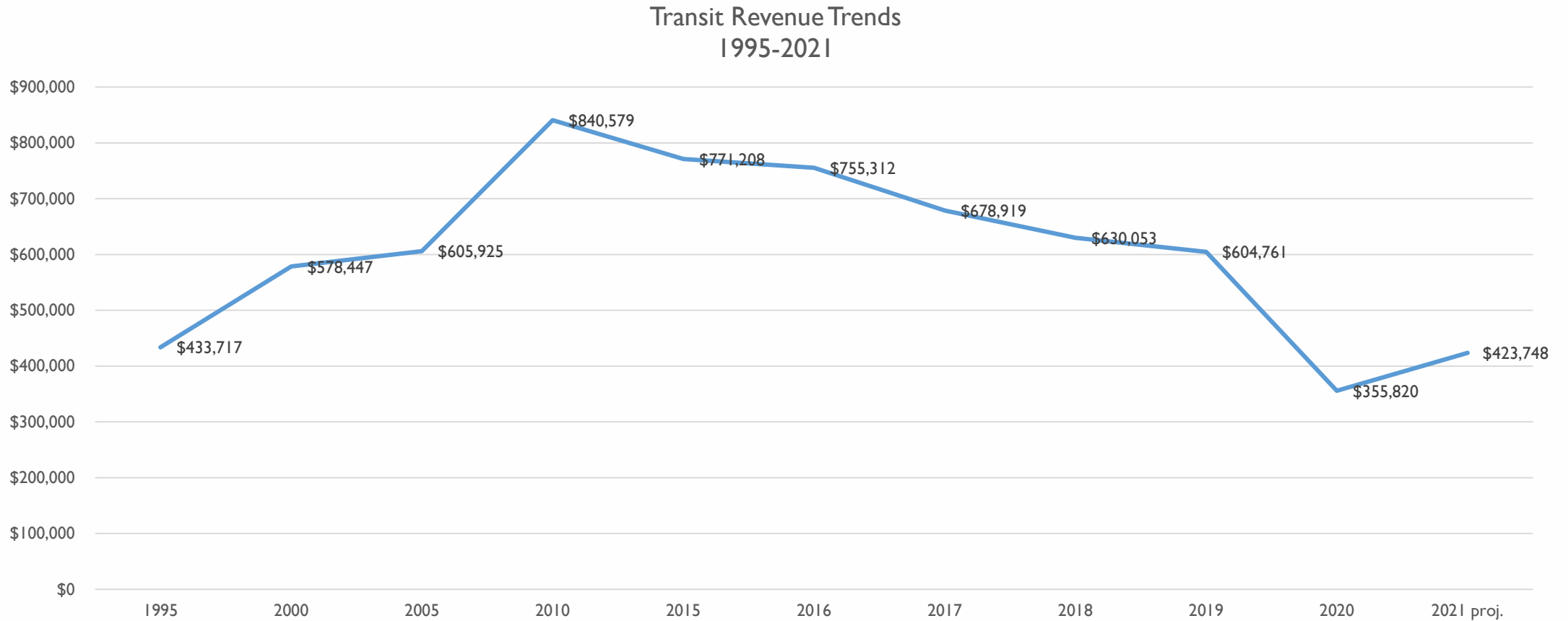
Recent Trends

2019 thru 2021

Fixed-Route Ridership Trend



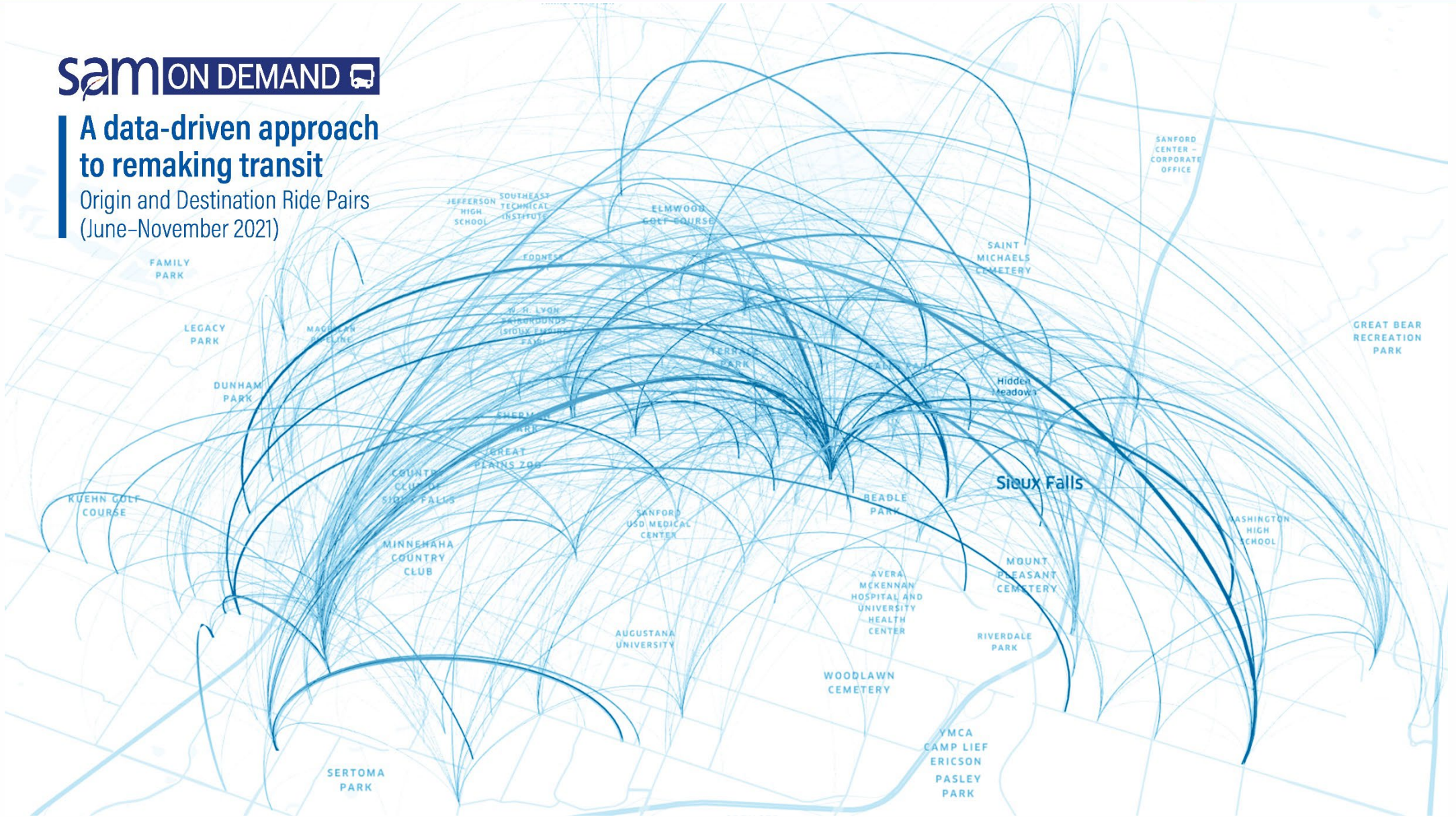
Transit Revenue Trends



sam ON DEMAND

A data-driven approach to remaking transit

Origin and Destination Ride Pairs
(June–November 2021)



Fixed-Route vs On Demand

- Fixed-Route
 - Transit service that follows the same route each trip and picks up riders at designated bus stops.
 - Bus riders follow bus schedules to know when a bus will be at a bus stop.
 - Many trips must transfer at the Downtown Depot or SWC to reach their destination.
- SAM On-Demand
 - Riders Need to Schedule a ride ahead with:
 - Riders App
 - Website
 - Phone call
