

Dynamics of Changes in Travel in the Largest U.S. Cities



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Demographic Trends in the Largest U.S. Cities*

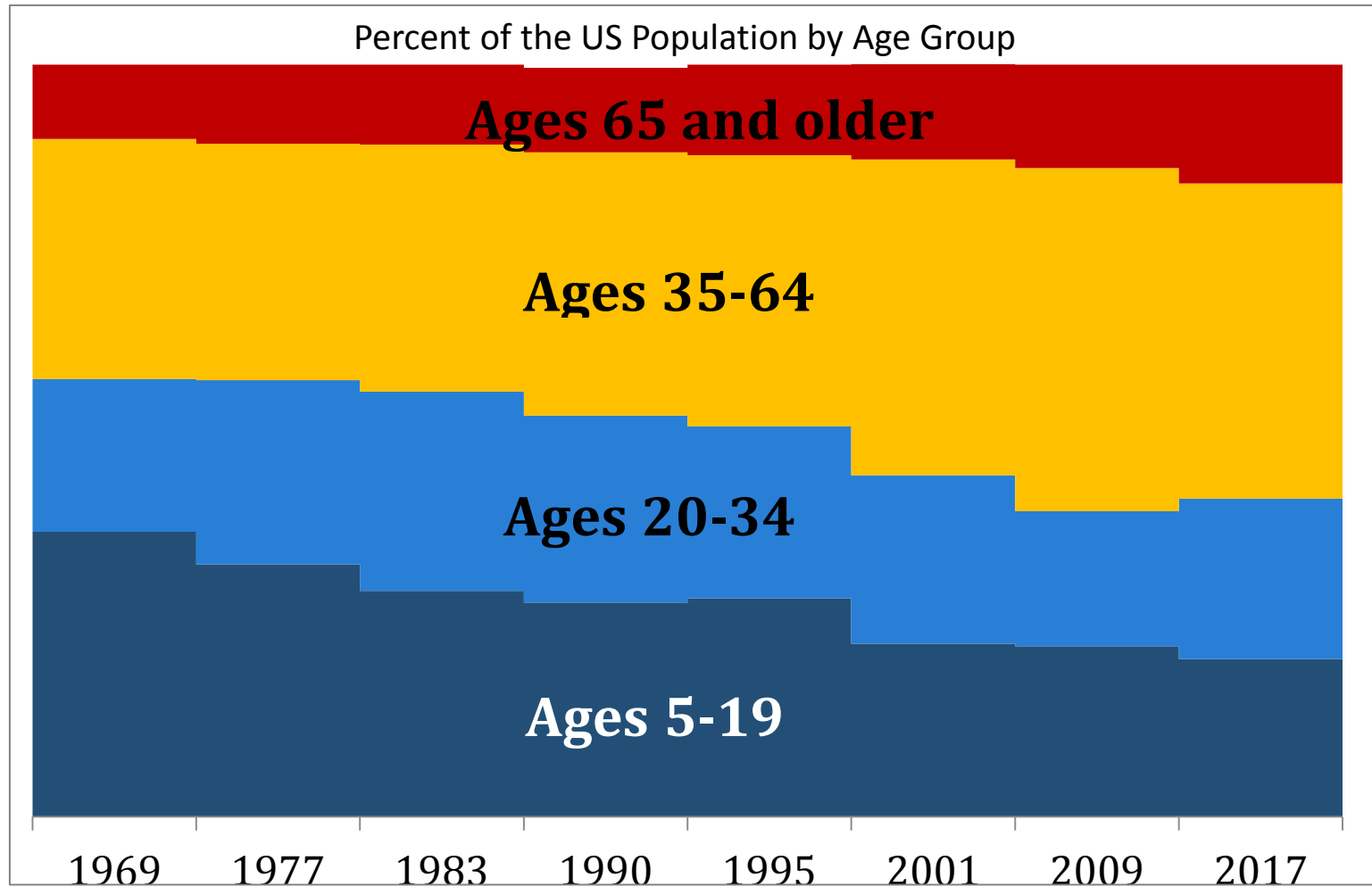
* Metropolitan Statistical Areas with populations of 3 million or more



Atlanta-Sandy Springs-Roswell, GA
Boston-Cambridge-Newton, MA-NH
Chicago-Naperville-Elgin, IL-IN-WI
Dallas-Fort Worth-Arlington, TX
Detroit-Warren-Dearborn, MI
Houston-The Woodlands-Sugar Land, TX
Los Angeles-Long Beach-Anaheim, CA
Miami-Fort Lauderdale-West Palm Beach, FL
Minneapolis-St. Paul-Bloomington, MN-WI

New York-Newark-Jersey City, NY-NJ-PA
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD
Phoenix-Mesa-Scottsdale, AZ
Riverside-San Bernardino-Ontario, CA
San Diego-Carlsbad, CA
San Francisco-Oakland-Hayward, CA
Seattle-Tacoma-Bellevue, WA
Washington-Arlington-Alexandria, DC-VA-MD-WV

Overall, the biggest demographic trend is the **aging population**:

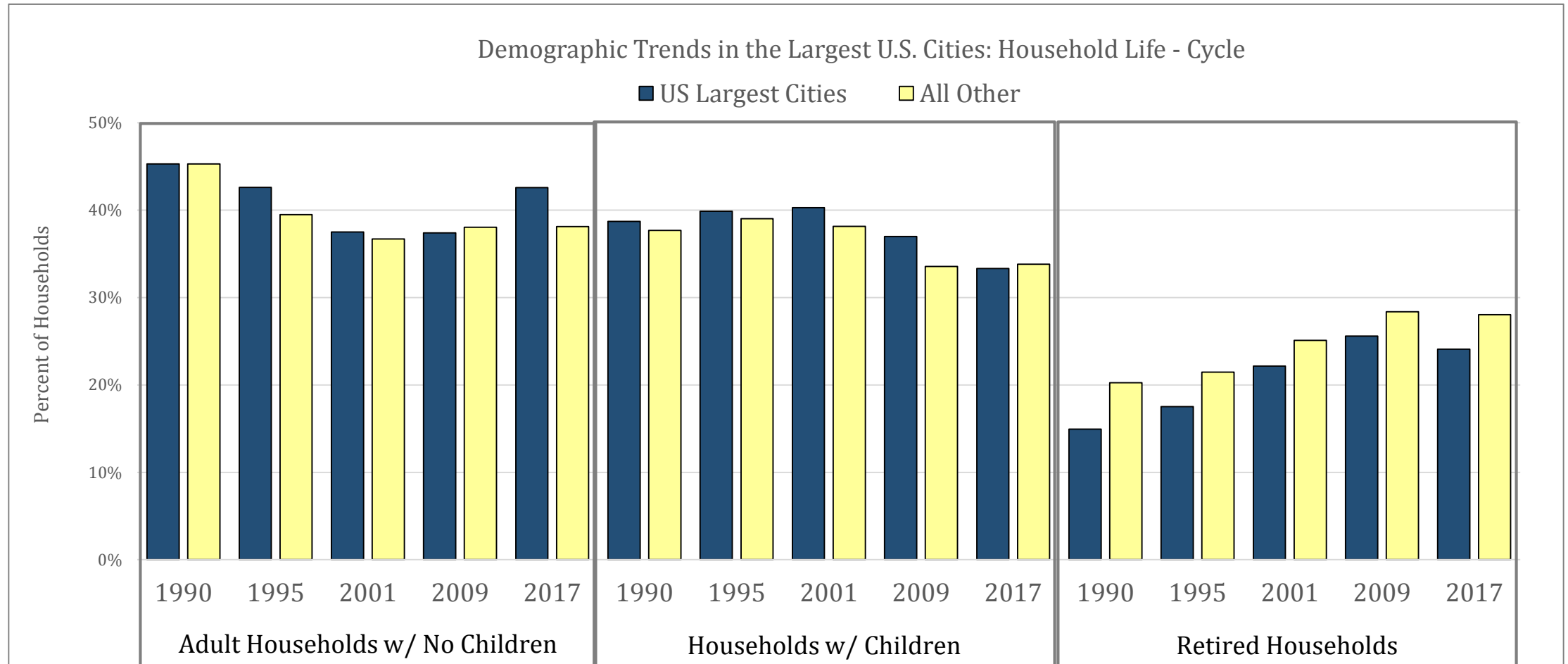


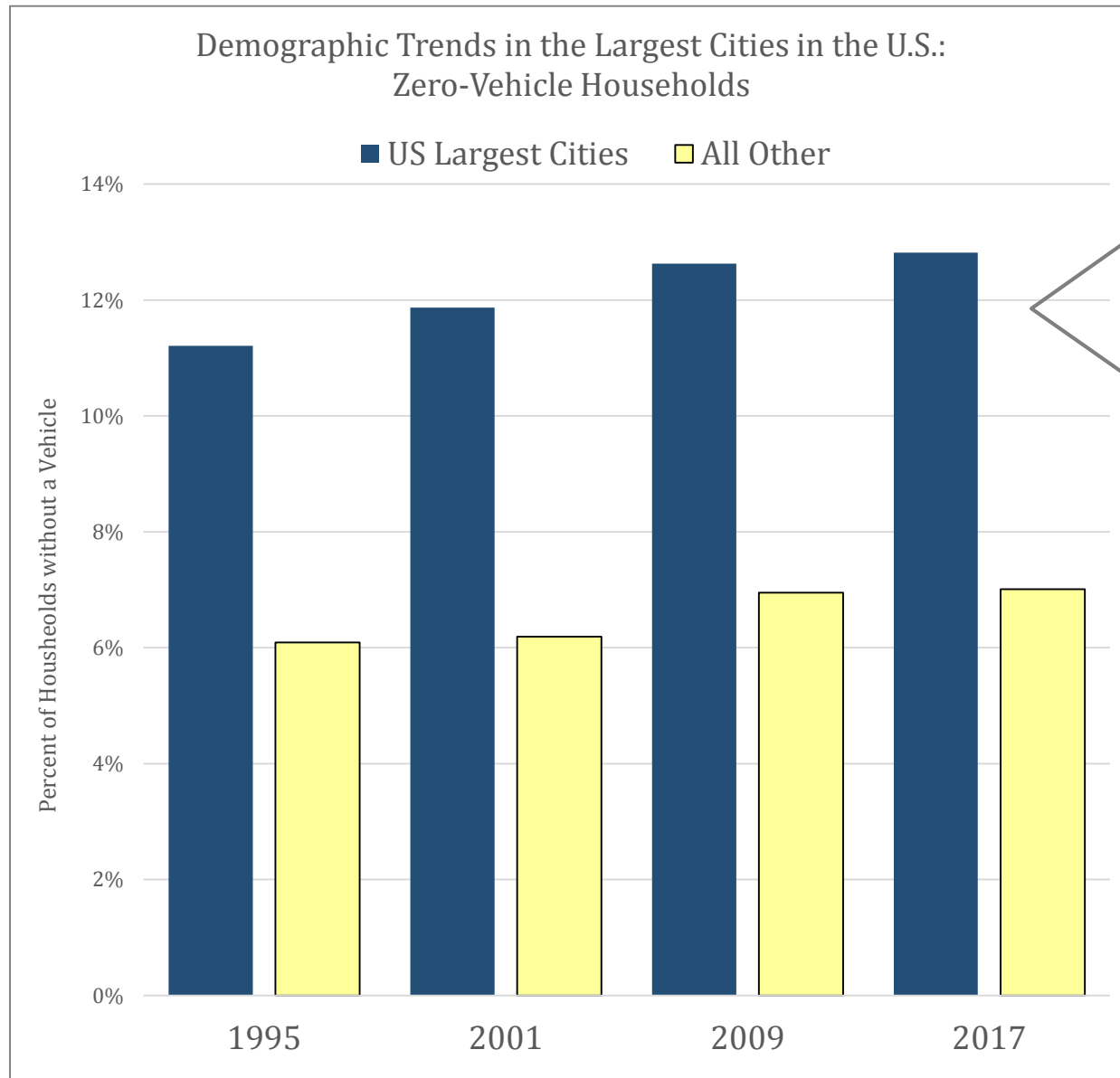
“The aging of baby boomers means that within just a couple decades, older people are projected to outnumber children for the first time in U.S. history.

US Census Bureau, March 13, 2018

Jonathon Vespa, Release Number: CB18-41

Meaning there are relatively **fewer households with children** and a greater share of retired households:



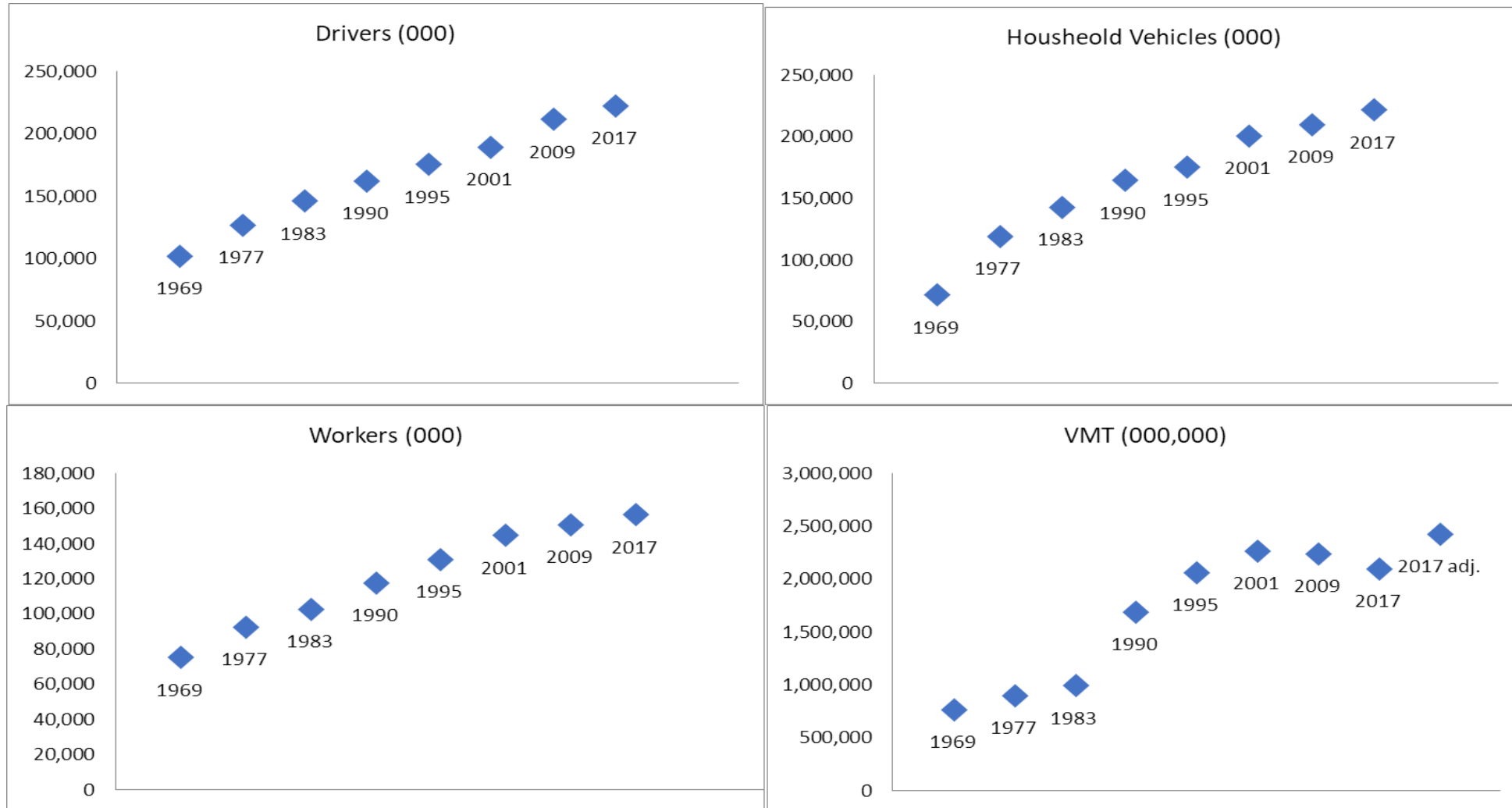


Long-term vehicle ownership trends show a ***slight increase*** in the percent of households without vehicles.

However, more recently in some cities (Los Angeles) those trends seem to reverse, especially in lower-income areas.

Some low income people may obtain a vehicle to work as an Uber/lyft driver, thereby increasing the number of private vehicles in operation. New leasing options target lower income drivers specifically for this purpose (e.g. Fair recently partnered with Uber to lease vehicles to lower income drivers).

