

National and metropolitan trends in transit use, transit-related walking, and ridesharing 2009 and 2017

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Research Questions

1. Is the frequency or duration of transit-related walking trips changing?
2. Is the change in taxi/ridesharing use associated with a change in transit-related walking?

Background

- Ridesharing (e.g. Uber, Lyft) use has dramatically increased while transit use has decreased.^{1,2}
- Walking is a common form of physical activity (PA)^{3,4} and is the most frequent travel mode to access public transit.⁵
- PA associated with transit-related walking is an important contribution to meeting the physical activity guidelines of 150 minutes of moderate to vigorous PA per week.^{6,7}

Data and Methods

Data: 2009 and 2017 National Household Travel Survey (n=229,105 and n=261,031)

Measures:

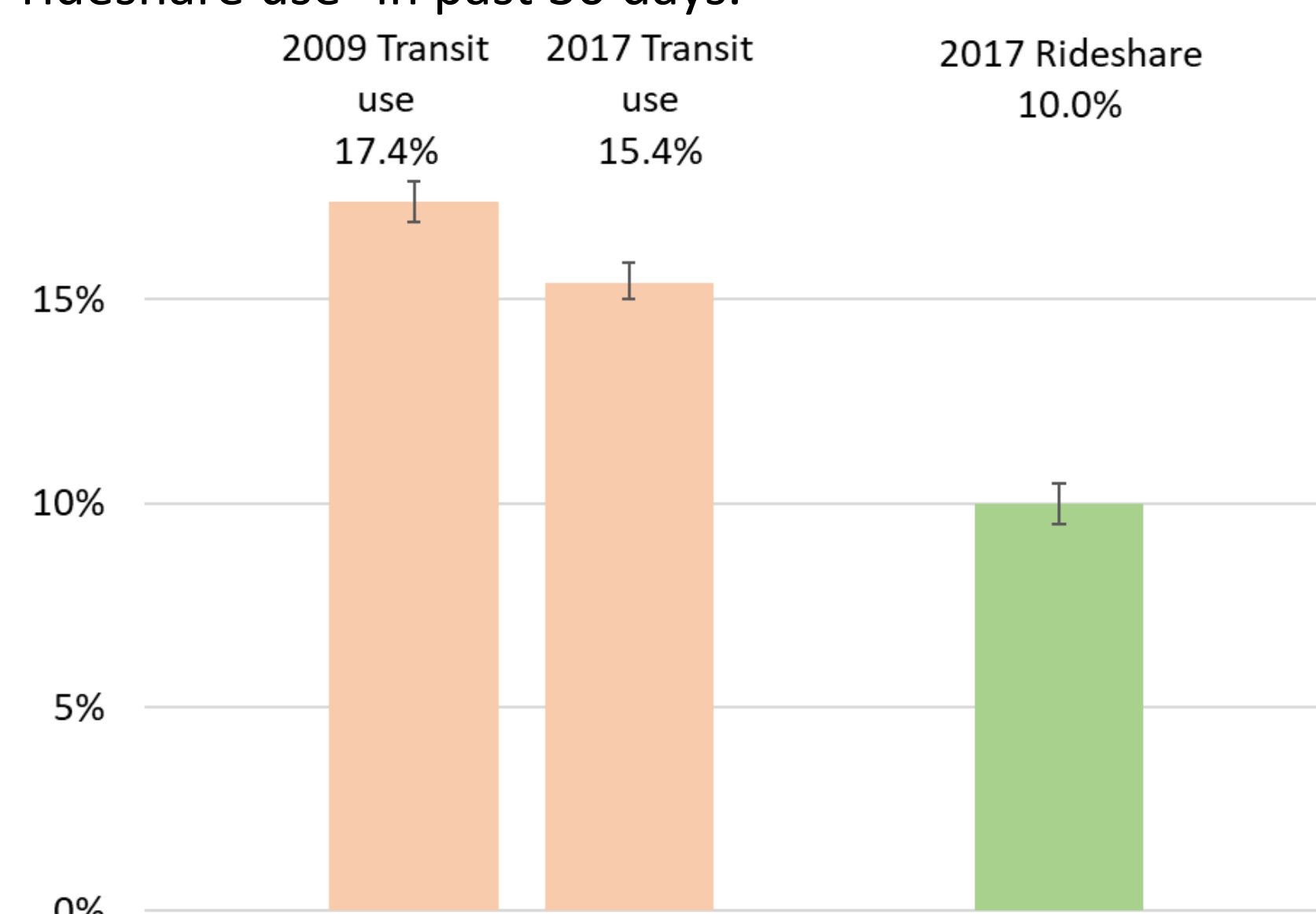
Previous 30 days: any rideshare use (2017); any transit use (2009; 2017)

Surveyed travel day: any taxi/rideshare use (2017); any walking to or from transit (2009; 2017)

Methods:

Survey weighted frequencies and logistic regression
Stratified by metropolitan areas

Table 1. Adjusted¹ national prevalence of any transit or rideshare use² in past 30 days.