 - Same day ride availability
 - Pick up is within a 20 minute ride window
 - Pick up and Drop off is at a bus stop
 - Riders can track their ride on the riders app

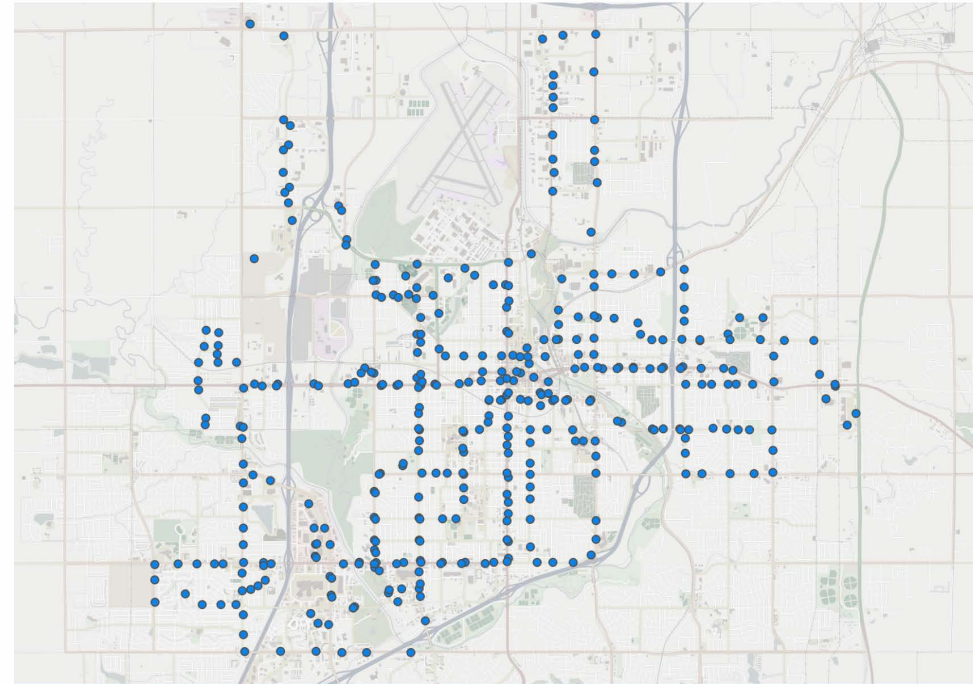
SAM On-Demand Data Review

June 5 – November 27 2021

SAM On-Demand By the Numbers

From June 5th to November 27th, SAM's On Demand Service had:

| | | | |
|-------------|--------------------------|------------|---------------------------------------|
| 26 | Days of service | 18 | Minutes average ride time (15 median) |
| 4581 | ODT trip requests | 13 | Minutes average wait time (12 median) |
| 3042 | Unlinked passenger trips | 74% | Trips completed early or on time. |