Nationwide, long-term trends show **slower growth** in important travel-related factors:



Long-Term Travel Trends

- Household Travel
- Person Travel
- Special Topics



Components of Change in Personal Travel, 1995 to 2017

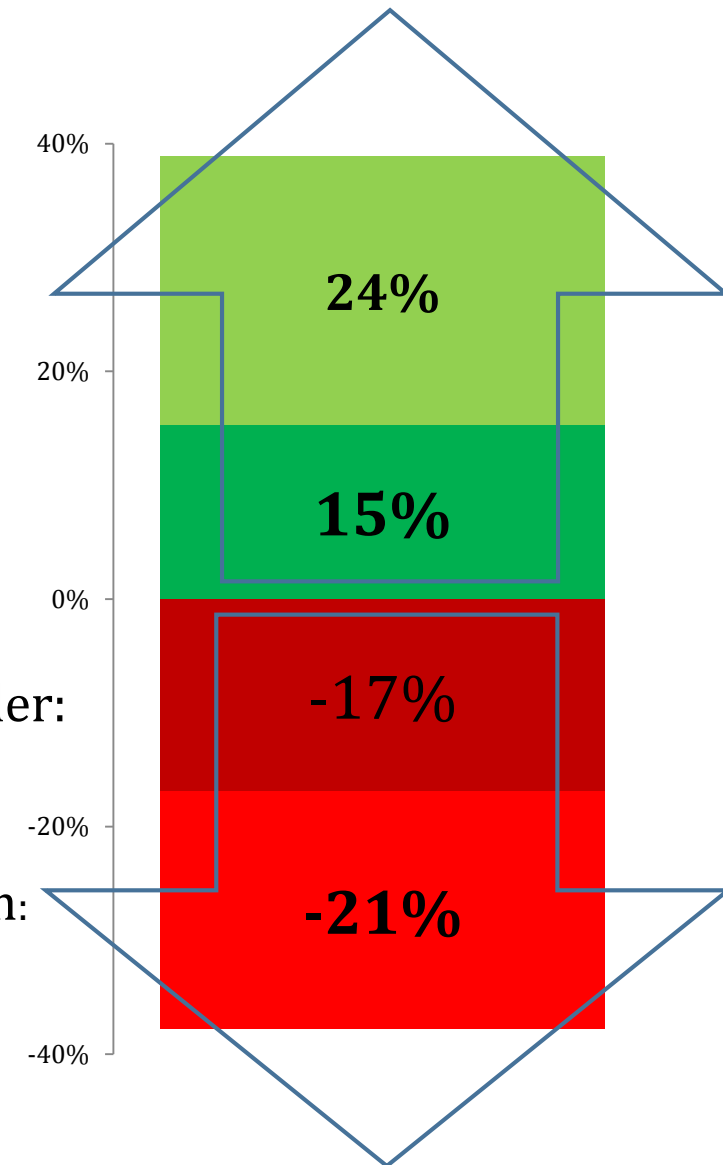
- **Population growth** was a major contributor to growth in travel (Trips/VMT/KMT)
- The average **trip length** increased 15 percent—but private vehicle trip length only increased 5.5% (not shown) indicating more long-distance (air) travel
- People who travelled reported making **fewer trips** in 2017 compared to 1995
- And more people **stayed home**, which contributed to the decline in per capita trip rates

Population Growth:

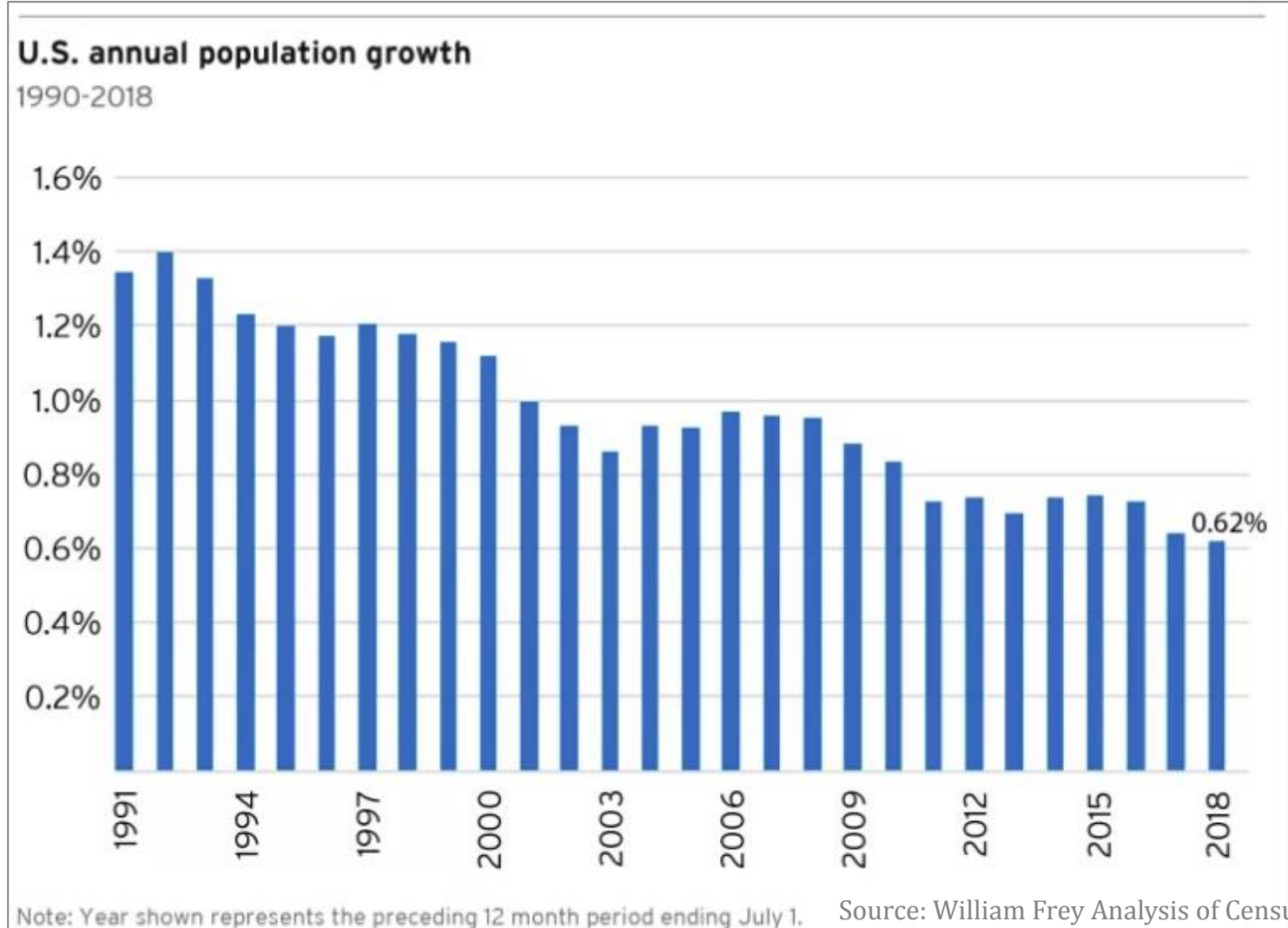
Increased Trip Length:

Decline in Trips per Traveler:

Decline in Trips per Person:



Overall, U.S. population growth is *slowing*:



“Nearly a fifth of all states displayed absolute **population losses** over the past two years.”

William Frey, Dec 2018

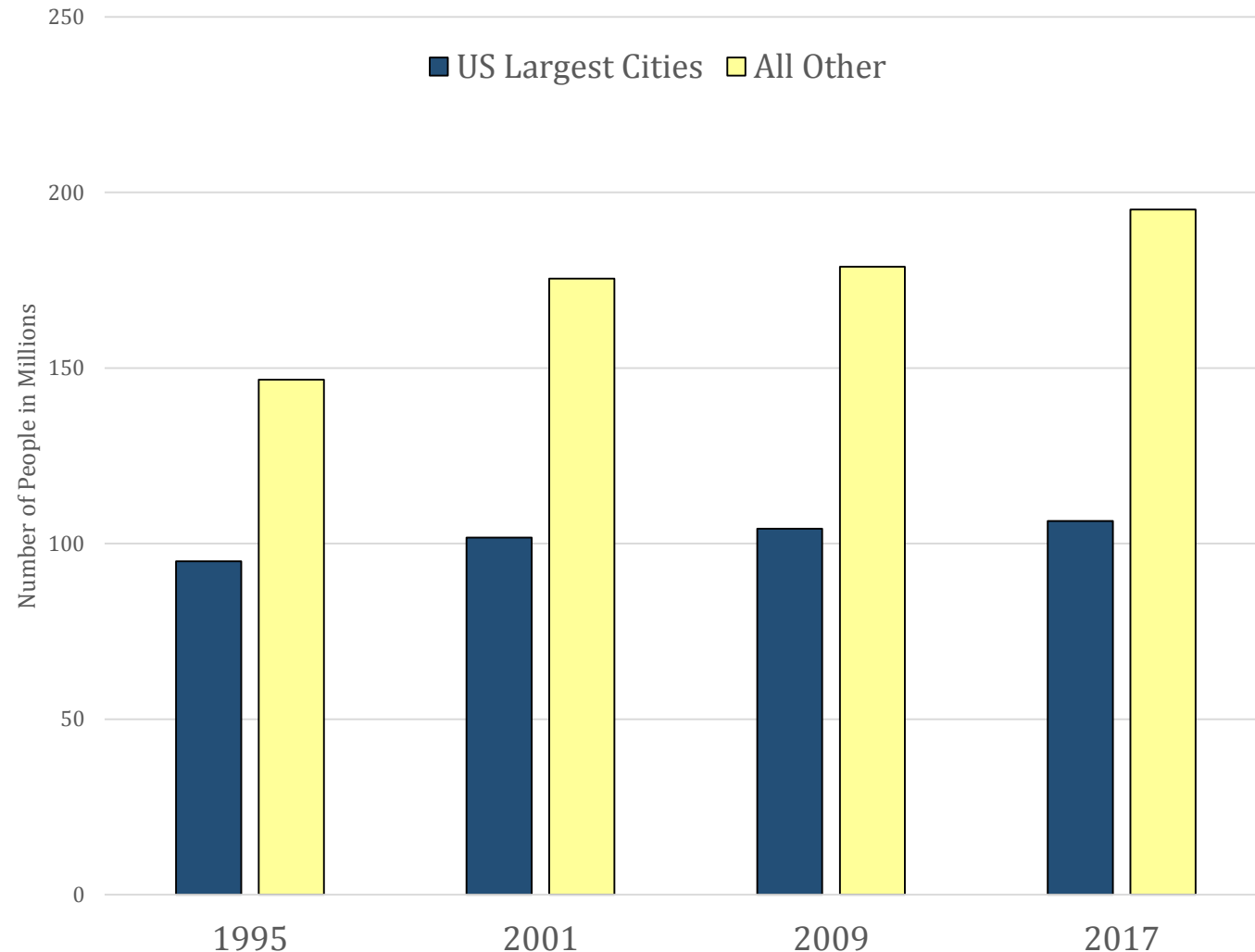
<https://www.brookings.edu/blog/the-avenue/2018/12/21/us-population-growth-hits-80-year-low-capping-off-a-year-of-demographic-stagnation/>