¹Adjusted for gender, age, race/ethnicity, education, employment, household size, household number of vehicles, census tract population density, census region, and season.

²Unadjusted prevalence for 2017 rideshare

Results

National

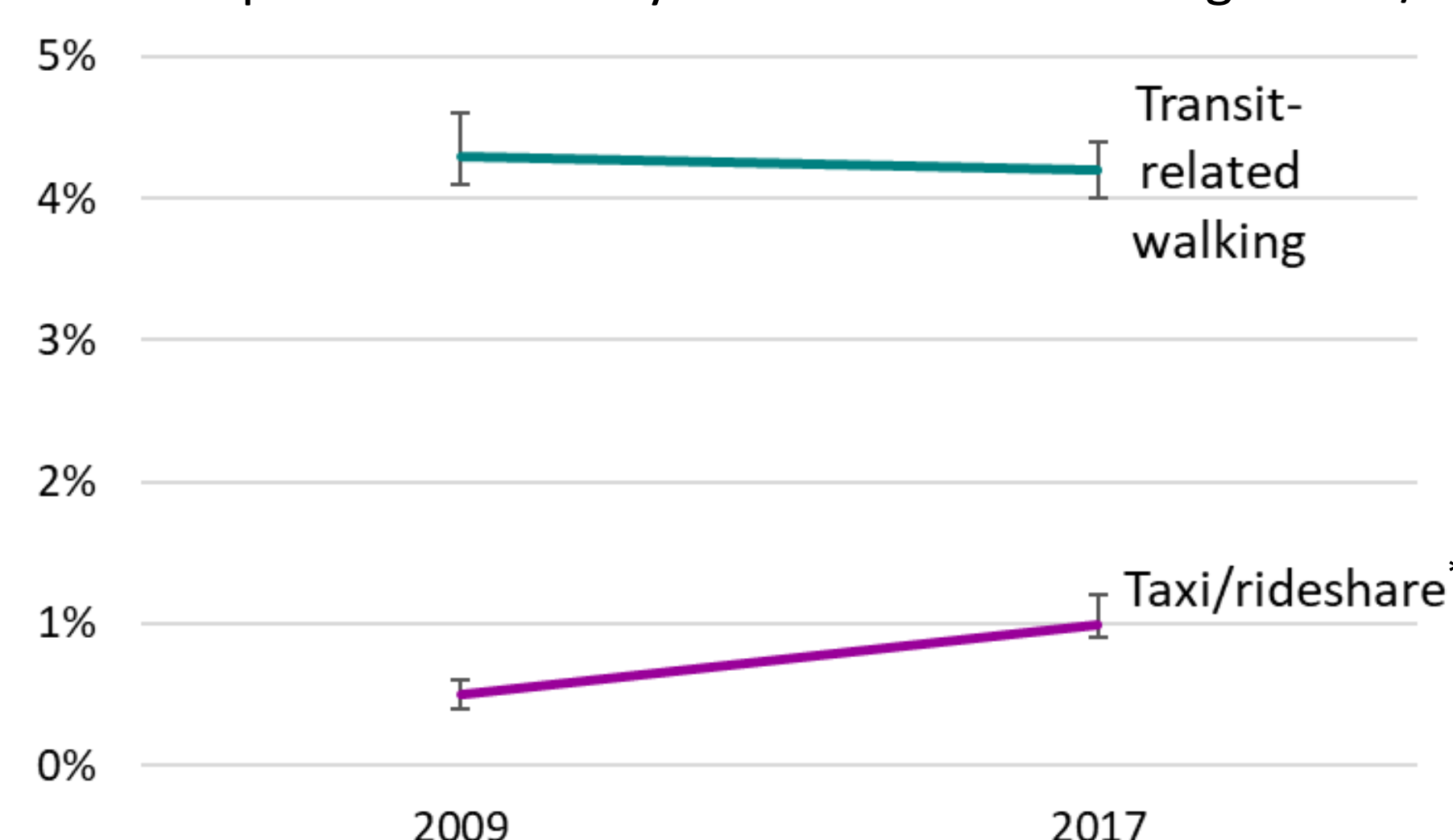
2009

- An estimated **9.4 million** people walked a median of **19.5** minutes (95% CI: 18.8 - 20.2 min) per day to or from transit.
- **96.5%** (95.3%-97.7%) of transit users had at least one walking trip to or from transit.