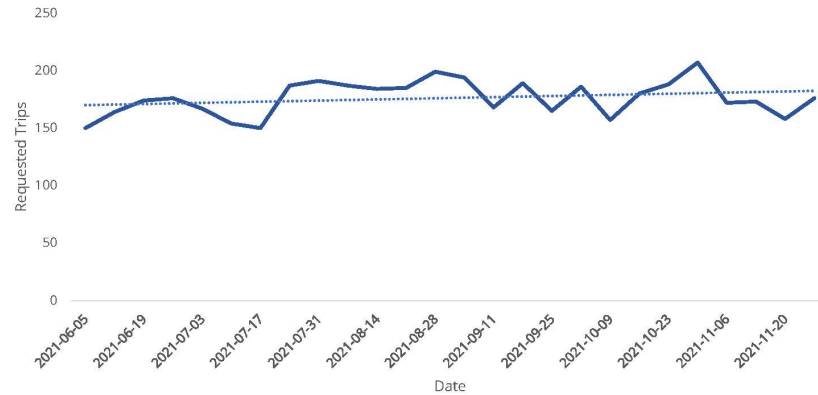


This document is confidential and is intended only for those to whom it is addressed.

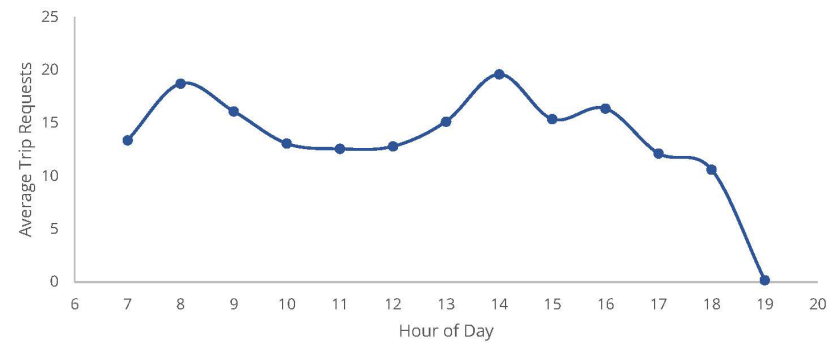
ODT Trip Requests

By Date and Time

Between June and November, ridership trended slightly upward. There were on average 176 trip requests per service day, resulting in an average of 138 unlinked passenger trips per day.

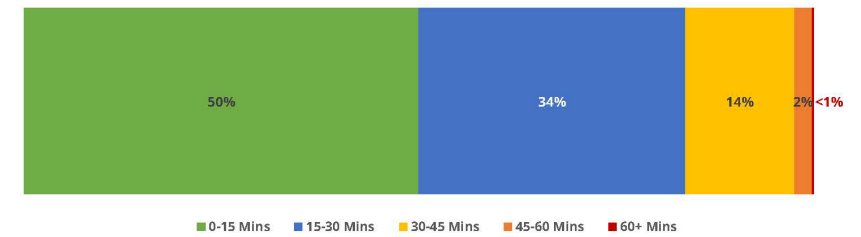


SAM's service was busiest in the morning and in the early afternoon during this period.

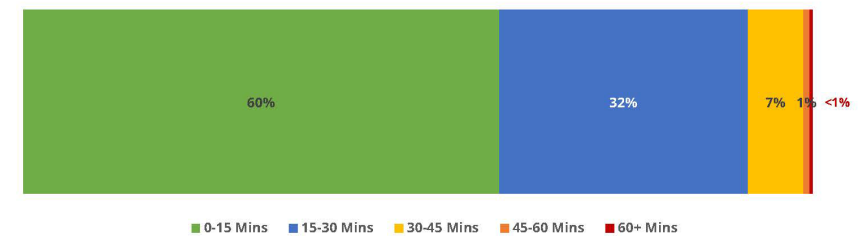


Ride and Wait Times

During the reporting period, the average ride time for SAM's trips was 18 minutes, down from 20 during the first six months of the service. Only 2% of trips took more than 45 minutes to complete.

