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Understanding the Bike-share Market in the Sacramento Region to Increase Demand and Improve Access

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POLICY BRIEF

Issue

Bike-share services provide an affordable and environmentally sustainable transportation option. Research has shown that bike-share use can reduce car dependence and facilitate access to public transit. Expanding the use of these services can help cities meet environmental goals and, if done right, better serve transportation-disadvantaged residents.

Researchers at the University of California, Davis surveyed households and bike-share users in the Sacramento region and used both behavioral modeling and market segmentation approaches to identify opportunities for increasing demand while improving access for low-income groups. The results can inform cities' efforts to expand bike-share services.

Key Research Findings

Although low-income individuals and students are less likely to have used the bike-share service, those who have are more likely to be frequent users compared to others. Only 20% of low-income users, many of whom are students, reported using the service in the past month. However, students and low-income travelers make up a higher proportion of frequent users (5–10 bike-share trips per week) and super users (more than 10 bike-share trips per week). This result suggests the possibility that initial adoption is a key barrier to expanding bike-share use among low-income travelers. This barrier could potentially be addressed by publicizing the availability of discounted rates.

Carless individuals are using the bike-share service frequently for both commuting and non-commuting purposes. Bike-share is



Figure 1. An electric bike in the Sacramento-area bike-share fleet (photo credit: Gregory Urquiaga)

being used in combination with other travel options as a more environmentally sustainable alternative to car ownership. Marketing bike-share services to carless individuals who have not tried bike-share could be an effective way to recruit new users. Integrating bike-share service with transit, car-share, and other mobility options through a “mobility as a service” concept could help to achieve this aim.

Moderate (three or four days per week) and infrequent (one or two days per week) transit users are using the bike-share service at a very high rate. It is likely that a certain segment of the market is using the bike-share service for first- and last-mile transit connections, indicating that bike-share use can also benefit transit ridership. Attracting other transit users to the bike-share service could increase use of both services. This aim could be achieved through collaborations between bike-share operators and transit agencies to offer integrated trip payments, place bike-share stations near transit stops, and give first- and last-mile trip promotional discounts.

One segment of users never or infrequently rides personal bikes but uses the bike-share service frequently. The fact that the service is attracting these users, which may be due in part to the availability of electric bikes, suggests that marketing efforts to attract new users should not be focused exclusively

on existing cyclists. Electric bikes may attract new riders to the market.

Frequent bike-share users tend to have the least favorable perceptions of the bike-share service. The fact that frequent users have had more experiences of bike unavailability and/or parking difficulty could explain this finding, which underscores the need to increase the number of bikes in the system to improve service, especially as new users are recruited.

More Information

This policy brief is drawn from “Examining Market Segmentation to Increase Bike-share Use: The Case of The Greater Sacramento Region,” a report from the National Center for Sustainable Transportation, authored by Hossain Mohiuddin, Dillon Fitch, and Susan Handy of the University of California, Davis. The full report can be found on the NCST website at <https://ncst.ucdavis.edu/project/examining-market-segmentation-increase-bike-share-use-case-greater-sacramento-region>.

For more information about the findings presented in this brief, contact Hossain Mohiuddin at hosmohiuddin@ucdavis.edu.

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