Source: William Frey Analysis of Census Population Estimates released Dec 19, 2018

The largest cities are growing *slower* than the rest of the nation:

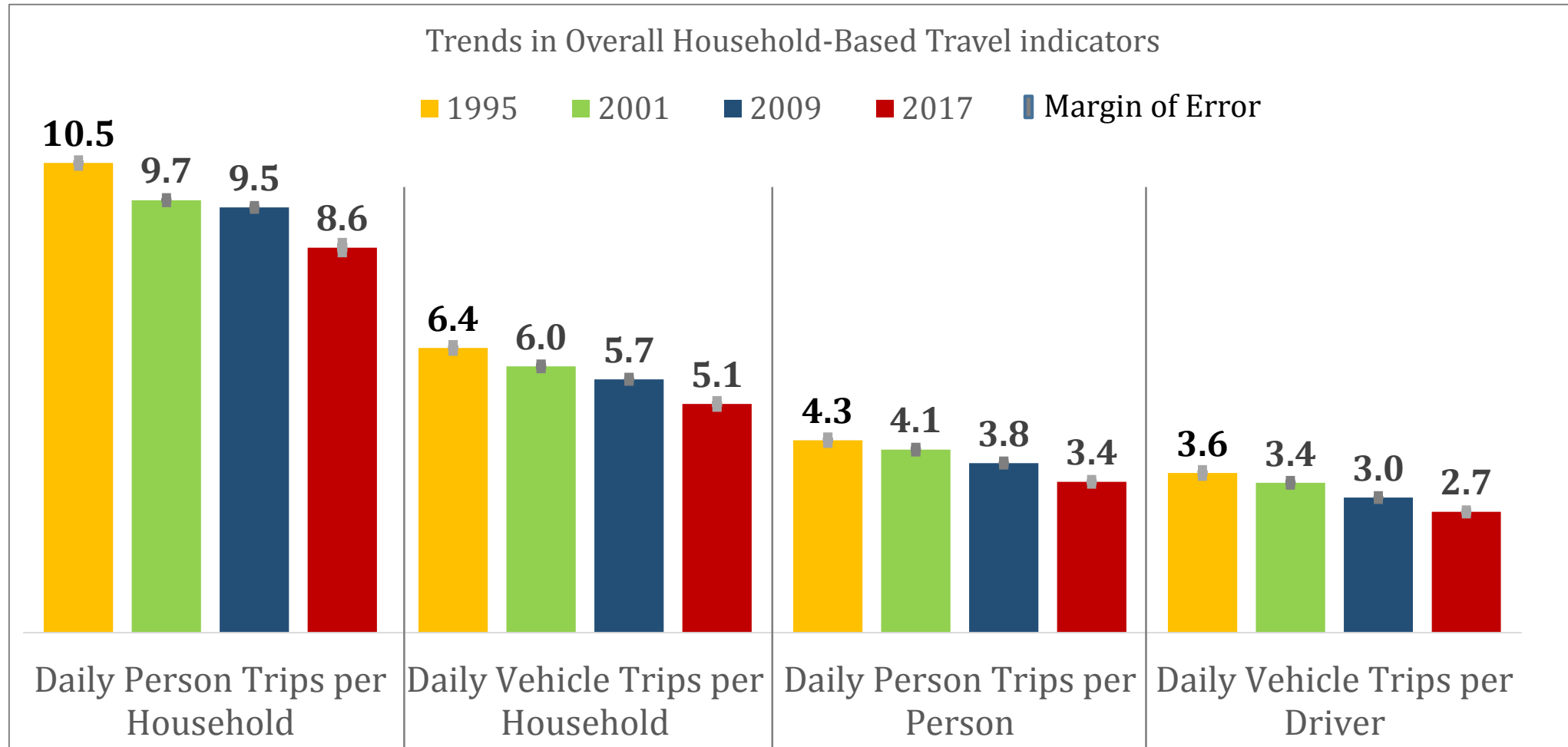
In the last two decades, the largest cities increased their populations by **12%** compared to **33%** for the rest of the nation.

Demographic Trends in the Largest U.S. Cities: Population Growth
(MSAs of 3 million or more population)