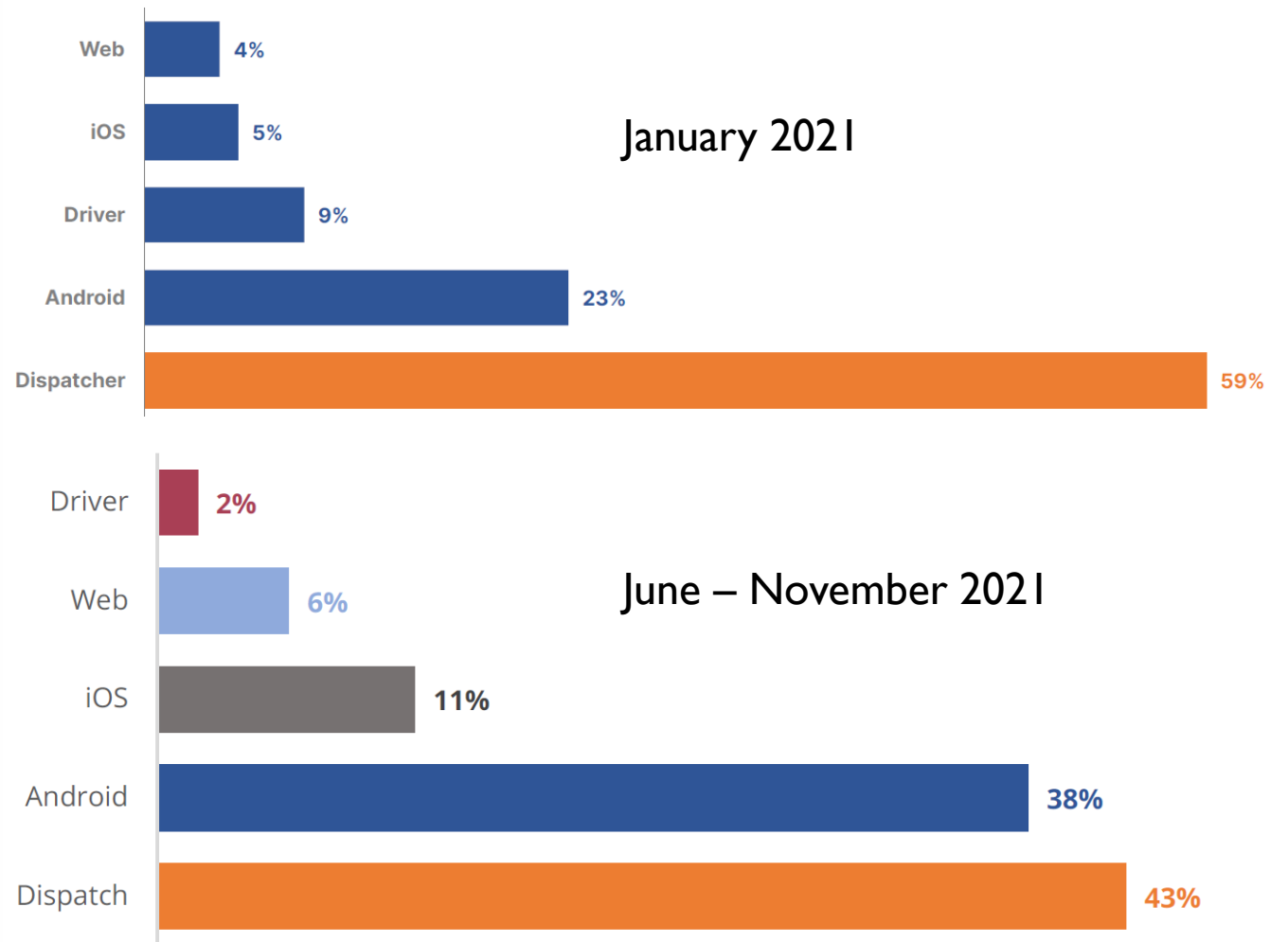


The average wait time for completed pickup type trips was 13 minutes. Overall, 60% of these trips waited for 15 minutes or less, and 92% were collected in 30 minutes or less.

