

Elevating Saturday Transit With On-Demand Service



Launching The Pilot

DECEMBER, 2020

Sioux Area Metro (SAM) had been working for a long time to find a better way to deliver Saturday transit service.

Originally, they were operating eight fixed routes from 7:45 am to 6:45 pm.

The city spent over seven months studying their bus system with the goal of making transit service more efficient and useful for both the city and its citizens.

On December 19, 2020, Sioux Area Metro officially launched a pilot for a new on-demand transit service (ODT) with Pantonium. Covering the entire 75 sq. miles of the city, this was the largest ever pilot using full-sized vehicles.

Right from launch, riders could book rides from an app, web portal, or by phone and were able to travel across the city without needing to transfer, vastly improving rider convenience from the old fixed route system.



Sioux Falls, SD
CITY

190, 583
POPULATION

75 sq. mi
LAND AREA

IMPACT

Before On-Demand Transit

22 Riders per hour

79% of trips required transfers

306 stops covered

45% of trips took > 30 mins

After On-Demand Transit

26 Riders per hour

0% of trips require transfers

368 stops covered

93% of trips took < 30 mins



Delivering Immediate Results

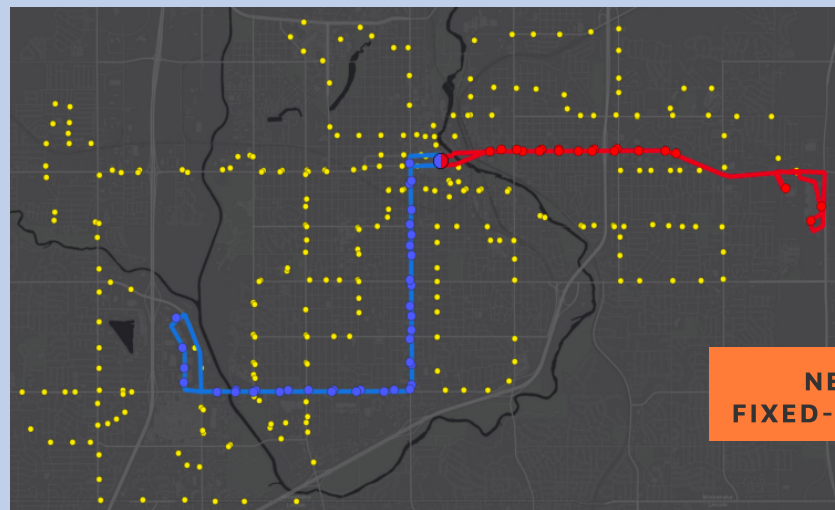
FEBRUARY, 2021

Based on a 2020 rider survey, only 4% of trips were completed early or on time with the old fixed route system. Since launching ODT, **75% are now being completed early or on time.**

With ODT, 290 of the city's 306 stops at launch, about 95%, had been requested by riders at least once. Although, on any given day, at most 37% of the stops in the service area was used as a pickup point by riders.

This is the type of circumstance ODT excels at handling. Most of the time, a majority of stops remain unused. But with ODT, there's no cost or burden with having them be

available to riders, even if they're used infrequently. Compared to ODT, servicing this kind of distributed demand with fixed routes is impossible to do efficiently.



Finetuning Service to Improve Rider Experiences

APRIL, 2021

Pantonium's vision for transit is a hybrid system where fixed routes are used in places they are efficient and other areas are covered by ODT. This delivers the most efficient, convenient, and accessible transit possible.

As ODT operates, it generates immensely valuable origin-destination data which shows the precise travel patterns of riders across the city. This information is key to designing a transit system that perfectly matches citizens' needs.

We used SAM's origin-destination data to design two fixed routes to connect the Downtown Bus Depot with the two retail areas on the city's East and West sides.

The new fixed routes are designed to efficiently serve the highest demand corridors and simultaneously help riders without devices easily access transit.

In addition, a few months into the deployment, SAM's full-sized vehicles were allowed to begin using

highways to traverse the city. This opened up new opportunities for routing vehicles more efficiently around the service area.

The new access to faster routes across the city led the average driving distance per journey to **decrease by 21%** and the average driving time per journey to **decrease by 24%.**

Pantonium is working closely with SAM to continually improve their service and deliver the best outcomes for the city and its citizens.