What was the need?

The purpose of this project is to develop possible explanations for changes in active transportation and transit mode share using the 2010-2012 California Household Travel Survey (CHTS) and the California sample in the 2017 National Household Travel Surveys (NHTS). The research team also used the 2009 NHTS to help examine methodological effects that could explain any differences between the 2010-2012 CHTS and the 2017 NHTS.

What was our goal?

The completed report includes the following: literature review, methods, analysis, and results. The explanations focus on the quantitative results obtained in the analyses but also include discussions about unaccounted for variables. This report provides a rigorous evaluation of the change (or perhaps only differences if the methodological effects are overwhelming) in mode share from statewide sources.

What did we do?

This study evaluates changes in travel mode shares in California over the period from 2012, when the California Household Travel Survey (CHTS) was most recently completed, to 2017, the most recent implementation of National Household Travel Survey (NHTS). A comparison of the CHTS results to the California add-on sample of the NHTS suggests that active travel declined over the five year period. The purpose of this study is to assess whether differences in methodology between the two surveys may explain...
the apparent decline and to identify factors that might have resulted in a true decline in active travel. In addressing these questions, we explore different measures of mode share, including mode share of trips, distances travelled, and the share of individuals using active modes for any travel. This report summarizes that work and provides recommendations for future tracking of changes over time as well as the measures of mode share that might be most useful to Caltrans’ evaluation of bicycling and walking.

WHAT WAS THE OUTCOME?

Changes in the Hispanic population of California are likely a factor impacting changes in walking and biking, but these changes might be underestimated, since these groups have historically been undercounted. Our results suggest that the use of alternative transportation modes among Hispanic groups has decreased much more than that of non-Hispanic groups. The increasing proportion of California’s population made up of Hispanic groups will likely result in even greater effects of this shift into the future. While there are not changes in the population with respect to gender, there are differences in the changes in mode shares for men and 39 women. We find larger decreases in walking and biking among men, though it is possible this reflects the higher starting point for males. This outcome may also relate to changes in mode shares resulting from the Great Recession, if this led to greater impacts on men’s travel. The major finding of this study is that the shifts in mode shares appear to be real. That is, they do not seem to be the result of methodological differences. We have begun to identify some of the key areas that might contribute to these changes; demographic shifts, and likely the Great Recession, however more research is needed to tease out how these impacts are affecting changes in mode share and what strategies might lead to increased bicycling and walking.

WHAT IS THE BENEFIT?

To provide evidence for potential reasons for the change with the purpose of helping Caltrans evaluate their progress toward increasing bicycling, walking, and transit use.

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