

Summary of Travel Trends 1969 to 2009



BASED ON THE NPTS/NHTS DATA SERIES

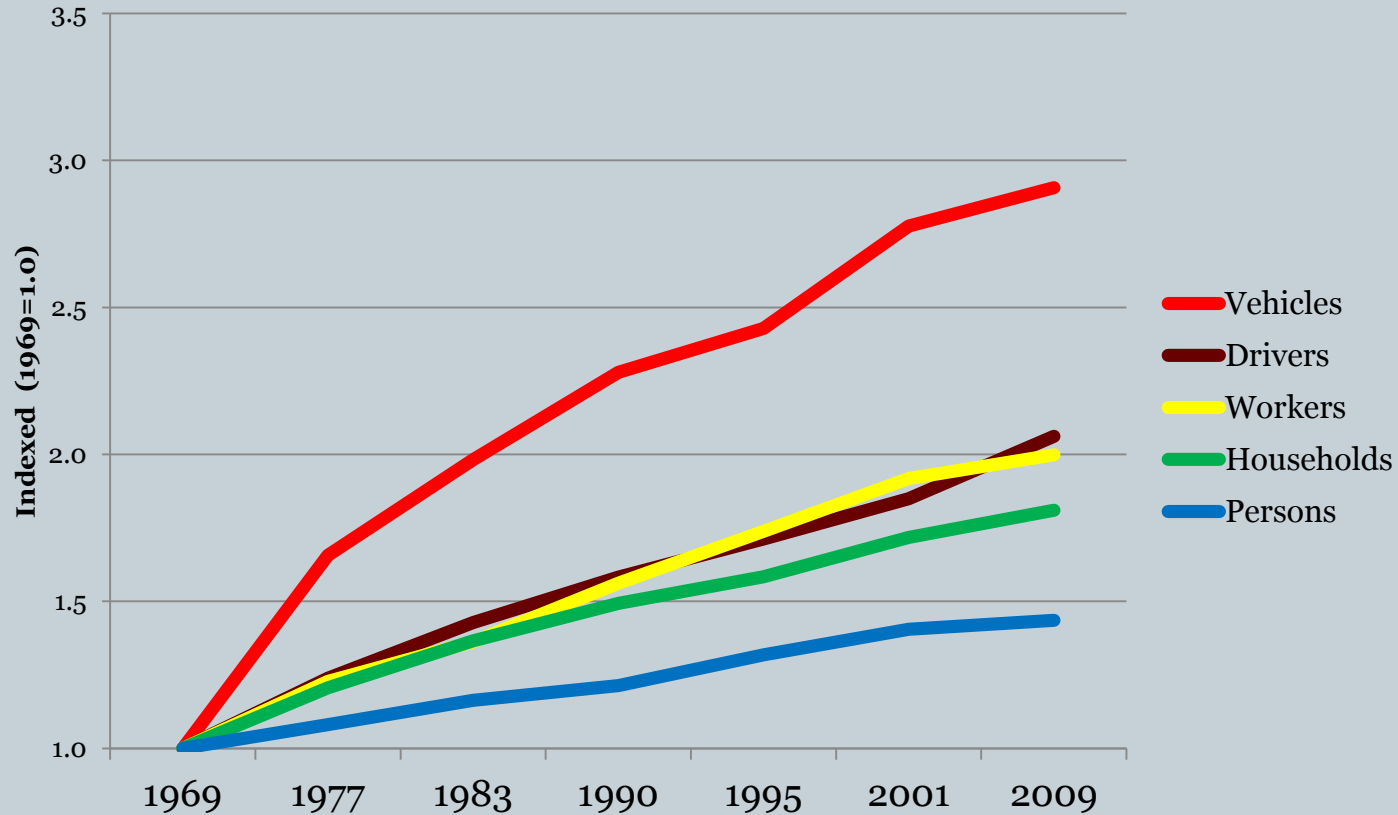
**NANCY MCGUCKIN
TRAVEL BEHAVIOR ANALYST**