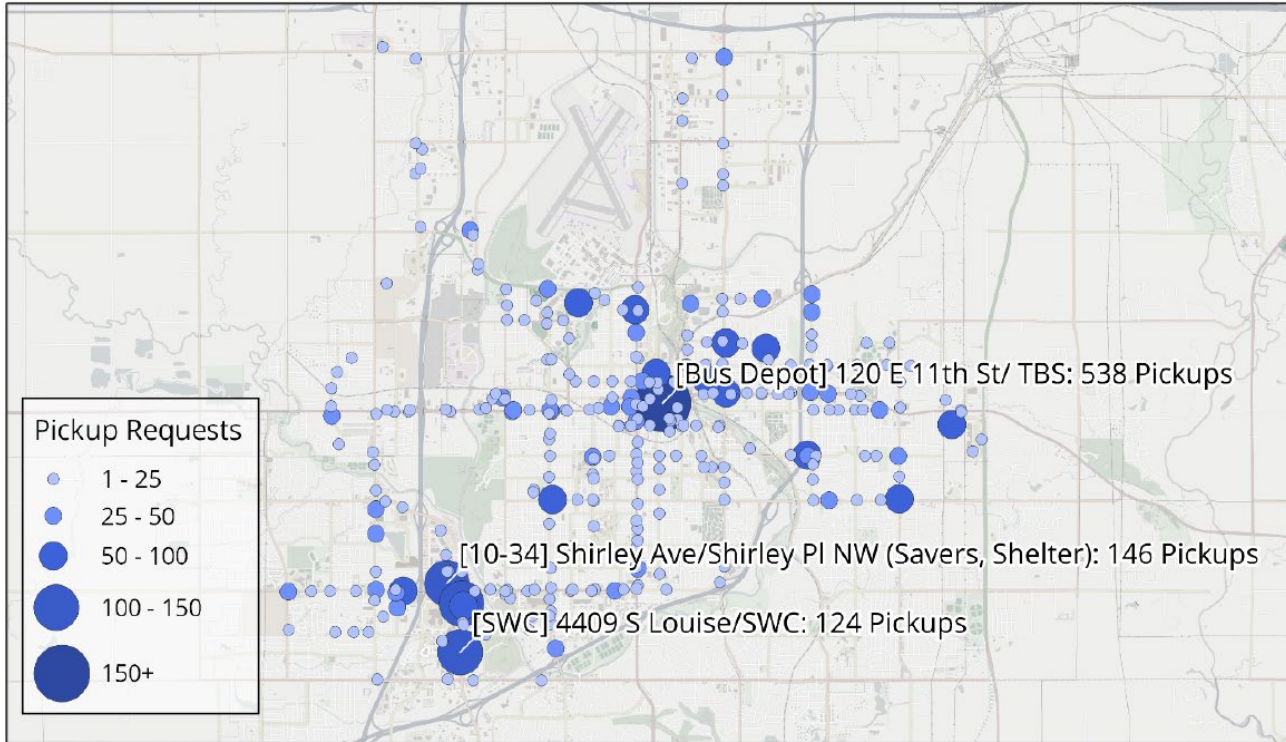


How do Riders Schedule a Trip?

- Increase in App usage from early part of pilot phase
 - 28% - Jan 2021
 - 49% - June-Nov 2021
- Decrease in call in
 - 59% - Jan 2021
 - 43% - June- Nov 2021
- Driver scheduled trips down
 - 9% - Jan 2021
 - 2% - June-Nov 2021

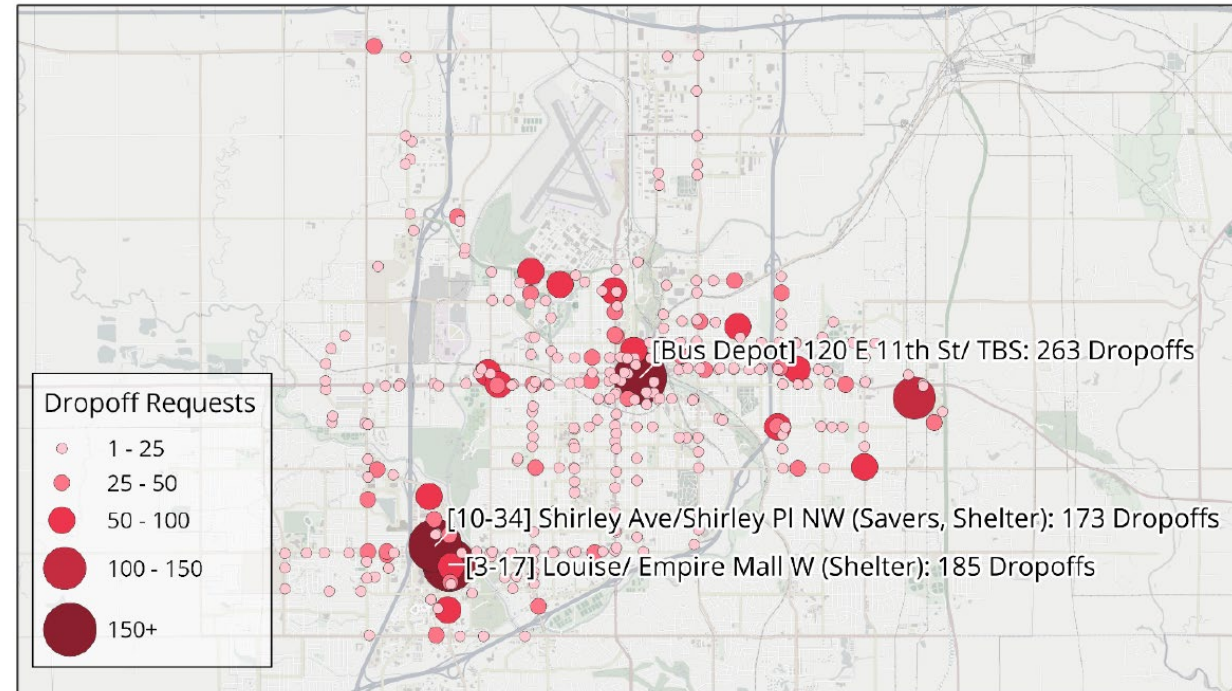


June to November SAM On Demand Popular Stops



Origins

Destinations



Origin-Destination Pairs

Below is a map of all of the OD pairs requested by riders - the wider the arc, the more often it was requested.

Although 4581 trips were requested between June and November, no single OD pair accounted for more than 1% of trips.

