

# A Longitudinal Analysis of Cars, Transit, and Employment Outcomes

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Access to cars and transit can influence individuals' ability to reach opportunities such as jobs, health care, and other important activities.

While access to cars and public transit varies considerably across time, space, and populations, most research portrays car access as a snapshot in time; some people have a car and others do not. But does this snapshot approach mask variation in car ownership over time? And how does access to particular types of transportation resources influence individuals' economic outcomes?

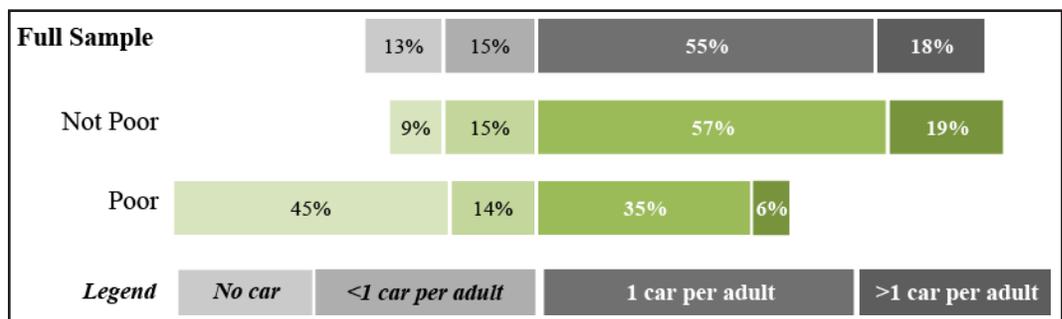
**For most families, being "carless" is a temporary condition.**

## Study Methods

This study used 14 years (1999-2013) of panel data from the Panel Study of Income Dynamics (PSID), a long-running panel survey of US families, to examine changes in auto ownership and transit use. The researchers first examined patterns in car ownership in relation to poverty status, race/ethnicity, and immigration status; focusing on low-income families, people of color, and immigrants. Second, the researchers examined the relationship between economic outcomes and transportation access over a fourteen-year period, comparing the effects of public transit accessibility and car ownership.

## Findings

The research found that for most families, being "carless" is a temporary condition. While 13% of families in the US are carless in any given year, only 5% of families are carless for the duration of the analysis. The research also found that poor families, immigrants, and people of color are considerably more likely to transition into and out of car ownership and are less likely to have a car in any survey year than are non-poor families, the US-born, and whites. The figure below shows these patterns for the full sample as well as for families living above and below the poverty line, respectively.



Additionally, the research found that greater access to cars is associated with improved economic outcomes in subsequent years, but the effect of increased access to public transit is mixed. Gaining a car results in an increase of roughly \$3,500 in total family income one year later. However, the costs associated with owning and maintaining a car—\$4,000 to \$7,000 a year—outstrip the average income gains associated with having a car. The implications of this are not cut and dried. In some contexts, cars confer significant advantages over transit; in others, transit offers advantages, while cars may be a financial burden. Future research should explore these costs and burdens in different contexts to shed more light on these tradeoffs.

## Policy Recommendations

Transportation planners, researchers, and politicians should be cautious when designing policies for carless households and transit-dependent populations. In most places in the US, even the poorest families choose to own a car, although their access to those cars may be short-lived.

Many transit debates focus on “captive riders” (those without a car) and “choice riders” (those with a car). To this, a third group could be added: families for whom car ownership is tenuous. Focusing on ways to improve transit service for these families—disproportionately the poor, people of color, and immigrants—could increase transit ridership and alleviate the financial burden of car ownership, both worthy goals.

Policy interventions aimed at helping poor families obtain a car might serve to strengthen the family’s income, but simply providing assistance with car acquisition may not be enough; these families may need additional help to keep the car once they have it. Owning a car may not “pay for itself” in terms of income gains. Of course, the costs and benefits of cars are neither entirely economic, nor are they borne only by individual families. Increased car ownership has many negative societal impacts, such as pollution and traffic congestion. Similarly, the benefits are not only economic; access to transportation resources can improve access to food, recreation, and social opportunities as well as to jobs.

Further, although this research finds no clear income effect of living near high-quality transit, transit service will continue to play an important role. Among other functions, public transit serves an important purpose in providing mobility for those who cannot, or choose not, to own a car.

## About the Authors

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## To Learn More

For more details about the study, download the full report at [transweb.sjsu.edu/project/1244.html](https://transweb.sjsu.edu/project/1244.html)