Trends in Travel

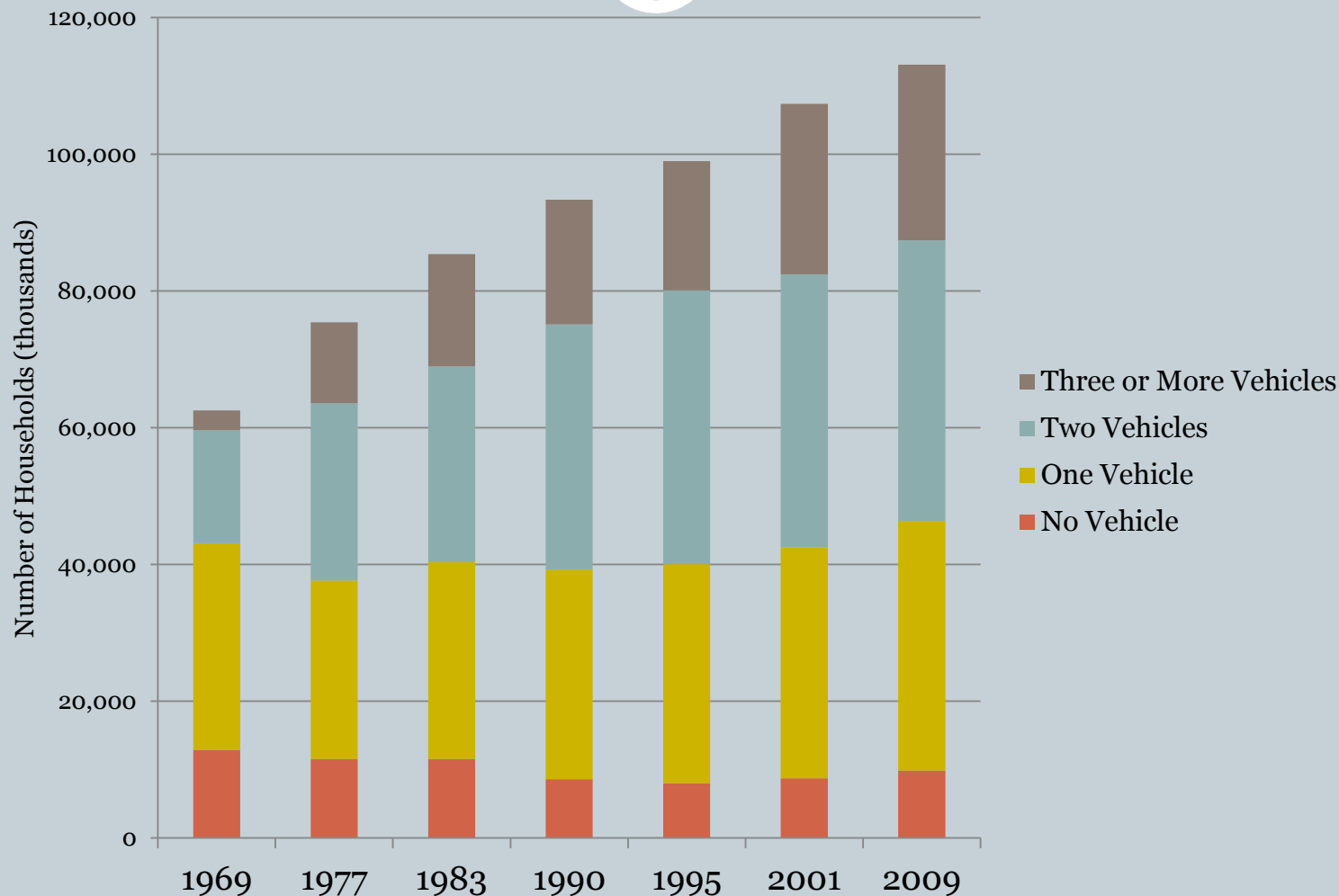


- Major indicators, such as per capita trips and miles, seem to be slowing in growth
- Significant declines in trip rates for younger travelers
- Significant declines in shopping and errands for men and women
- High rates of on-line shopping, and
- High number of purchases delivered to households
- Rural areas show different patterns than urban

Since 1969, growth in vehicles outpaced other demographic changes



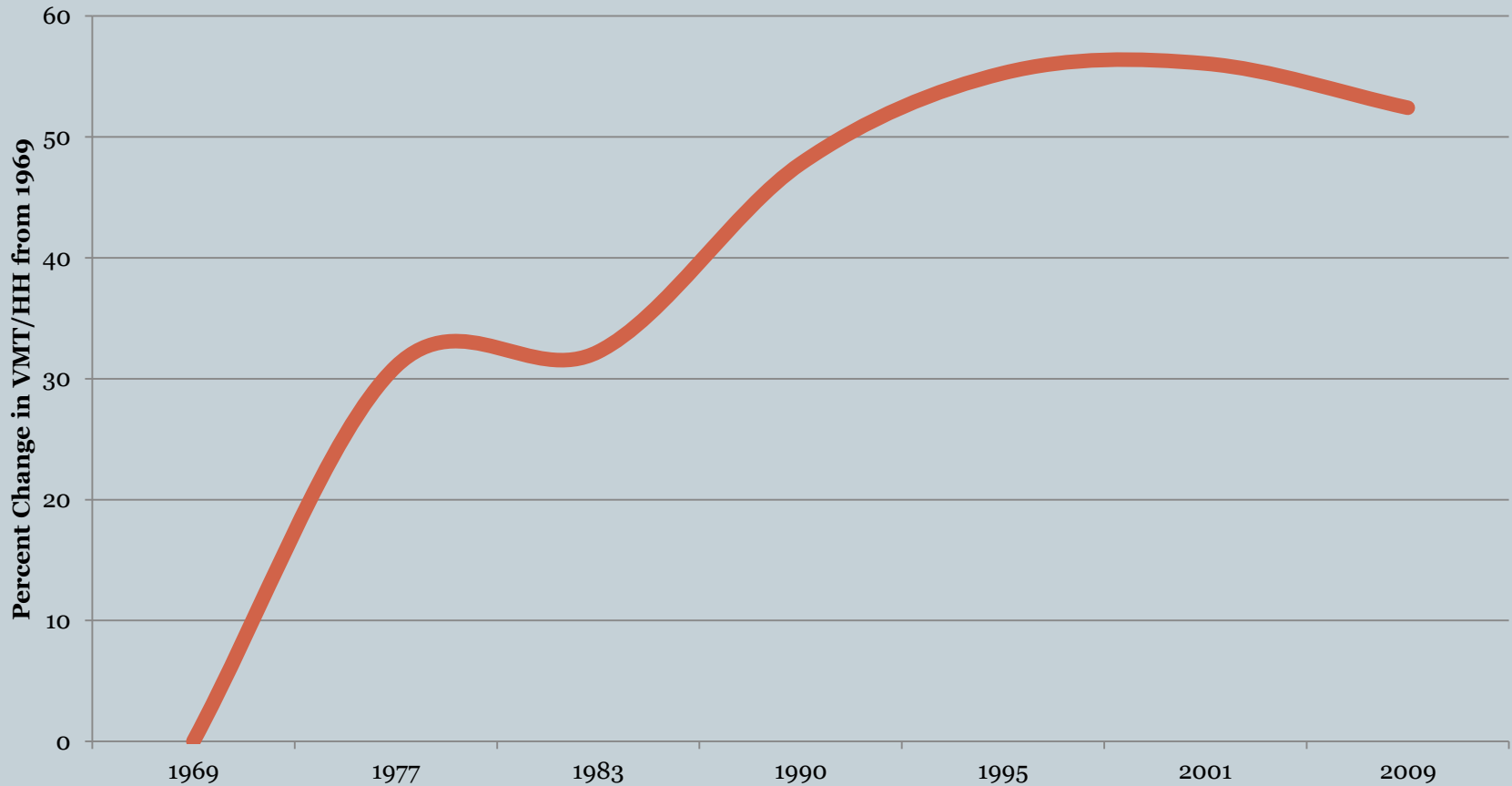
But the growth has been primarily in households with 2 or more vehicles:



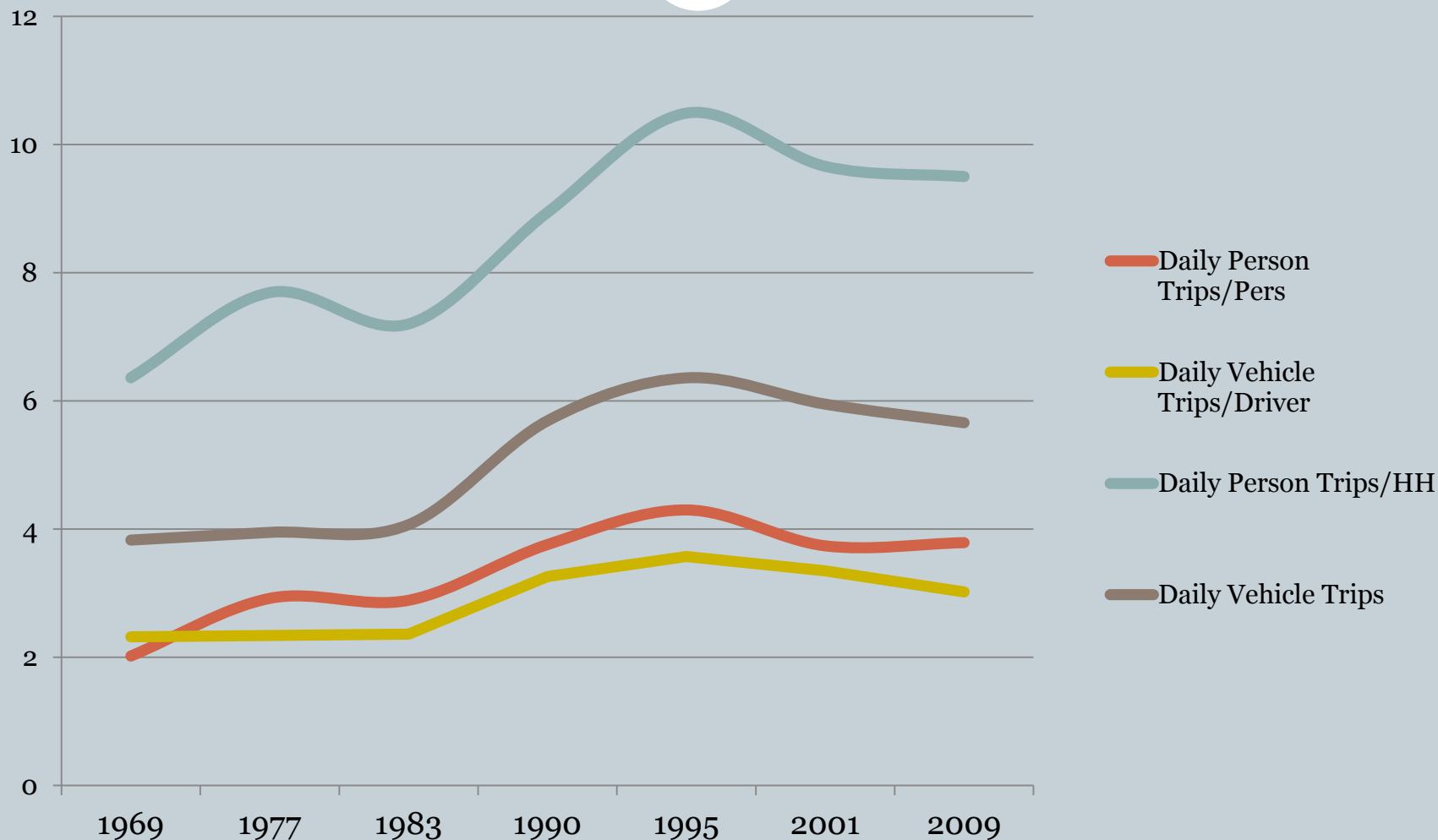
Leading to large increases in VMT per household (until recently)



