

# Millennial Travelers Are More Multimodal than Older Travelers, but This Trend Might Change as They Age

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## Issue

Millennials, those who were born between the early 1980s and the late 1990s, tend to have different travel patterns than the members of the preceding generations when they were at the same age. These differences occur in daily travel choices and longer-term mobility choices, such as those related to household vehicle ownership. Research has suggested that the observed differences may be due to a combination of the effects of the economic crisis in the late 2000s, delays in experiencing life events such as marriage and childbearing, changes in attitudes and preferences, and the adoption of information and communication technologies.

Among various dimensions of millennial travel, multimodality—the use of multiple travel modes—has important implications for transportation sustainability. Prior research has found that members of this generation travel more by walking, bicycling, and riding public transit. Further, multimodal travelers are usually better informed about and more sensitive to level-of-service attributes of various modes than are habitual users of single modes (especially cars). Therefore, exploring trends in multimodality among millennials could inform policymakers' efforts to encourage more sustainable travel modes for millennials and shed light on how they might respond to policy interventions.

Researchers with the 3 Revolutions Future Mobility Program at the University of California, Davis compared millennials' travel behavior to that of members of the preceding Generation X by analyzing data collected from 1,069 California commuters. The researchers analyzed the effects of individual attributes on the likelihood of different components of travel behavior, including multimodal travel.

## Key Research Findings

**The researchers identified four traveler groups with unique socioeconomic attributes and**

### **different frequencies of use of various travel modes for commuting and non-commuting trips.**

Monomodal drivers drive for most of their trips, and they tend to own the most household vehicles and reside in suburban or exurban neighborhoods. Carpoolers drive occasionally, generally have a car available, but commute more often as passengers than as drivers. Active travelers travel most frequently by walking, biking, or skateboarding for both commute and non-commute purposes. Transit riders use public transit almost every day for commute and non-commute trips, usually with active modes as access or egress modes. Carpoolers, active travelers, and transit riders were additionally grouped as multimodal travelers.

### **Monomodal drivers account for the vast majority of travelers in the sample.**

Monomodal drivers make up more than 84% of the sample, while carpoolers (5%), active travelers (8%), and transit riders (3%) are substantially smaller groups.

### **Economic factors, living arrangements, attitudes/preferences, and related land use attributes all affect an individual's tendency towards travel multimodality.**

Not surprisingly, those without a driver's license and with less car availability and accessibility are more likely to be carpoolers, active travelers, or transit riders. All else being equal, the lack of children in the household and a short commuting distance are associated with a higher likelihood of being an active traveler, while having children and a higher level of education are associated with being a transit rider. Those who view cars as simply a tool rather than a desirable object, have concerns over the environmental impacts of driving, and have fewer constraints regarding trip schedules and mode choice tend to travel more by active and public transportation. Moreover, a higher level of economic and social vitality in the place of residence increases the likelihood of an individual being a public transit user.

**Individuals' travel multimodality differs across and within generations (Figure 1).** While monomodal drivers dominate all age cohorts, the

