



### The Jule

Fixed route system in Dubuque, Iowa

### Problem/Challenge

Inefficient routes and unhappy ridership

### Solution

Reporting capabilities to reveal ridership details

### Result

- 28% increase in ridership
- 66% Increase in trip times
- \$100,000 reduction in budget

## How The Jule Profited From Fixed Route Software Reports

### A Jule on the Mississippi

Dubuque, Iowa lays just astride the Mississippi River, where The Jule operates a fixed route and complementary paratransit service to its 90,000 metro-area riders. The demographic of their ridership ranges from K-12 school-bound travelers and college students to elderly and alternatively abled riders. Transporting such a diverse population with unique needs requires analysis of a great deal of data. It also takes a person who's willing to roll up her sleeves to get the job done.

Enter Candace Eudaley, Director of Transit Operations at The Jule. Despite being involved with The Jule for only the past five years, she has had an enormous impact on her community. Candace's philosophy is that transit management is about "giving people the gift of more time." The best way to achieve this is to design optimal routes in order to provide faster, more reliable transit service.

The Jule implemented Streets ITS fixed route software in November of 2013. Prior to using CAD/AVL software, they did everything manually. They quickly discovered the immediate time-saving benefits of automation and digital data collection.

*"We only needed a month's worth of data to begin restructuring our routes and optimizing schedules."*

## The Main Challenge

Before automated scheduling and dispatching, buses simply didn't connect efficiently. They had three transfer stations, but some buses weren't getting to them. The system, as Candace describes is, "was set up to fail. But now they don't. They just work." Buses that once were empty are now better filled. Trips that once took 90 minutes are now performed in 30. Bus stops are now in more areas of the city reducing the need for paratransit service in some areas.

This shift from costly paratransit to fixed route services, alone, has accounted for a large amount of savings. The new hub-and-spoke style system they're developing along with the launching of a new indoor/outdoor transfer station will also help to relieve the burden placed upon

## The Power of Custom Reports

One of the main reasons Candace chose TripSpark's fixed route software solutions (over the competition) was due to its robust reporting capabilities. By reviewing ridership data on custom reports they are able to reduce miles driven to low traffic zones. Each individual stop and rider can be analyzed to learn who they are and where they're going. By running customized fare reports, they can drill down to see not only the amount of riders boarding or de-boarding buses, but the precise passenger type who is using their service. Informed scheduling decisions



*"If our transfer system didn't work, we'd get calls. But we don't. Our rate of complaints is way down."*

paratransit. And of course, it will improve overall service, shorten travel times and completely facilitate transfers for all users. This has been greatly applauded by their ridership.

can made to reduce any negative impacts on those who require their service the most.

*"Reporting is amazing versus your [TripSpark's] closest competitor. With theirs, you can't tweak or drill down to the data you need. Streets reporting is uncomplicated."*

## Data Provides Proof to City

The Jule needs to make a case to Dubuque city council in order to justify funding for their agency. Candace needs to provide evidence to argue that proposed changes are in the best interest of both riders and the city budget. “This is why,” Candace says, “having data to back us up really helps. City council gets the best information possible.” Decisions have led to operational success for Candace and her team. And of course, showing how their scheduling decisions have led to huge savings has no

doubt improved their reputation with city council. Streets has also allowed The Jule to reduce the amount of buses they require to provide the same (and even better) service. This has led to a reduction in their budget by \$100,000.

*“What we can get from Streets ITS is pretty robust for our needs.”*

## How Data Has Improved Service and Safety

On August 17th of this year, they are completely altering their schedules due to the building of a new transfer center and switching to a hub-and-spoke system. Trip times are reduced due to better usage of buses. Better locations of stops have been found to enable elderly and (those who are able) to choose fixed route over paratransit services. They have reduced the amount of buses needed to provide the same (and in some cases, better) travel times and frequency of service. Analysis of data showed which stops were more used by riders who would benefit from a transit shelter. These types of initiatives have impressed riders, claims Candace.

*“Streets data helped us create routes that produced a 28% increase in ridership.”*

Streets data also helped to address safety concerns. Examination of stop locations revealed there to be a higher risk of danger, for example in a particular parking lot. Since accidents and complaints could be tracked to a specific parking lot they were able make trustworthy recommendations to city council in order to mitigate risk and move those particular stop locations. Improved stop placement has provided safety for riders, while also cutting operating expenses.

*“Streets data has helped to reduce our budget by \$100,000 while increasing our service offering.”*

## Solving Problems Together

In order to offer a much-needed cashless faring system to college students, Candace worked closely with the TripSpark team to develop a solution. While the functionality of TripSpark's fixed route software and hardware components could do the job, it needed to be reconfigured in order to provide the unique service that The Jule required.

Having a vendor who is able to adapt to suit an agency's needs has given Candace the ability to add more services. And by aggregating key faring data, she is better able to analyze the habits and needs of college riders. By working together, TripSpark and The Jule were able to build a unique solution.

*"We got together and it wasn't difficult to achieve at all. Having people who truly understand the needs of a transit agency makes it easy."*

*"TripSpark isn't just pushing out information and products and then just walking away."*

We look forward to working with The Jule to help them broaden their service offering, particularly in the area of mobile faring solutions. Dubuque-area riders have a lot to look forward to.