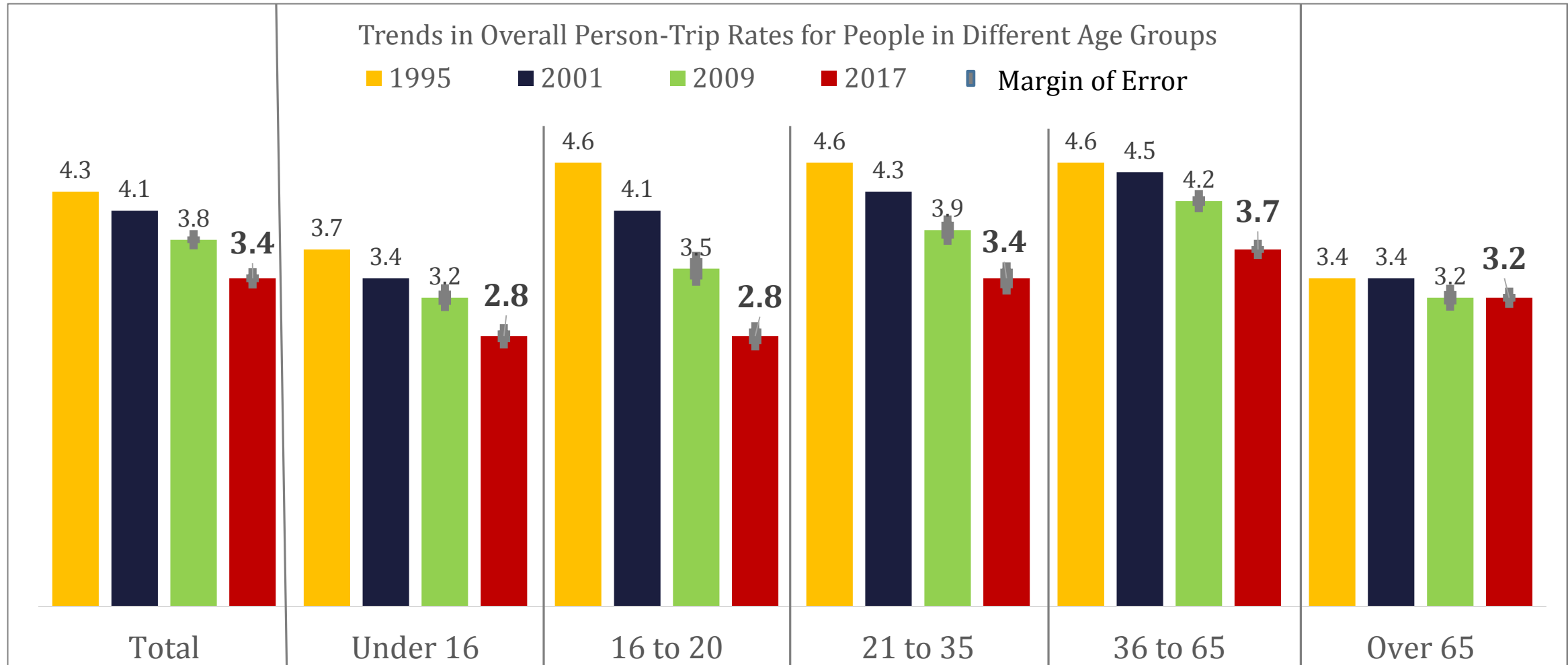


Source: McGuckin's Analysis of the FHWA NHTS Data Series

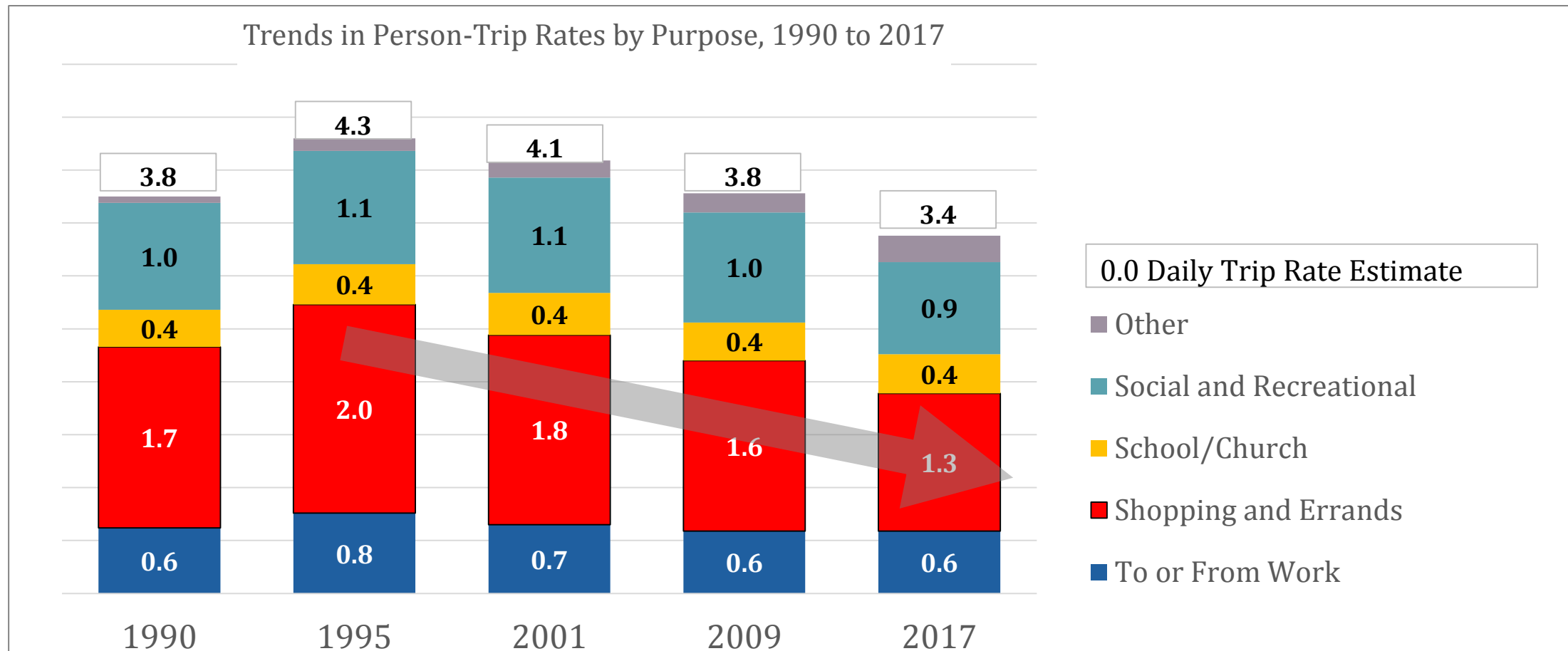
Household-based estimates of travel in 2017 were *significantly lower* than previous estimates:



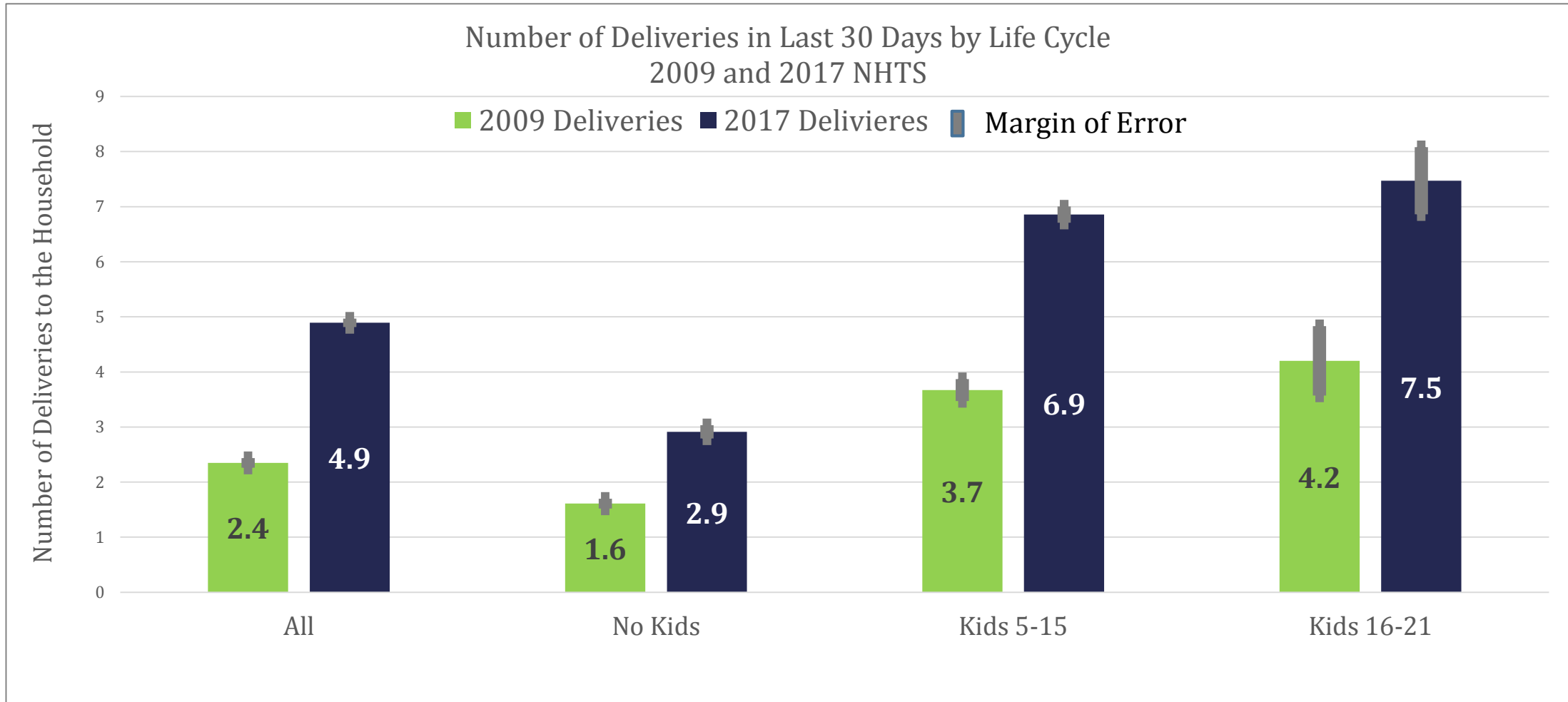
Trip-making ***declined significantly*** for all age groups except people over age 65. Declines since 1995 are remarkable...



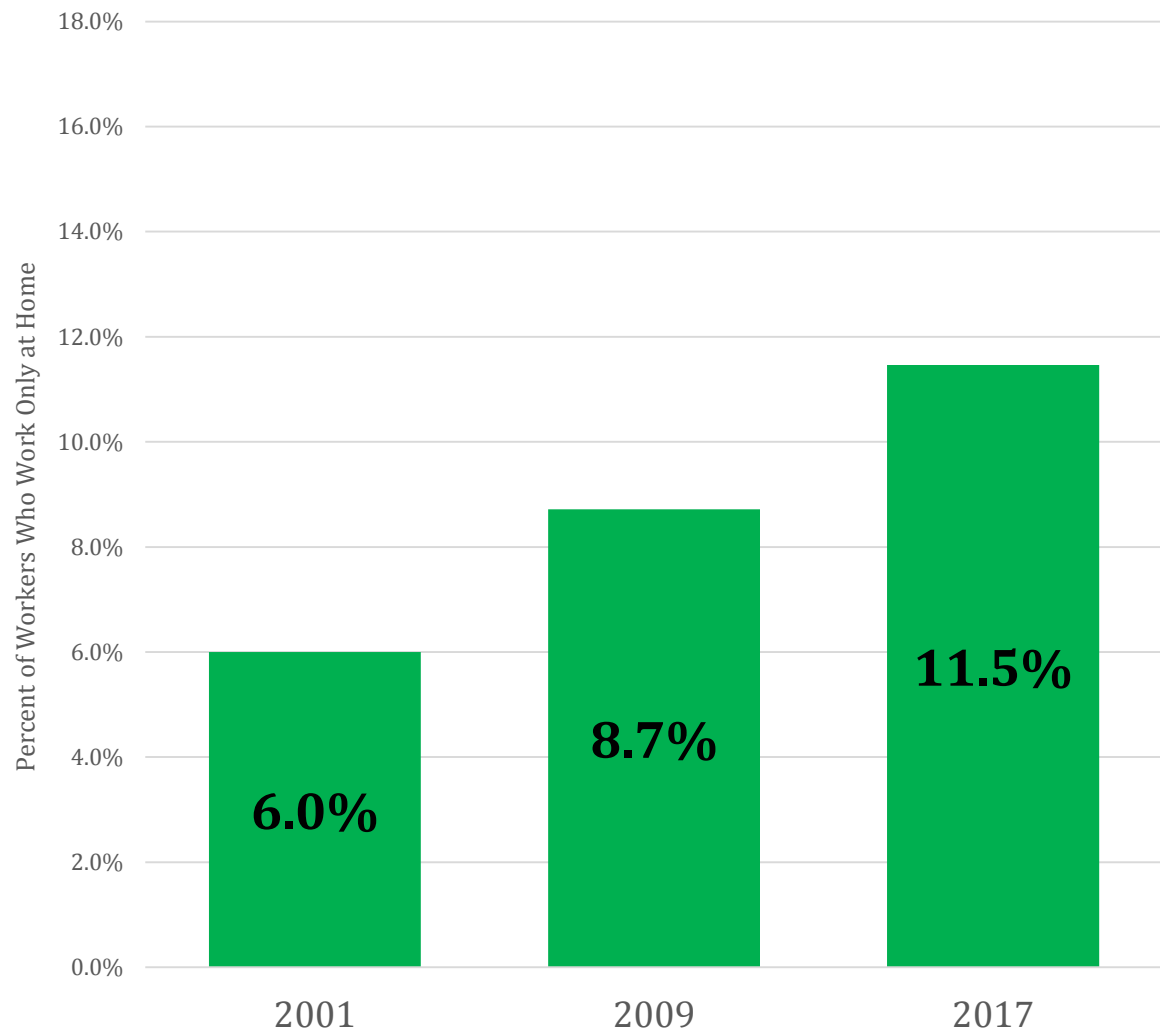
Trip rates by age, sex, urban/rural, income, purpose, etc. all seem to track with previous trends--they ***declined***. The declines came predominantly from trips for shopping and errands.



