



MOBILITY ON DEMAND (MOD) SANDBOX

Chicago Transit Authority (CTA)

Integrated Fare Systems -- From Transit Fare to Bike Share

TEAM, BUDGET, AND WAIVERS

Key Partners: Chicago Department of Transportation, Cubic Transportation Systems, Inc.

Other Partners: Motivate

Budget Summary: The budget from the applicant is summarized below:

MOD Sandbox Demonstration Federal Amount (\$)	MOD Sandbox Cost Share (\$)	Total Cost
\$400,000	\$100,000	\$500,000

INNOVATION: PROJECT APPROACH

The CTA is committed to providing new technologies to support multimodal transportation options to customers. This project will extend the CTA's transit network from rail stations and bus stops to other ride sharing options throughout the service area. Cubic Transportation Systems is CTA's transit fare collection partner that designed and implemented the Ventra open fare payment system. To increase connectivity between CTA's regional transit partners, CTA launched the Ventra App in November 2015. The Ventra App has been downloaded by over 600,000 customers and can be used to track, in real-time, bus and train arrival times, purchase transit value and passes for CTA and suburban Pace buses, and purchase Metra commuter rail tickets. A trip planning feature is under development that will provide additional information for customers looking for the most efficient way to connect multiple modes of transit into a single trip.

CTA will partner with the Chicago Department of Transportation (CDOT), whose customers have access to more than 580 Divvy Bike Share stations and over 5,800 bikes located throughout the region; this includes the ability to make connections to Divvy at 75% of CTA's rail stations and nearly 50% of CTA's bus stops. These connections greatly increase CTA's reach throughout the Chicago metropolitan region. Customers are now able to rent a Divvy bike near their point of origin and ride to a bus stop to continue their trip, or exit a train station and get on a bike to complete the 'last mile' of their trip to their destination. With more 7.75 million trips taken since the bike-sharing system launched in June 2013, Divvy is transforming the way many Chicago residents and visitors travel throughout the region. Divvy currently provides an average of over 215,000 rides per month. Divvy bikes are used by commuters, tourists and recreational riders for convenient and healthy trips around the downtown, in 44 city neighborhoods, and two suburbs. To increase accessibility to the bike sharing program, Divvy has recently placed 65 new stations in 12 primarily low-income neighborhoods and developed an alternative fee structure to encourage ridership.

With CTA's partners (CDOT, Cubic and Divvy), CTA is proposing two modifications to the Ventra App that will allow customers to more easily access Divvy bikes and establish a platform to expand this opportunity to other ride sharing modes of transportation in the future.

- The Ventra App Trip Planner is currently under development. CTA proposes adding the Divvy bike station locations and status to the trip planning function so customers can identify in real-time, the availability of a bike at their transit stop, or the availability of a docking station at the destination of their bike trip. This modification can be incorporated and implemented in tandem with the roll-out of the Ventra Trip Planner.

- CTA also proposes to augment the Ventra App to allow customers to pay for a Divvy Bike Share rental through the App with Ventra transit value. Conveniently, transit riders will be able to open the Ventra App, add transit value to their account, pay for a Divvy pass, receive a Divvy code, go to a bike station, enter the code, and proceed on their way. The major innovation to this process is the ability to use Ventra transit value to pay for other ride sharing modes, and it will require additional software development and security protocols within the Ventra App and the back-office settlement processes.

The implementation of this proposal expands the transit network from traditional bus, train and commuter rail modes to other ride sharing options. Once these processes have been implemented and put into practice, this payment procedure can be readily expanded to car sharing or other transportation modes.

CHALLENGES PROJECT IS DESIGNED TO ADDRESS

Divvy is a popular bike sharing system featuring over 5,800 bikes available for rent at more than 580 stations in the Chicago metropolitan area, available 24/7, 365 days a year. While Divvy is popular among regular and repeat users, many traditional transit commuters may not be fully aware of the convenience the service offers.

The 'last mile' is often the most difficult for transit users - a train or bus often only takes a user close to their final destination and typically walking is the first option for users to get the 'last mile' to their destination. Many commuters rely on the Ventra App to track the arrival time of CTA trains and buses, and the ability for the same App to locate Divvy Bike Share stations, including how many bikes/docks are available, would be a great way to personalize mobility and increase accessibility. This would be a true example of seamless integration between transit and bike sharing. Increasing the awareness of Divvy Bike Share locations by integrating with the Ventra App will greatly improve mobility choices for all commuters.

ANTICIPATED OUTCOMES, BENEFITS, IMPACTS

The expected outcomes of the Transit Fare to Bike Share Project are directly aligned with the goals of the MOD Sandbox Demonstration Program. Using Ventra transit value to pay for bike share rentals, and eventually other ride sharing services, will create an efficient and smooth multimodal transit experience for CTA's transit customers. By using the Ventra App for multimodal transportation, CTA riders have access to an integrated tool that is a vital element to the regional transport network. The Ventra App has proven to be an efficient and reliable tool for CTA, Pace and Metra riders.

This proposed project allows CTA and its partners to add additional functionality that will extend the regional transit network. The proposed upgrade to the Ventra App will enhance the customer experience by putting bike sharing information in the hands of customers prior to reaching a station or stop. This will give customers the information they need to complete the 'last mile' of their trip by obtaining access to a Divvy bike via the Ventra App.