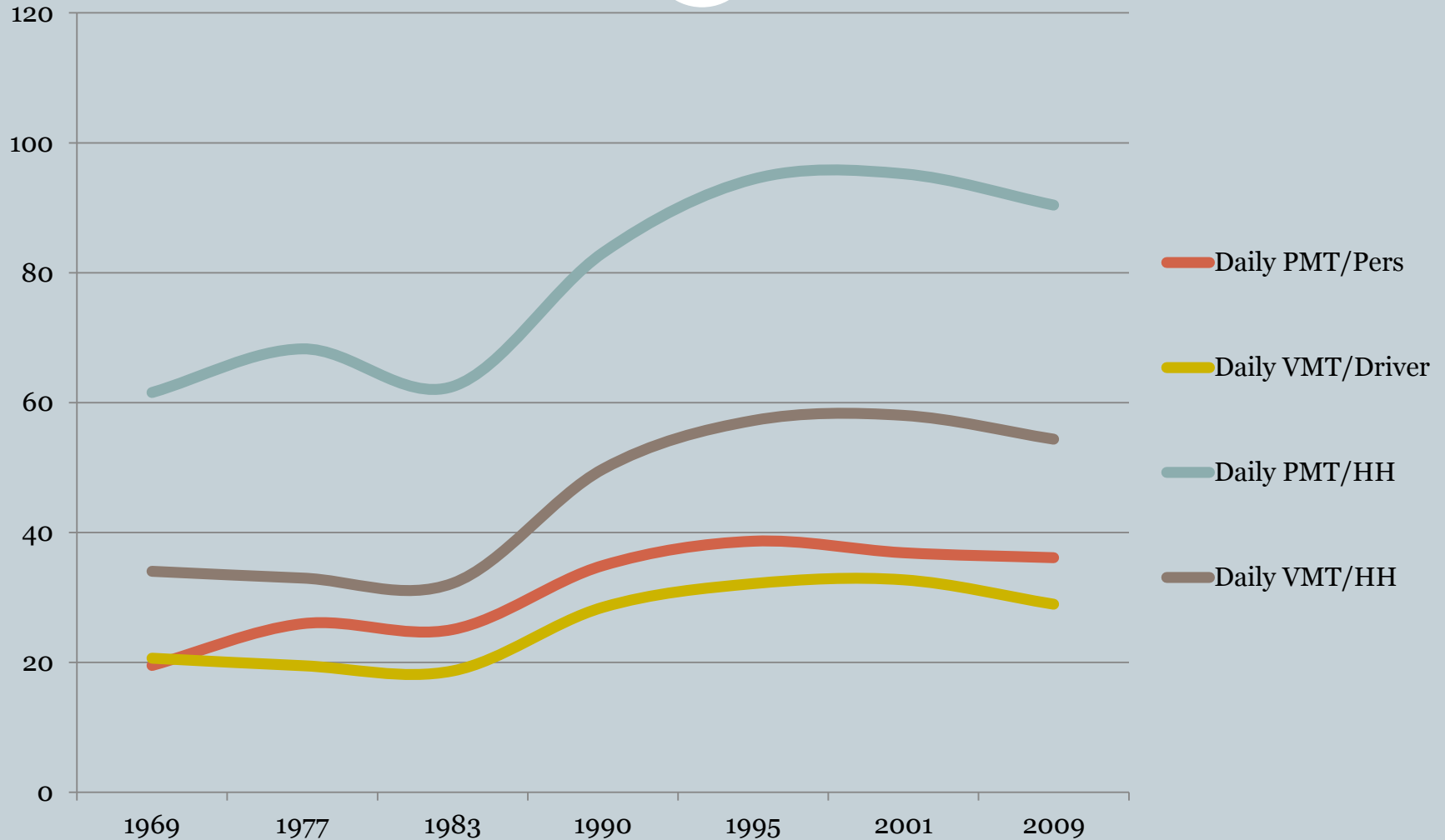
Intensity of Household Vehicle Use (Indexed to 1969)