The top five OD pairs in the service area were:

| Origin | Destination | Count of Requests |
|--|-------------------------------------|-------------------|
| [Bus Depot] 120 E 11th St/ TBS | [10-8] 12th/Williams NE (McDonalds) | 32 |
| [7-44] 7th/Phillips NW (Orpheum) | [9-7] 18th/Blaine SE (Shelter) | 31 |
| [9-15] 26th/Sycamore NW (HyVee, Shelter) | [10-9] 10th/Kiwanis NW (HyVee) | 29 |
| [SWC] 4409 S Louise/SWC | [3-29] 41st/ Summit SW (Shelter) | 29 |
| [3-29] 41st/ Summit SW (Shelter) | [SWC] 4409 S Louise/SWC | 27 |

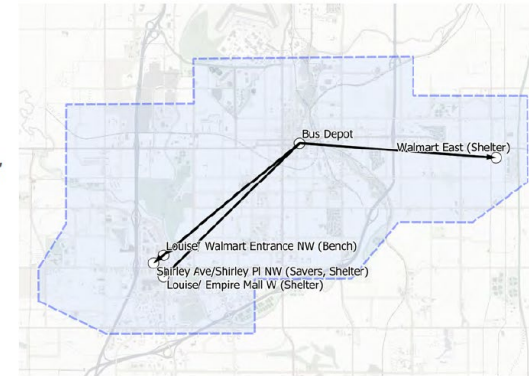


This document is confidential and is intended only for those to whom it is addressed.

Popular OD Pairs

Top Destinations from The Bus Depot

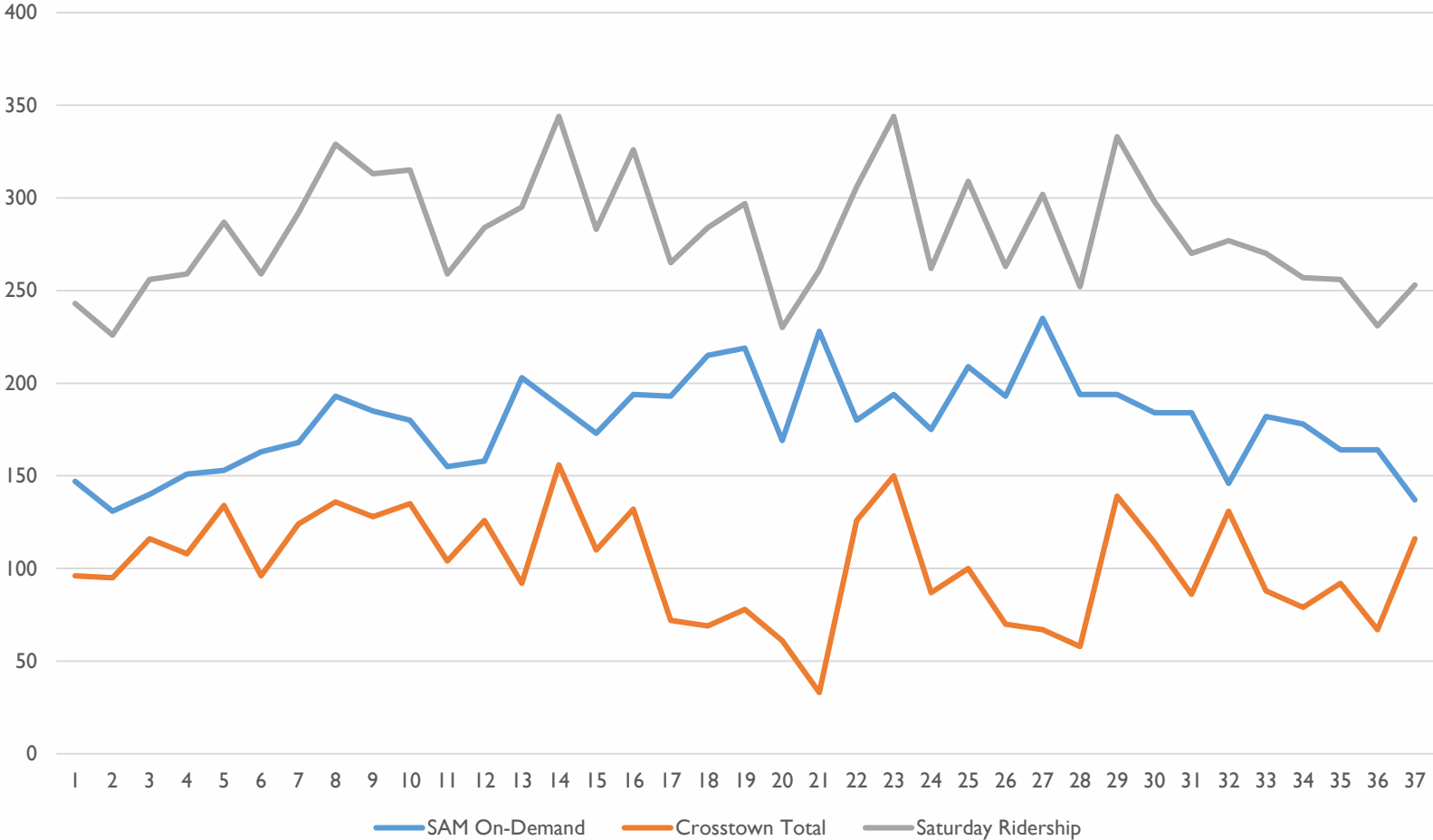
- 23 drop-offs @ Walmart East (Shelter) - 22 Dispatcher, 1 Android
- 21 drop-offs @ Shirley Ave/Shirley Pl NW (Savers, Shelter) - 16 Dispatcher, 5 Android
- 20 drop-offs @ Louise/ Walmart Entrance NW (Bench) - 19 Dispatcher, 1 iOS
- 18 drop-offs @ Louise/ Empire Mall W (Shelter) - 17 Dispatcher, 1 Android