2017

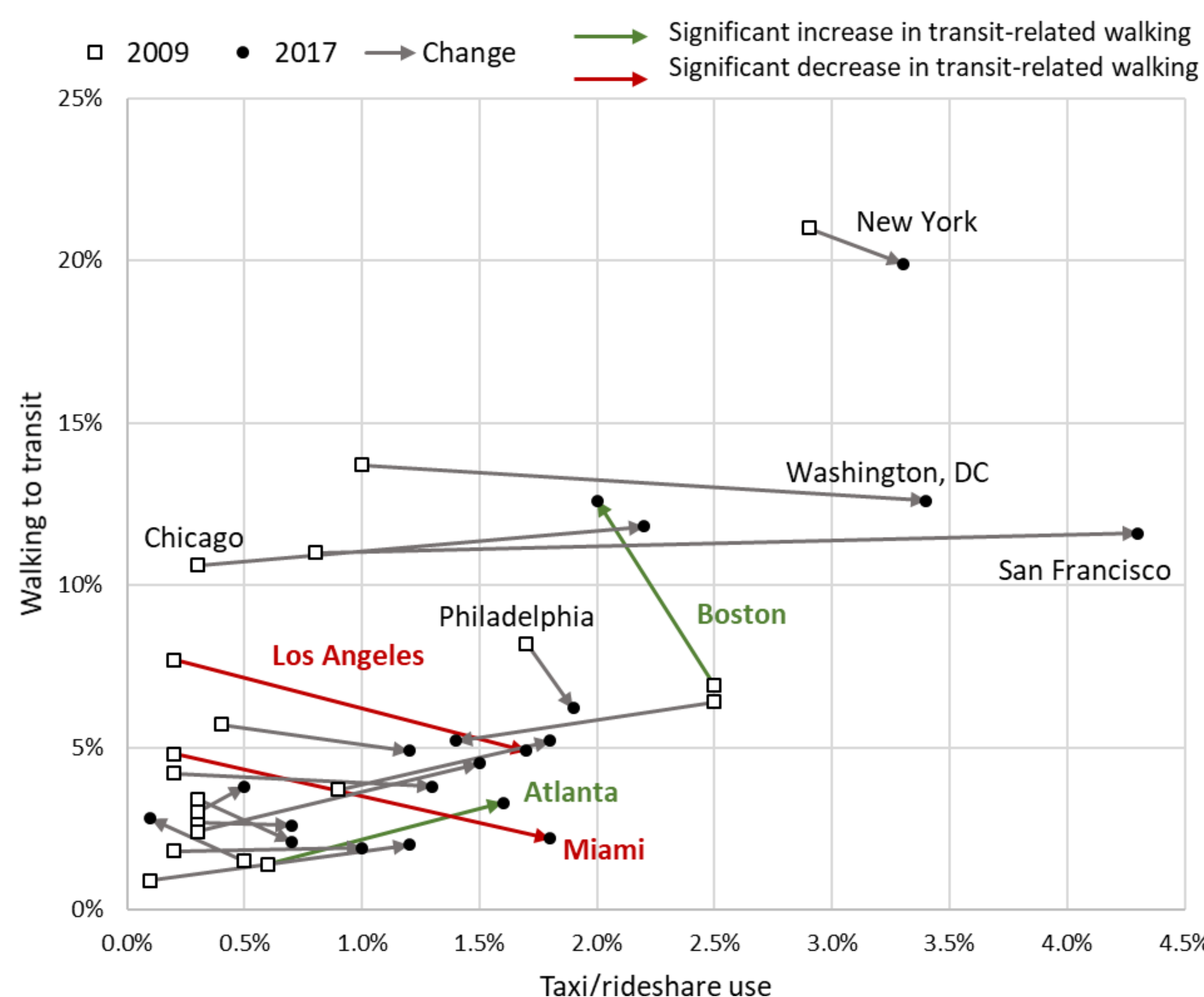
- An estimated **10.8 million** people walked a median of **19.9** minutes (18.8 - 21.0 min).
- **91.1%** (89.9%-92.3%) of transit users had at least one walking trip to or from transit.

Table 2. Adjusted¹ national prevalence of any transit-related walking or taxi/rideshare use.



¹Adjusted for gender, age, race/ethnicity, education, employment, household size, household number of vehicles, census tract population density, census region, and season. *p<0.0001 for difference between years.

Metro Areas



Unadjusted prevalence of any walking to transit versus any taxi/rideshare use
Significant transit-related walking for p<0.05

Results Summary

- Nationally, transit use declined and walking to transit remained flat.
- A few metro areas had changes in transit-related walking; nearly all had increases in taxi/rideshare use.
- National evidence does not suggest taxi/rideshare use is associated with a change in transit-related walking.

Public Health Implications

- As use of ridesharing continues to increase, monitoring of travel mode prevalence is required.
- Tracking potential unintended health consequences of technology-related changes in travel, such as decreases in physical activity, are useful to inform policy and transportation-related physical activity interventions.

References

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American Association of Geographers, 2019

