

Planning, Policy
&
Programming

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Project Title:
Optimizing Bikeshare Service to
Connect Affordable Housing Units
with Transit Services

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Optimizing Bikeshare Service to Connect Affordable Housing Units with Transit Services

Developing a framework to optimize bikeshare services
between affordable housing and transit.

WHAT IS THE NEED?

Currently, affordable housing has become an important part of urban housing planning, and both Federal and local governments seek to provide more affordable housing for low-income populations. Additionally, transit-oriented development (TOD) has attracted increased interest from local transit agencies. Overall, these two trends have been addressed separately resulting in a spatial gap between affordable housing units and transit services including fixed-route bus/rail and paratransit bus. Much of the research related to affordable housing and transit service has recently focused on combining these two processes; however, this is a complex effort, which may not show short-term results. Bikeshare, as an emerging micro-mobility service, shows a great potential to increase accessibility, especially for disadvantaged populations. Moreover, researchers have not thoroughly examined the potential of bikeshare to solve the accessibility gap between affordable housing and transit.

WHAT ARE WE DOING?

This work will develop a mathematical framework to optimize bikeshare services to mitigate the barriers between affordable housing and transit services. The work will include case city selection, data collection, bikeshare demand analysis, transit accessibility analysis, and optimization modeling.

WHAT IS OUR GOAL?

This project will develop a framework to optimize the location of bikeshare stations to mitigate the barriers between affordable housing and transit services.



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California's transportation system

WHAT IS THE BENEFIT?

The results may provide bikeshare planning suggestions to connect affordable housing units and transit services. It may also provide guidance on how bikeshare may increase accessibility, particularly for disadvantaged populations.

WHAT IS THE PROGRESS TO DATE?

A kick-off meeting was held in October.

IMAGE

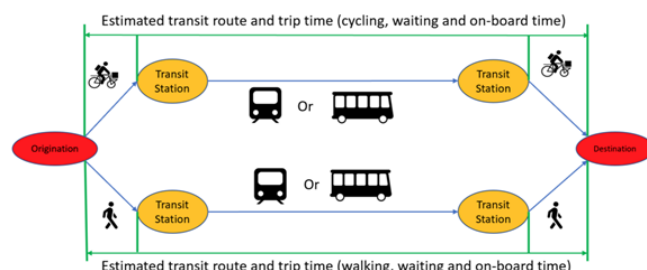


Image 1: Various data flows in the vehicle infrastructure communication environment