



CALTRANS DIVISION OF RESEARCH,
INNOVATION AND SYSTEM INFORMATION

Research Results

Planning, Policy
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Project Title:

Slow Streets and Dockless Travel: Using a Natural Experiment for Insight into the Role of Supportive Infrastructure on Non-Motorized Travel

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Task Manager:

Stephanie Alward
Associate Transportation Planner
Stephanie.Alward@dot.ca.gov

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Using a Natural Experiment for Insight into the Role of Supportive Infrastructure on Non-Motorized Travel

WHAT WAS THE NEED?

Several cities implemented slow street programs during the pandemic, closing streets to car traffic, opening traffic lanes to non-motorized uses, or slowing car travel. This research took advantage of the opportunity to study the effect of large programs that turned over street space to non-motorized modes—exactly the kind of intervention that many urban planners have been advocating, but an intervention that has not been observed at the scale implemented during the early days of the pandemic.

WHAT WAS OUR GOAL?

The purpose of this research was to use the slow street programs in four major cities to study how planning programs that reduce auto traffic and speeds can encourage increases in nonmotorized travel.

WHAT DID WE DO?

This research project implemented a before/after, experimental-control group study of slow street infrastructure to examine the role that supportive non-motorized infrastructure can play in non-motorized travel. The researchers studied the programs in the cities of Los Angeles, San Francisco, Oakland, and Portland.



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WHAT WAS THE OUTCOME?

The outcome showed that dockless trip counts, on slow streets, were from 10 to 74 percent higher than on a control group, with statistically significant results across a range of cities and regression specifications. We have presented the results of this research at academic conferences such as the Western Regional Science Association and at seminars at the University of Texas and National University of Singapore. The results inform active policy discussions about whether to preserve or expand slow streets and will assist with Caltrans's active transportation planning.

WHAT IS THE BENEFIT?

The case study results will contribute to slow streets and non-motorized travel data, providing transportation planners with insight on investments and implementation of slow streets for traveling within communities.

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<https://escholarship.org/uc/item/244529qz>

IMAGES



Image 1: Slow Streets network in San Francisco; courtesy of the San Francisco Municipal Transportation Agency (SFMTA).