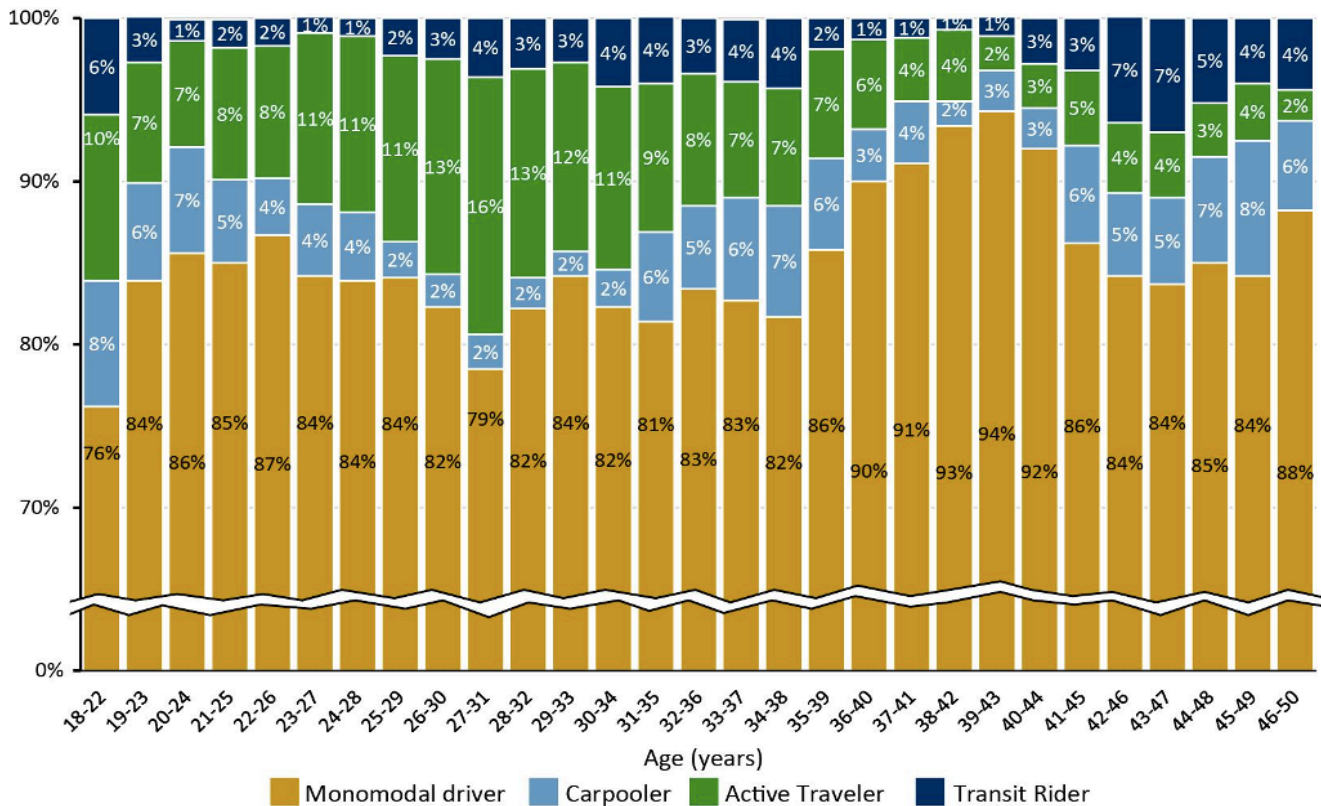


Figure 1. Shares of the four traveler groups in each age cohort. Each successive cohort advances the 5-year age range by 1 year.

share of each of the four traveler groups differs between millennials and Gen Xers and among the age cohorts within each of these two generations. The proportion of the three classes of multimodal travelers tends to be largest among travelers in their late 20s and early 30s. This proportion is lower and that of monomodal drivers is higher among individuals between 36 and 41 years old—ages at which people often marry, have children, increase their earnings, and relocate to the suburbs. The proportion of multimodal travelers rebounds slightly among travelers in their 40s. These differences suggest possible changes that may occur in the mode use patterns of millennials in coming years as they age and experience life course events.

### Policy Implications

Providing millennials with opportunities to maintain higher levels of travel multimodality, especially when those young adults transition to the next stages of their lives, can enhance the environmental sustainability of transportation. Based on the land use attributes associated with multimodality,

affordable residential alternatives in central parts of cities can promote active travel and public transit use among those who prefer urban lifestyles but want to buy a home and raise children. For millennials who relocate to suburbs, designing and planning these areas with urban amenities such as dense residential and commercial districts could support more sustainable travel behavior.

### More Information

This policy brief is drawn from the paper “Are millennials more multimodal? A latent-class analysis with attitudes and preferences among millennial and Generation X commuters in California,” authored by Yongsung Lee, Giovanni Circella, Patricia L. Mokhtarian, and Subhrajit Guhathakurta. The paper can be found at <https://ncst.ucdavis.edu/project/impact-residential-location-lifestyles-and-emerging-technologies-travel-behavior-and>.

For more information about the findings presented in this brief, contact Giovanni Circella at [gcircella@ucdavis.edu](mailto:gcircella@ucdavis.edu).

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