This document is confidential and is intended only for those to whom it is addressed

SAM On Demand Ridership

Saturday Ridership - May 2021 thru January 2022

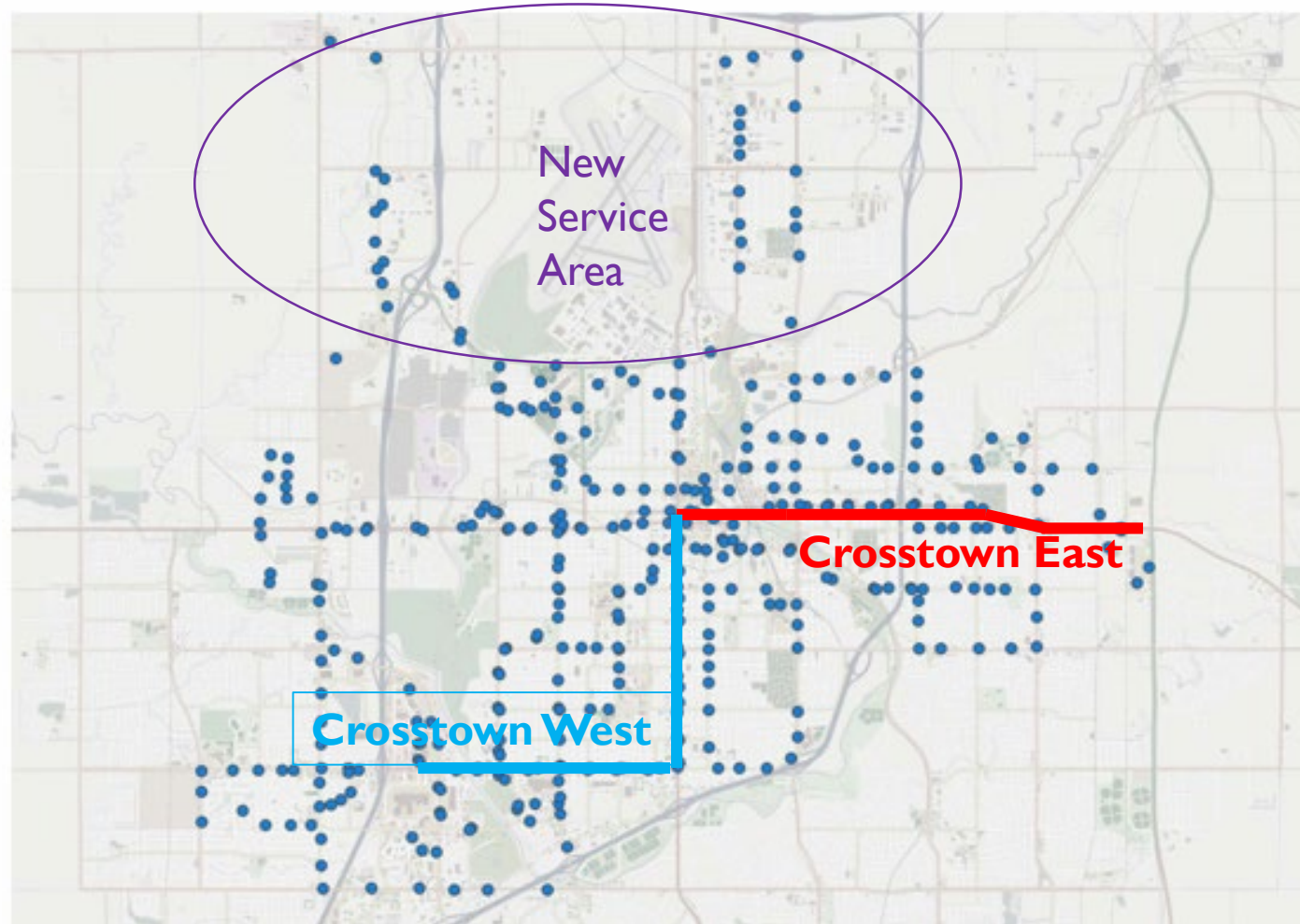


On-Demand vs Fixed-Route

| SAM Fixed-Route | SAM OnDemand |
|----------------------|-----------------------|
| Reliability | Flexibility |
| Ridership | Efficiency |
| No Technology Needed | Emerging Technology |
| Limited Data | Extensive Data |
| Paratransit Needed | No Paratransit Needed |
| Limited Frequency | No Shows |