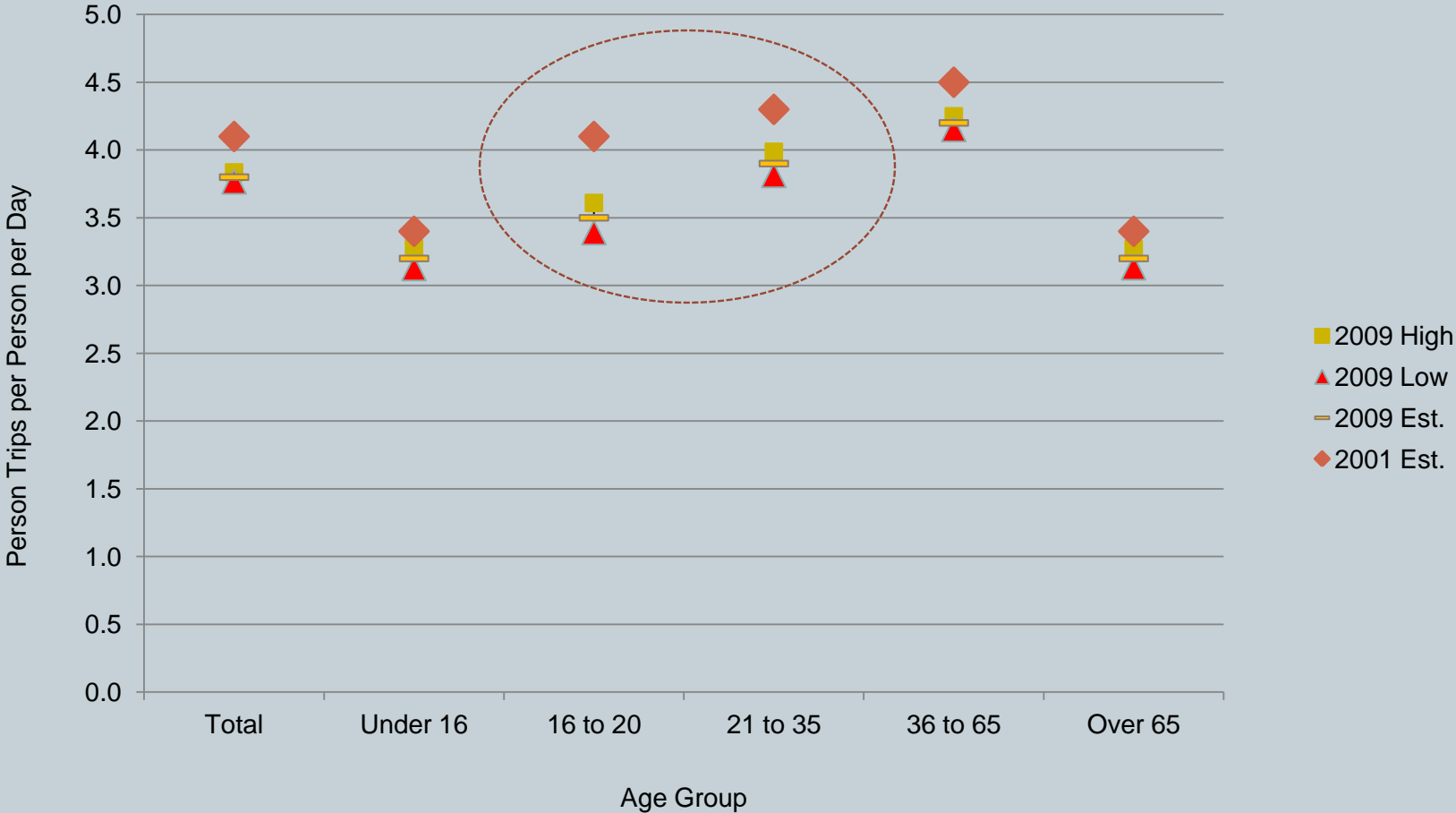
Recent trends are different: Trip making per capita seem to be leveling off



Miles of travel per capita seems to be leveling off:

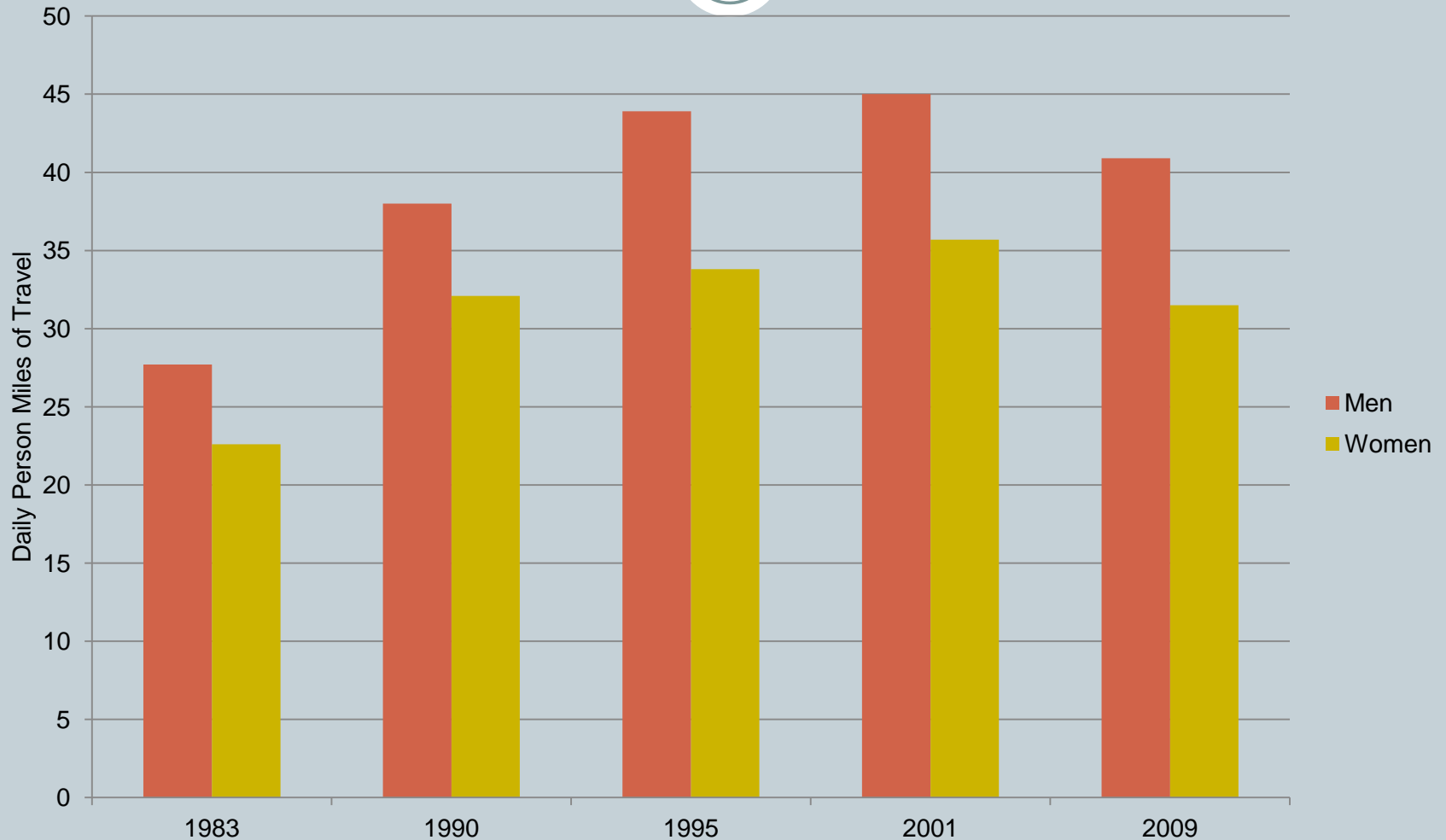


Significant declines in trips by 16-35 year olds...



