



Adults with Disabilities in California Travel Less, and Differently, but not Stereotypically

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Project Objective

The project aims to understand the extent to which disability may affect the choices and desires that people have for transportation mode usage frequencies, activity frequencies, and neighborhood features.

Problem Statement

People with disabilities travel less than their peers without disabilities. Much research about the travel patterns of people with disabilities focuses on problems they experience with specific transportation modes, under the assumption that fixing those specific problems is enough to fully include people with disabilities in the broader world. However, existing research does not account for the extent to which people with disabilities have different patterns of using various modes or performing activities outside of the home compared to people without disabilities. Such comparisons could shed light on the extent to which the needs of people with disabilities may actually be broader needs. Additionally, existing research does not account for the desires that people with or without disabilities may have to perform various activities or use various modes more often than they currently do.

Research Methodology

Researchers at UC Davis analyzed data from a survey disseminated in 2022 to adults with and without disabilities across California, including those in rural and suburban areas far from the coast. The survey asked about disability, other demographic information, location, and the frequencies with which respondents performed different activities outside of the home and used different transportation modes, along with the desires to perform those activities or use those modes more often than they currently did. The survey sample had 1,896 respondents, of whom 807 (43%) were people with disabilities. The researchers applied descriptive statistical analyses and discrete choice modeling techniques to the survey data.

Results

People with disabilities rarely use paratransit and public transit modes. Most people with disabilities across California use those modes less than once per month, if ever, though rates of public transit use are higher in urban neighborhoods. Policymakers should still consider improving the human service, vehicle design, and stop design aspects of those modes to attract more riders with disabilities, but greater gains may come from improvements to operational characteristics, infrastructure, and land use patterns that may also lead to greater use of public transit modes by people without disabilities.

Many people with disabilities do not have driving licenses or own their own vehicles, but in many cases, they use other modes instead, though not as often as people without disabilities who drive. People with vision, mental, or other driving-preventing disabilities are especially likely to use taxi and ridehailing services instead, while people with cognitive disabilities are more likely to rely on relatives or friends for rides. People with physical disabilities are more likely to travel less often overall for most

activities and less use most modes. These results identify modes for policymakers to prioritize for specific improvements relevant to specific subgroups of people with disabilities.

Many people with physical or cognitive disabilities perform many activities outside of the home less often than people without physical or cognitive disabilities. However, people with other forms of disability differ less from people without those forms of disability in how often they perform most activities.

People with and without disabilities want to do basic activities, like visiting people, shopping at grocery stores and going to parks, more often than they currently do. Around 30-40% of respondents, with or without disabilities, reported such unmet demand. Higher income helps people without disabilities, but not as much people with disabilities, meet this unmet demand. This suggests that people with disabilities, even with high income, continue to experience problems using various transportation modes and performing various activities outside of the home. These issues could be mitigated by denser mixed-use development (that also includes public parks and similar communal green spaces).

People with and without disabilities want to use private vehicles more often than they currently do. At least 20% of respondents, with or without disabilities, reported such unmet demand. People with disabilities consistently report unmet demand for private vehicles at significantly higher rates than people without disabilities even at high income, suggesting fundamental issues with vehicle design or with driving that policymakers could help resolve by setting standards for more inclusive vehicle designs.

People with and without disabilities want to use active modes (walking and biking) more often than they currently do. People with and without disabilities consistently report unmet demand for active modes at even higher rates (over 50%) than for private vehicles, suggesting the need for more and better active mode infrastructure, including sidewalks and protected bike lanes, that can attract more active mode users.

People with and without disabilities want to use public transit more often than they currently do. At least 25% of respondents, with or without disabilities, reported such unmet demand. People with disabilities only report unmet demand for public transit at higher rates than people without disabilities at low income, suggesting that policymakers should consider prioritizing operational or land use improvements related to public transit that can benefit all riders. Also, people without disabilities at high income who claim to have unmet demand for public transit are those who travel a lot already and mostly use other modes, suggesting that policymakers may err by focusing on such potential riders instead of on riders in lower income groups who are less likely than those with high income to drive their own vehicles or use other expensive transportation options.