On the other hand, the number of home deliveries from *on-line shopping doubled*:

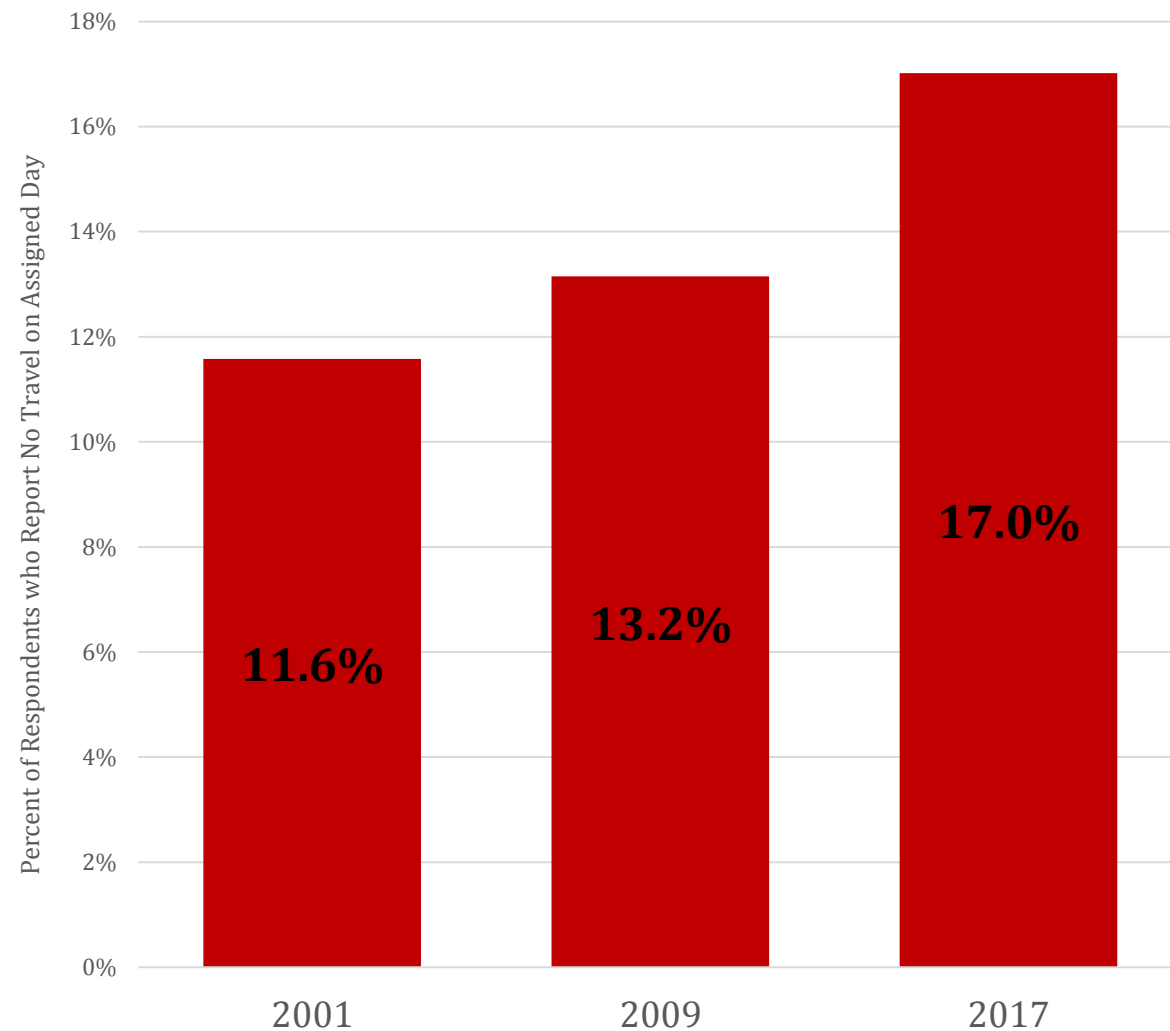


More workers *work at home*:



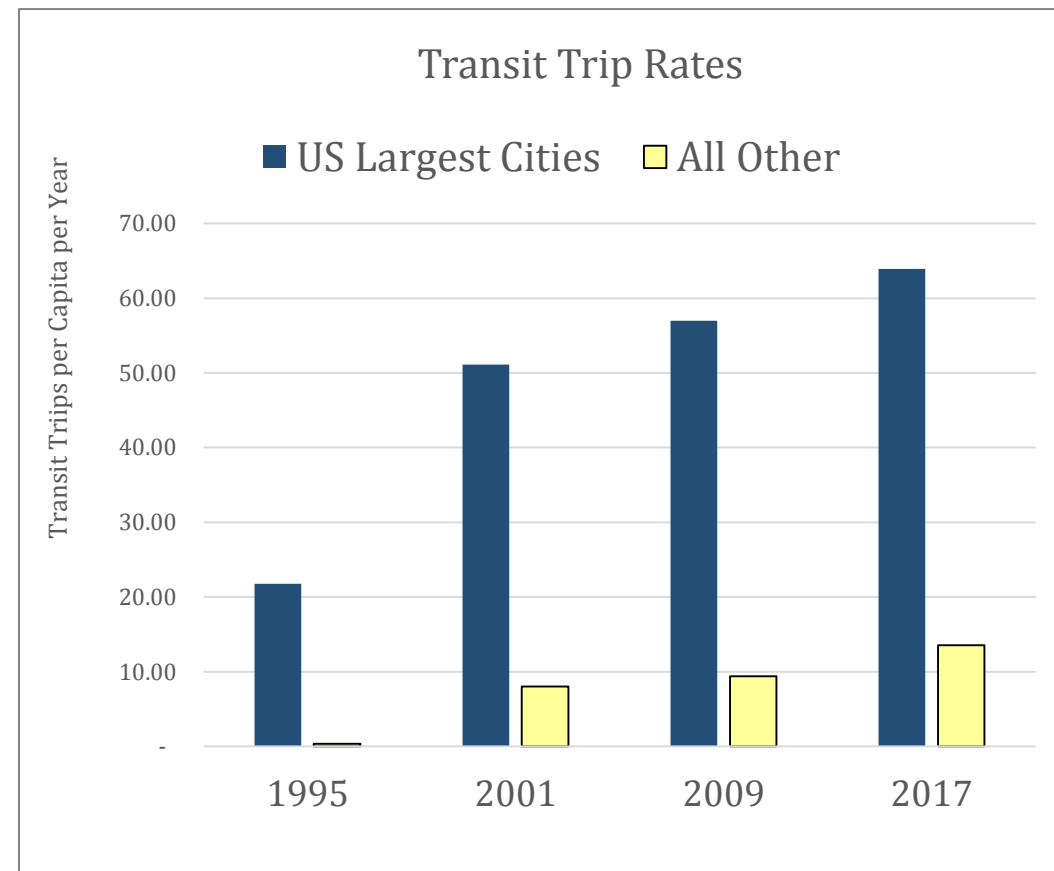
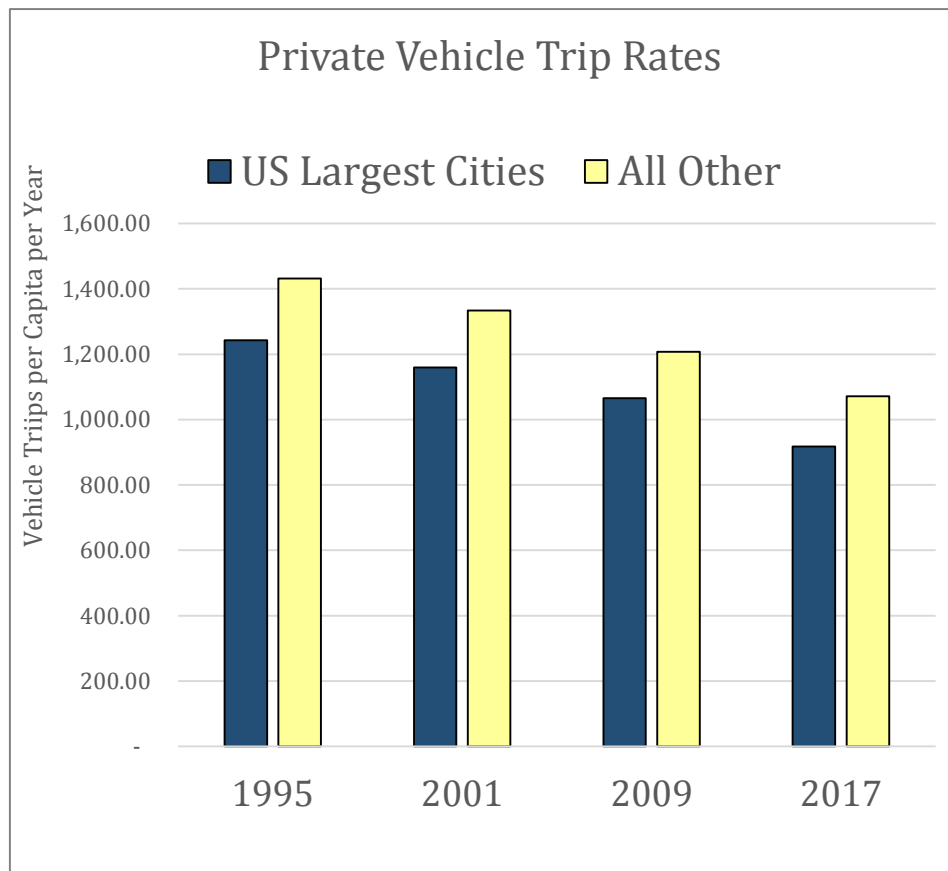
Source: McGuckin's analysis of FHWA NHTS data series