SAM On Demand Wins

- Expanded Services to North Sioux Falls
- Crosstown East and West Services
- Paratransit + SAM On Demand Pilot



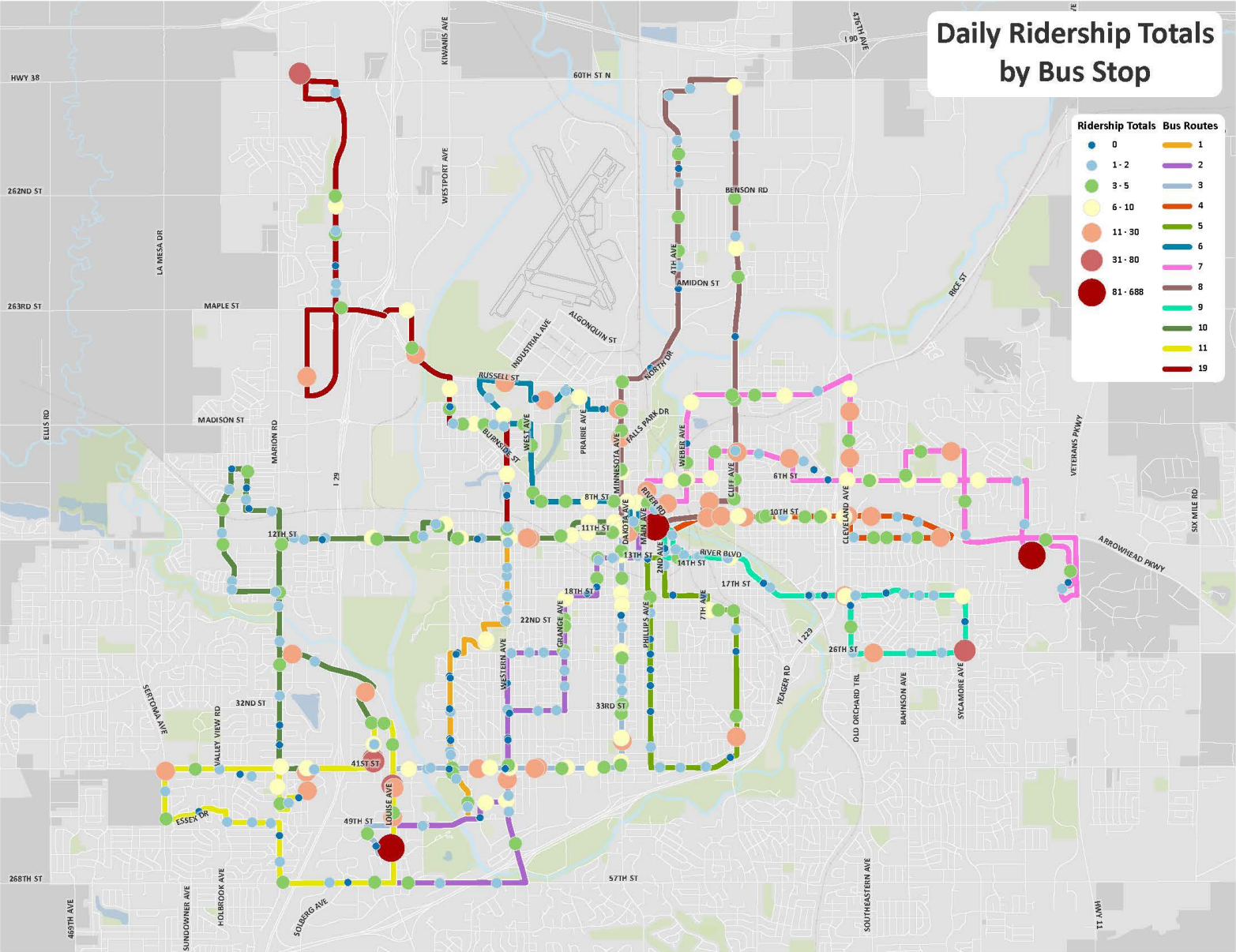
Top Findings for SAM on Demand

- SAM On Demand can provide transit service more efficiently in low ridership areas.
- Fixed-Route service is better to handle service in high ridership areas.
- SAM On Demand service has provided invaluable data to help develop two strong and direct Saturday fixed-routes.
- SAM On Demand services are a good option to expand transit to new areas of the city.
- SAM On Demand services have the potential to service paratransit and general transit customers within one service.
- SAM On Demand service can be provided with smaller vehicles.
- The SAM On Demand app is not available to enough riders because the riders do not have access to mobile services

Automatic Passenger Count Data - Weekdays

Collected in November and December 2021

To assist in Route Analysis



What's Next For Transit?

- Mobile Ticketing (Spring 2022)
- New Bus Shelters (Fall 2022)
- Transit Route and Operations Analysis (Summer 2022)
 - Expand use of Automatic Passenger Counters
 - Optimizing the number and size of buses
 - Expanding coverage area through On-Demand
 - Focus fixed-routes on high ridership corridors and increase frequency

Remaking Transit in Sioux Falls



+