Source: McGuckin's analysis of NHTS data series

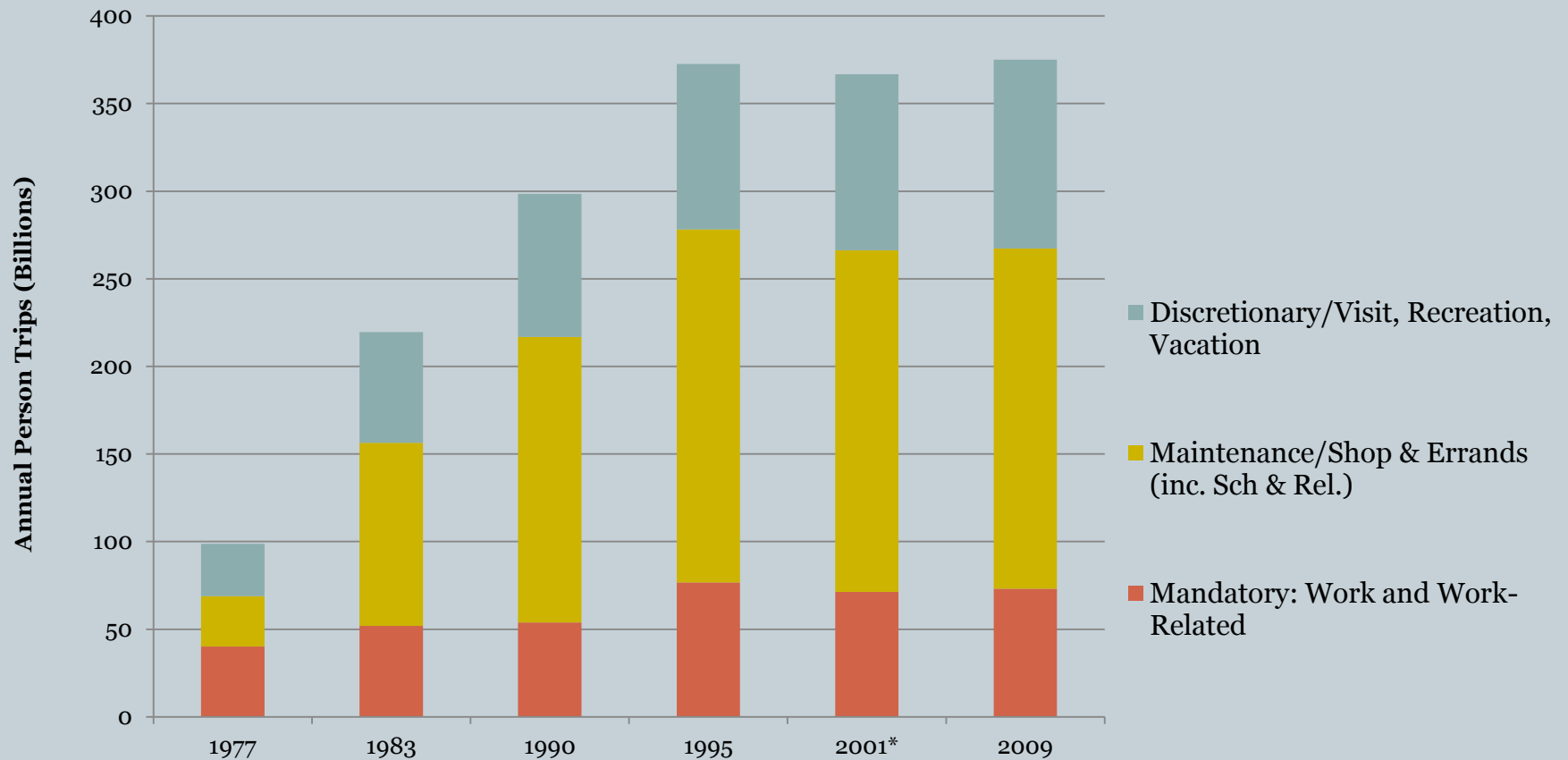
Per Capita trip rates have declined more for men:



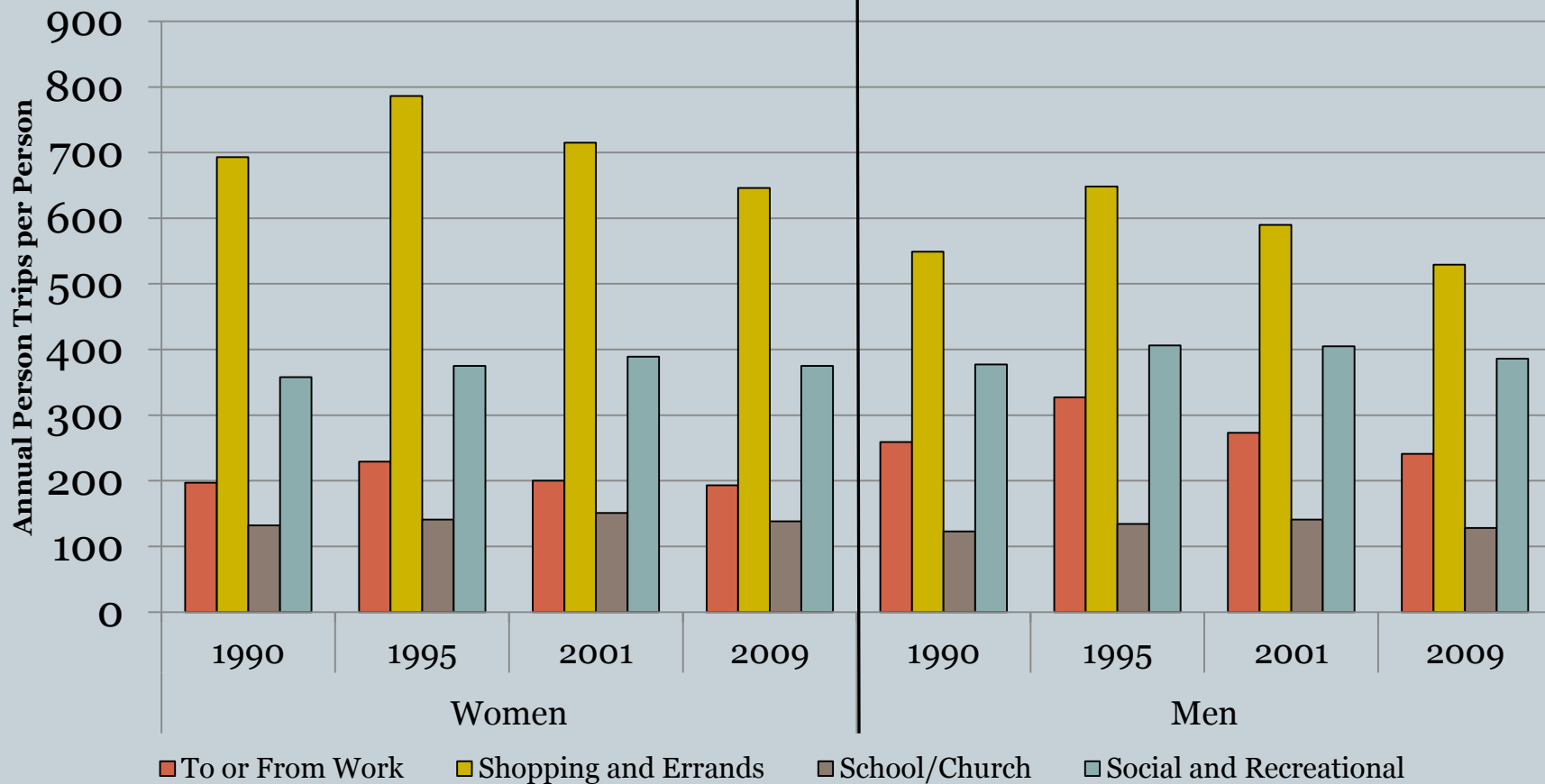
Over the last 40 years, shopping and errands grew faster than other types of trips:



Total Travel by General Category, 1977 to 2009



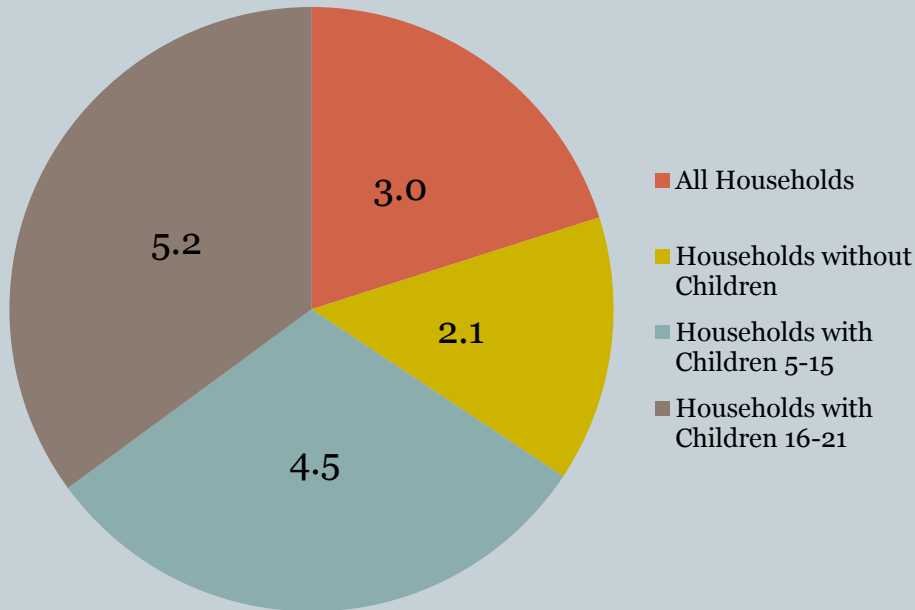
But lately, shopping and errands have shown declines for both men and women



