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Project Title:

Multi-Modal Travel in Yosemite Valley

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Multi-Modal Travel in Yosemite Valley

Assessing the role of bicycling in the Yosemite Valley transportation system

WHAT WAS THE NEED?

Yosemite National Park attracts 4.5 million visitors a year, 60% of whom spend at least some time in Yosemite Valley where many of the park's natural wonders are found. In the summer, visitors jam the valley's roads and parking lots, detracting from the quality of the park experience and contributing to significant environmental impacts.

Bicycles have been a popular transportation alternative within the valley. Visitors bring bicycles with them and visitors rent bicycles by the day from a private concession. To bolster the use of bicycles, the Yosemite Conservancy implemented a small bike-share system in 2018. This system, free to users, is intended to enable overnight visitors to run errands such as grocery shopping without having to get into their cars. Previously collected data revealed important aspects of how the system was used. Further analysis of system data could yield more insights that could provide a basis for system improvements in the future.

WHAT WAS OUR GOAL?

The purpose of this project was to explore the potential for bicycling to play a larger role in the effort to manage Yosemite Valley traffic and reduce environmental impacts.

WHAT DID WE DO?

The researchers analyzed existing data, including data from previous surveys of bike-share users and park visitors, as well as



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streetlight data on movements within the valley. They also developed a survey instrument designed to gather data on bicycling in the valley, including private, rented, and bike-share bikes and the people who use them. The researchers would like to acknowledge the Yosemite Conservatory and the National Park Service for contributions to this project.

WHAT WAS THE OUTCOME?

The results showed the Yosemite Village area was found to have the highest volume of trips within Yosemite Valley. Driving trips tended to be longer than walking and bicycling trips, but were short enough to be potentially walkable or bikeable. To further understand visitors' choices about bicycling, a survey will be conducted as part of a future study.

WHAT IS THE BENEFIT?

The results of the analysis can inform bicycling planning in the valley, including future adjustments to the location of bikeshare stations as well as improvements to the bicycle network. These improvements could synergize with existing programs like the bike rental program to offer better access by bike to all areas of the valley with the goal of encouraging bicycling as replacement for driving in the park.

LEARN MORE

For more information, view final report: <https://escholarship.org/uc/item/50r778cj>.

IMAGES

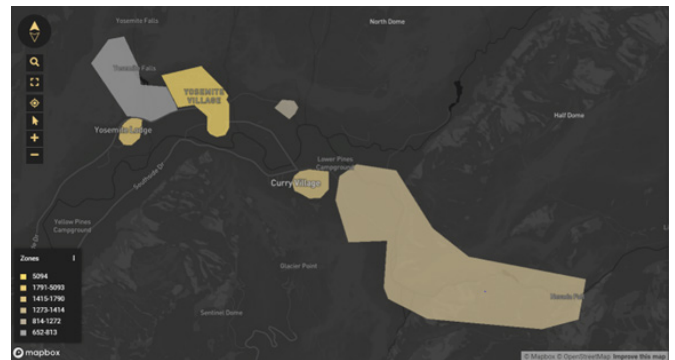


Image 1: Map of Daily Vehicle Bicycle Volumes in Each Major Zone

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