On an average day more people *don't leave home* :

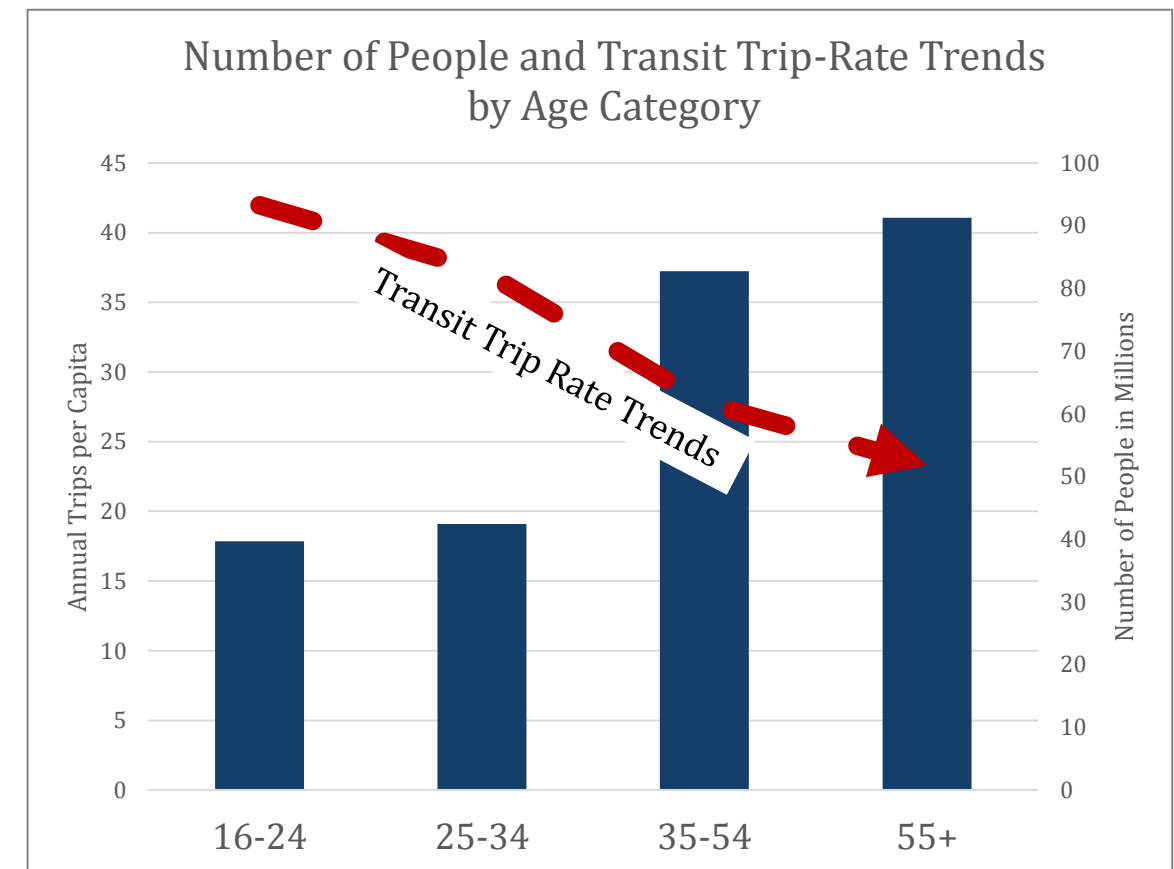
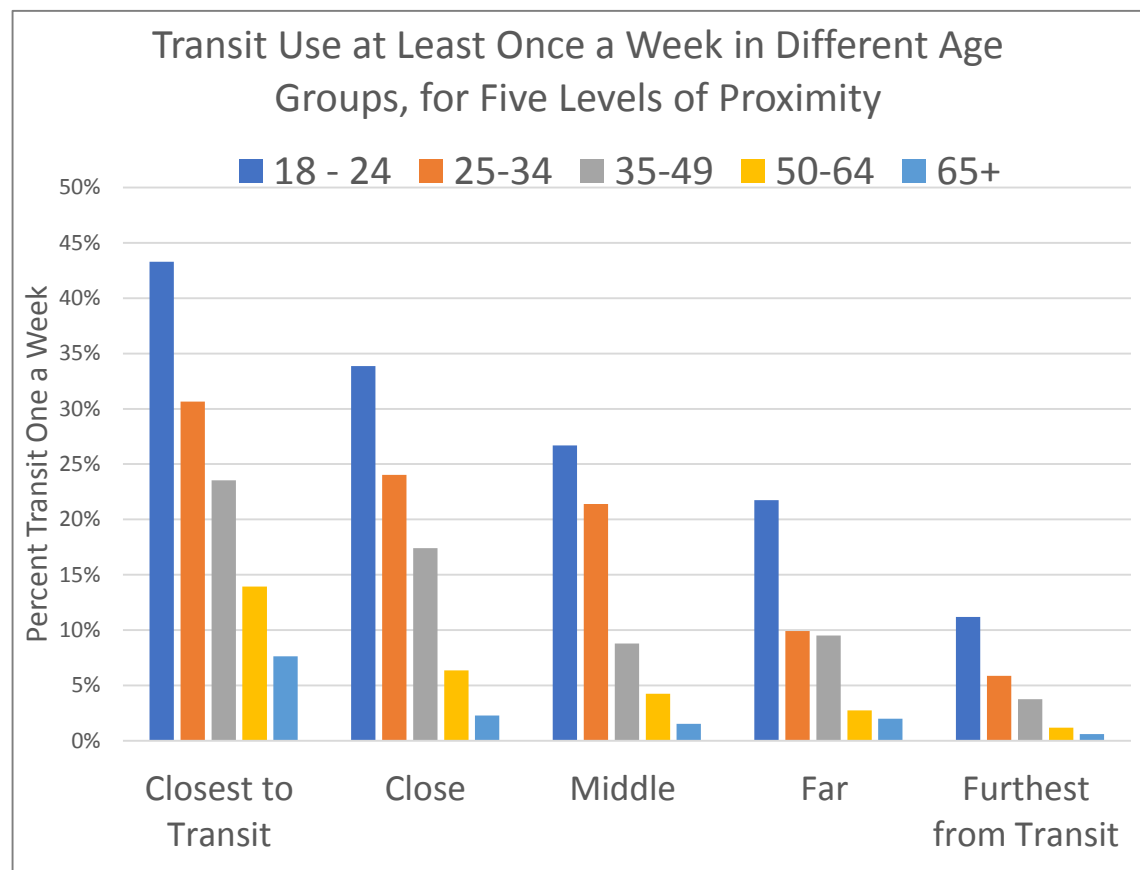


