POLICY BRIEF

UCLA ITS INSTITUTE OF TRANSPORTATION STUDIES

Heightening Walking Above its Pedestrian Status: Walking and Travel Behavior in California

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RESEARCH TOPIC

Californians start and end almost every journey by foot — even trips made by automobile. Walking is an important way to get around, but it also has benefits that extend beyond mobility: Contributing to positive health outcomes, promoting social interaction, and enabling access to jobs and other opportunities, especially among individuals who cannot drive. Walking also has a small environmental footprint, potentially helping to relieve traffic congestion and greenhouse gas emissions.

Yet outside of select case studies in specific metropolitan areas, planners and policymakers know very little about walking behavior in California. This makes it hard for them to adequately invest in walking amenities like sidewalks and crossings. To better understand walking behavior, researchers at UCLA examined data from California travel surveys. Their findings inform a set of recommendations to encourage walking and improve data collection related to walking behavior in California.

MAIN FINDINGS

Although walking is a small share of trips within the study area, walking rates have increased dramatically over time (see Figure 1). While the 9 percent walking share in the study area is relatively small, walking mode share is nine times higher than the percentage of trips taken by public transit or bicycle.

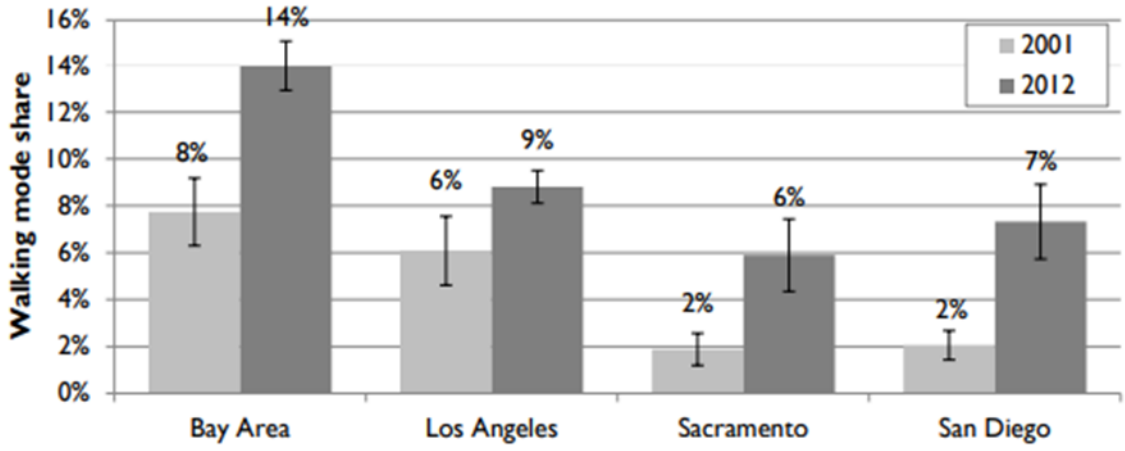

Figure 1. Increase in walking mode share by metropolitan area (2001 to 2012).

Compared to other factors, the built environment has a relatively small effect on walking. In general, the characteristics of a trip — its distance and purpose — have the greatest effects on the odds of walking (see Figure 2).

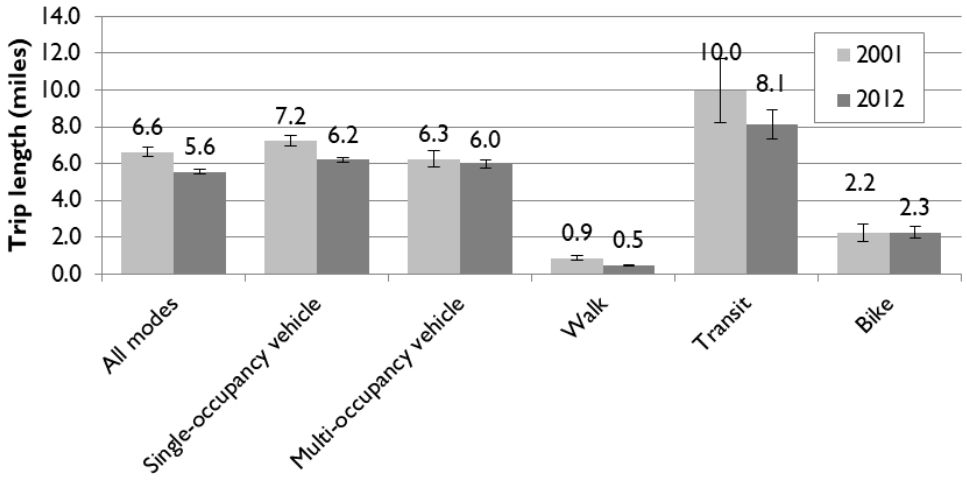

Figure 2. Changes in trip distance by mode and year, (2001-2012).

Travel demand models are increasingly incorporating walking, but could still be enhanced. Some California MPOs have shifted to activity-based models, but these models can be improved with better data.

STUDY APPROACH

Researchers used data from the two most recent California Household Travel Surveys to examine walking behavior in four regions: Los Angeles, Sacramento, San Diego, and the San Francisco Bay Area. The study includes analyses of the change in walking over time, the determinants of change in walking over time, the relationship between walking and the built environment, and the relationship between changes in neighborhood characteristics and changes in walking. Researchers also interviewed planners and travel demand modelers at metropolitan planning organizations (MPOs) to better understand how walking trips are included in their travel demand models.

RECOMMENDATIONS

Planners should facilitate the development of built environments that encourage walking. Neighborhoods with increased intersection densities, for example, are more likely to draw pedestrians. Having access to important destinations such as parks, schools, and restaurants within a half-mile also encourages walking.

Policymakers should support groups that already exhibit relatively high rates of walking. For example, policymakers can target investments to address safety and crime issues affecting the pedestrian environment in low-income and immigrant neighborhoods.

Engineers and planners should collect more data on walking. Travel demand modelers often lack quality data on walking behavior, pedestrian volumes and location, and the pedestrian environment over time.