Exploring the Consumer Market and Environmental Impacts of Microtransit Services in Sacramento and Citrus Heights, California

A study to assess the awareness, utilization, and demand of microtransit, its competitiveness in cost and efficiency, and the role it plays in the COVID-19 crisis.

WHAT IS THE NEED?

There is growing interest in microtransit, and pilot programs are emerging in many cities in the United States (U.S.). The Sacramento Regional Transit District (SacRT) is the largest microtransit provider in the U.S. SacRT launched its first microtransit model, SmaRT Ride, in Citrus Heights, California, in February 2018, and then expanded it to six additional areas with 42 shuttles in Sacramento County due to its success in Citrus Heights.

SmaRT Ride allows passengers who need a ride to open the application or book online to set their locations for the request. The microtransit platform automatically assigns the closest bus to pick up passengers along the flexible route by utilizing a scheduling algorithm. Then the information of the itinerary and the arrival of the vehicle can be viewed and tracked on a map. The fare is the same as that of a traditional bus service in the area and gives a discount to seniors, person with disabilities, and students.

Given the significant novelty of this service, the size of its potential market is still unknown, as is the relationship to other modes of transportation. Additionally, the effectiveness of microtransit during the pandemic has not been evaluated; it is not clear whether the pandemic will stimulate a burst of demand for microtransit, how much ridership will be generated due to COVID-19, and what other modes microtransit riders have used before shifting to it. Furthermore, the exploration of public acceptance of and attitude toward this new service is not known.
WHAT ARE WE DOING?

The research team will conduct the following tasks:

Task 1: On-going focus group question design
Task 2: Survey question design
Task 3: Conduct focus groups.
Task 4: Conduct large-scale online survey with SmaRT riders and non-SmaRT riders
Task 5: Data analysis and report writing

WHAT IS OUR GOAL?

At the end of the project, the research team aims to assess awareness and utilization of microtransit and estimate market demand for it. It will also enable the evaluation of the competitiveness of microtransit in the market in terms of cost and efficiency.

WHAT IS THE BENEFIT?

The deliverables and results will provide Caltrans with insights about the demand level for microtransit, its role in the COVID-19 crisis, characteristics of its consumer market, and its benefits; thereby, allowing for well-informed decisions to encourage this new mobility service in the future.

WHAT IS THE PROGRESS TO DATE?

First, we designed questions for the focus group and the large-scale survey. Second, we identified Microtransit routes. We then designed scripts for the focus groups and interviews. Based on responses from the focus groups and interviews, we revised survey questions. We then pretested the survey among researchers and other parties. Next we conducted the online survey on riders though the SmaRT Ride app. We are now in the process of collecting data. The final step is data analysis and report writing.

IMAGE

Image 1: A SacRT SmaRT Ride Vehicle