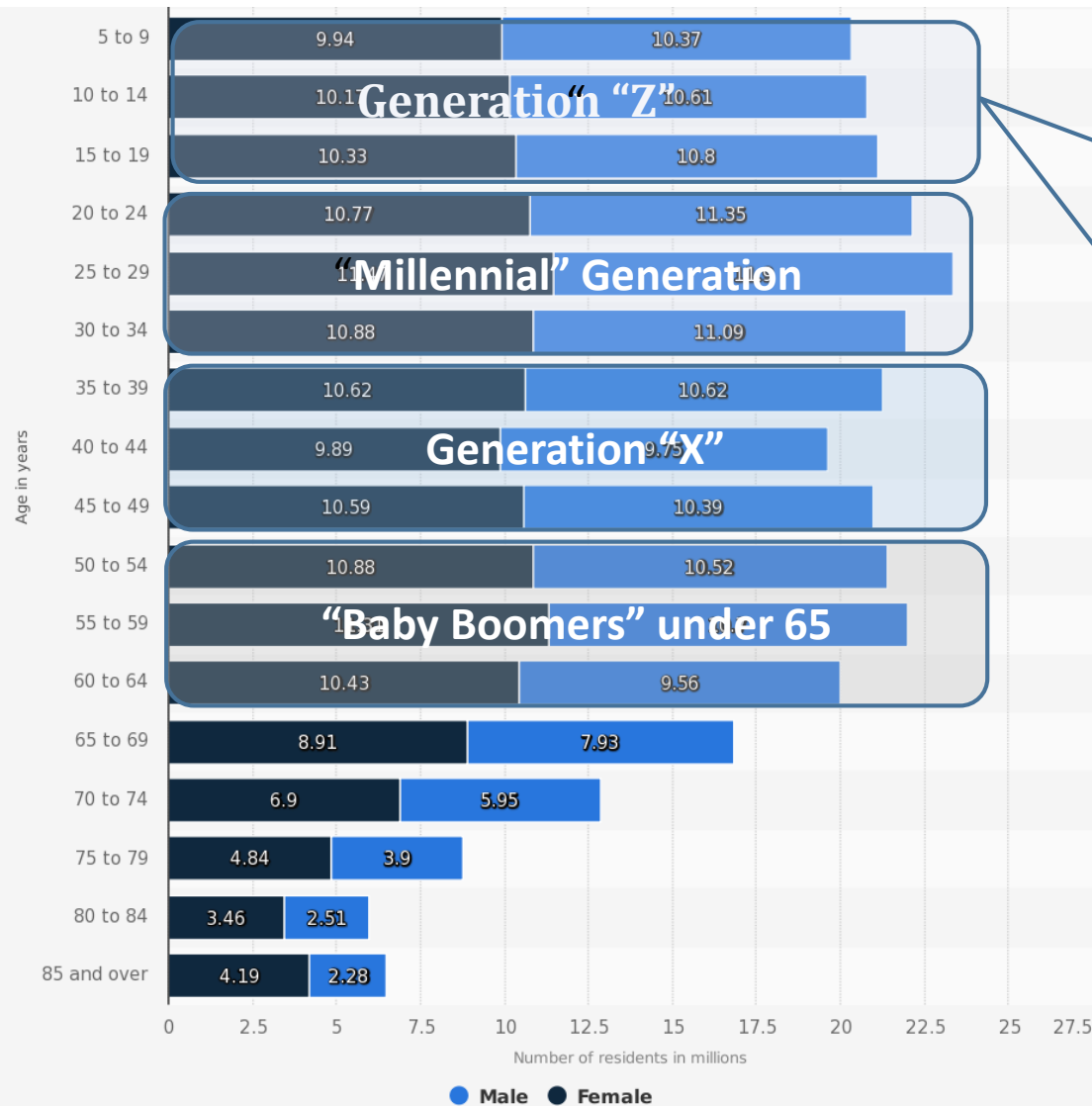
Trends show *vehicle use declined* faster in large cities since 1995— While *transit increased*

Please note the different scales for different modes of travel



Transit use is very correlated to age, even taking into consideration proximity. Therefore, there are ***challenges for transit*** agencies as the millennials age through their life-cycle:



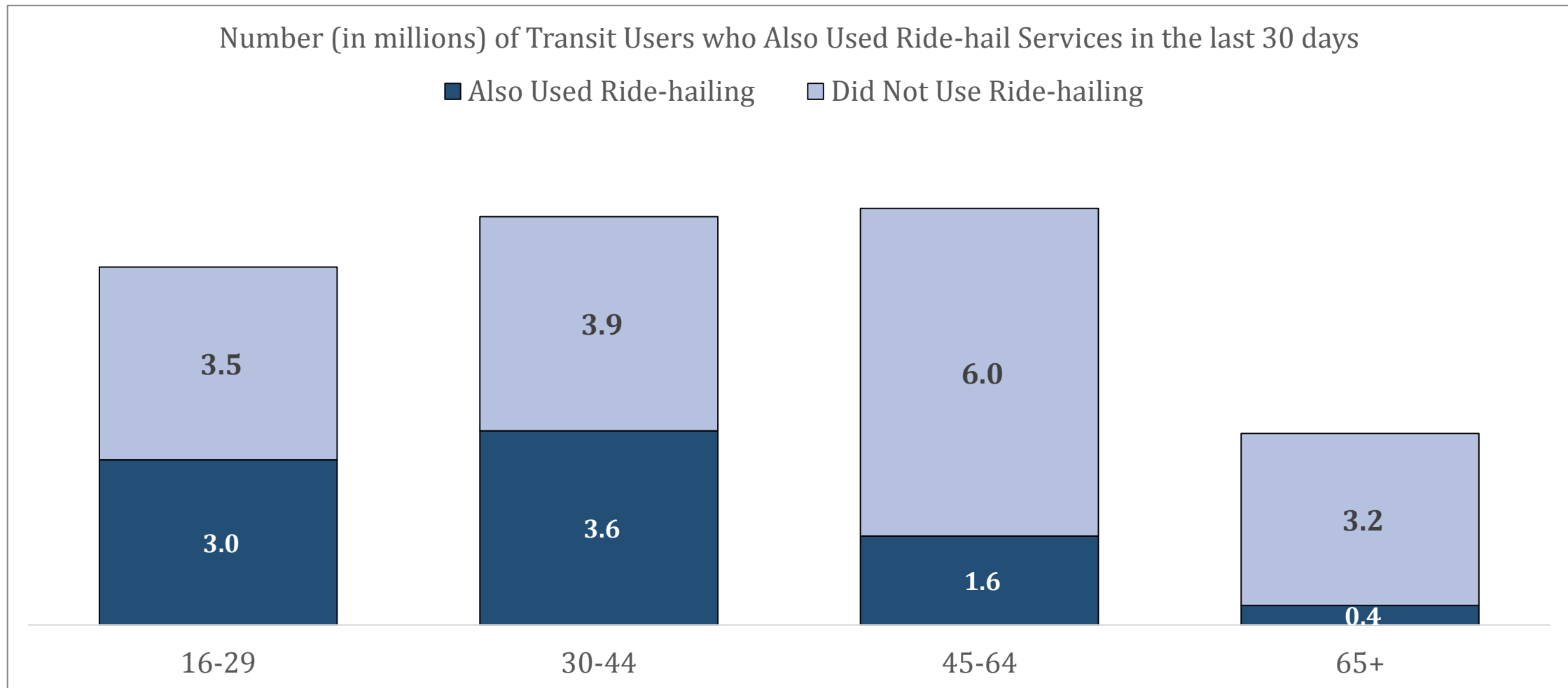


In the next 15 years, this group will populate the high-transit using age groups--

Overall there are about 10 percent fewer people in Gen Z compared to Millennials--

Even if this generation retains the pro-transit and pro-urbanist attitudes of Millennials, transit agencies will be challenged to keep current ridership levels.

And new services can complement and/or *compete with transit*:



Further thoughts: Travel is Changing

- The population is aging and the growth rate is slowing--this will probably be mirrored in travel rates in the next decade or so
- In addition, local trip-making for shopping and errands has declined while home deliveries have doubled
- Increased person-trip length (and long-term trends in air travel) indicate that inter-city travel and tourism has increased
- Transit People who live in large cities have a lot of new travel options and they use them
- Some options complement traditional services like transit and some compete

Further Thoughts: Implications for traditional revenue streams

- Lower vehicle use (VMT) means lower gas tax receipts
- Greater share of on-demand services means revenue from parking fees and parking tickets will be reduced
- Both large cities and smaller towns could be affected*:
 - The largest cities averaged about \$129 per capita in vehicle-related revenues. The highest were San Francisco (\$512), Washington, D.C. (\$502), and Chicago (\$248)
 - Smaller cities may be more affected: parking revenues and all types of legal fines, court fees and forfeiture of deposits totaled more than 10 percent of general revenues. But in Austin, TX for instance, parking fees account for nearly a quarter of the DOTs budget.

* Source: "How Driverless Cars Could Be a Big Problem for Cities", Mike Maciag, August 2017 at:
<http://www.governing.com/topics/finance/gov-cities-traffic-parking-revenue-driverless-cars.html>



Thank You!

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Data briefs and more at:
www.travelbehavior.us