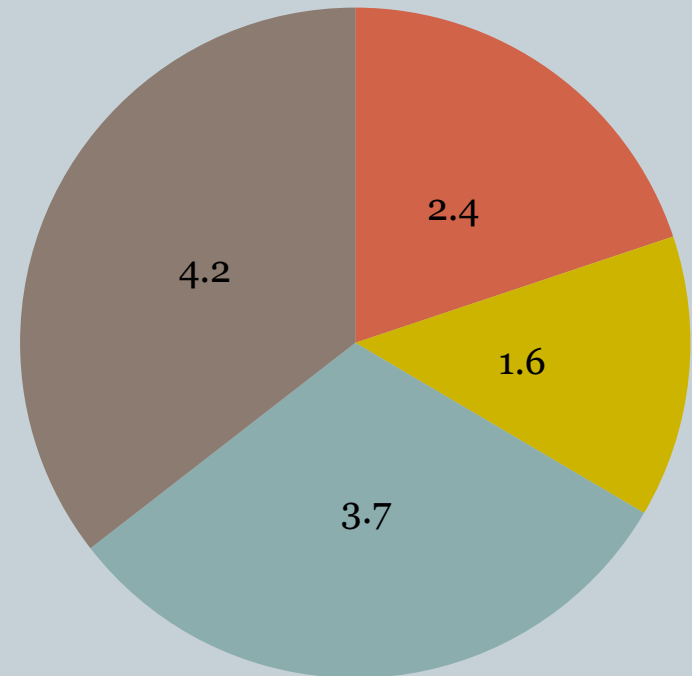
Households with children are more likely to shop on-line and have purchases delivered:



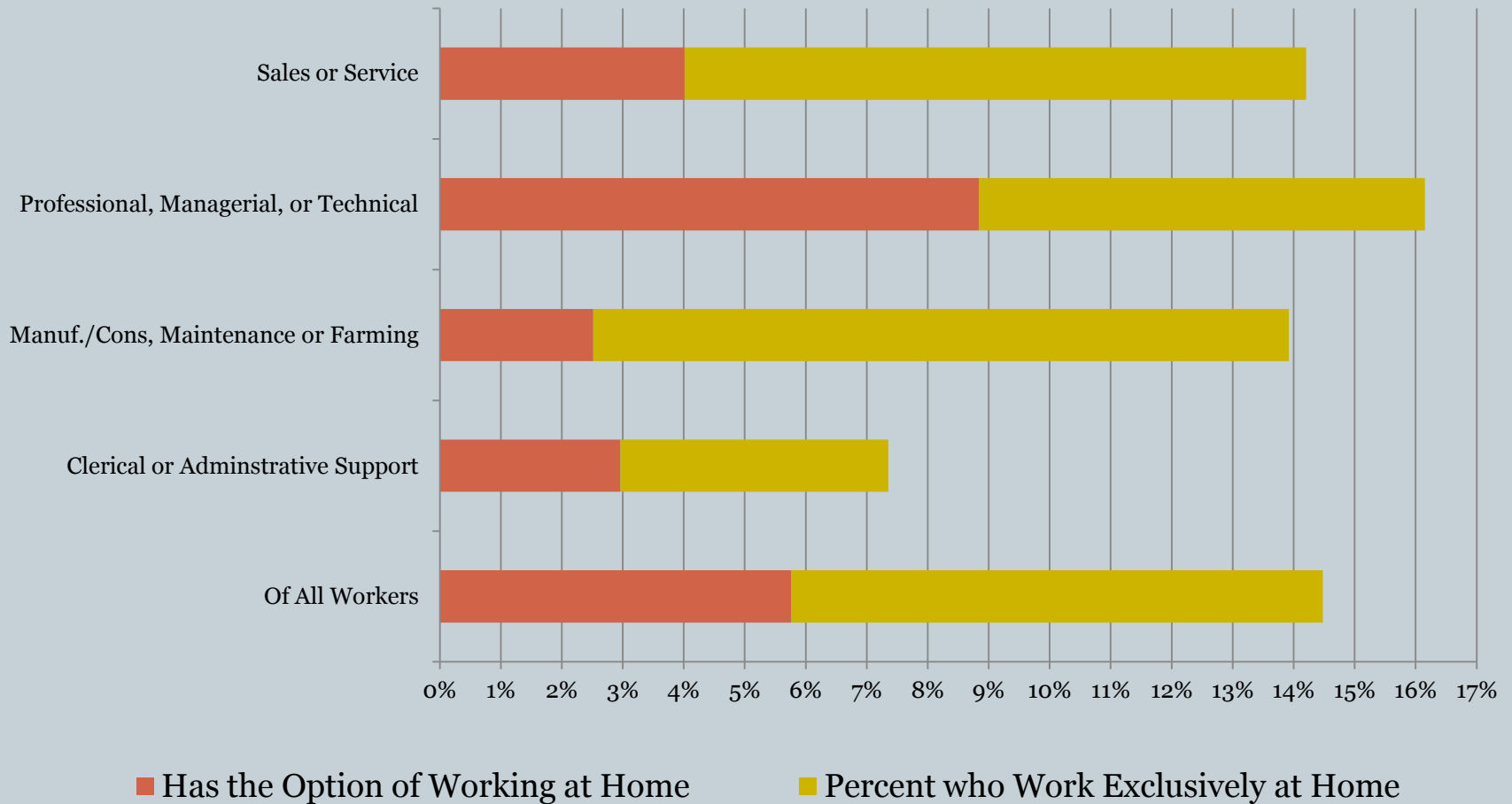
Number of On-Line Purchases per Household



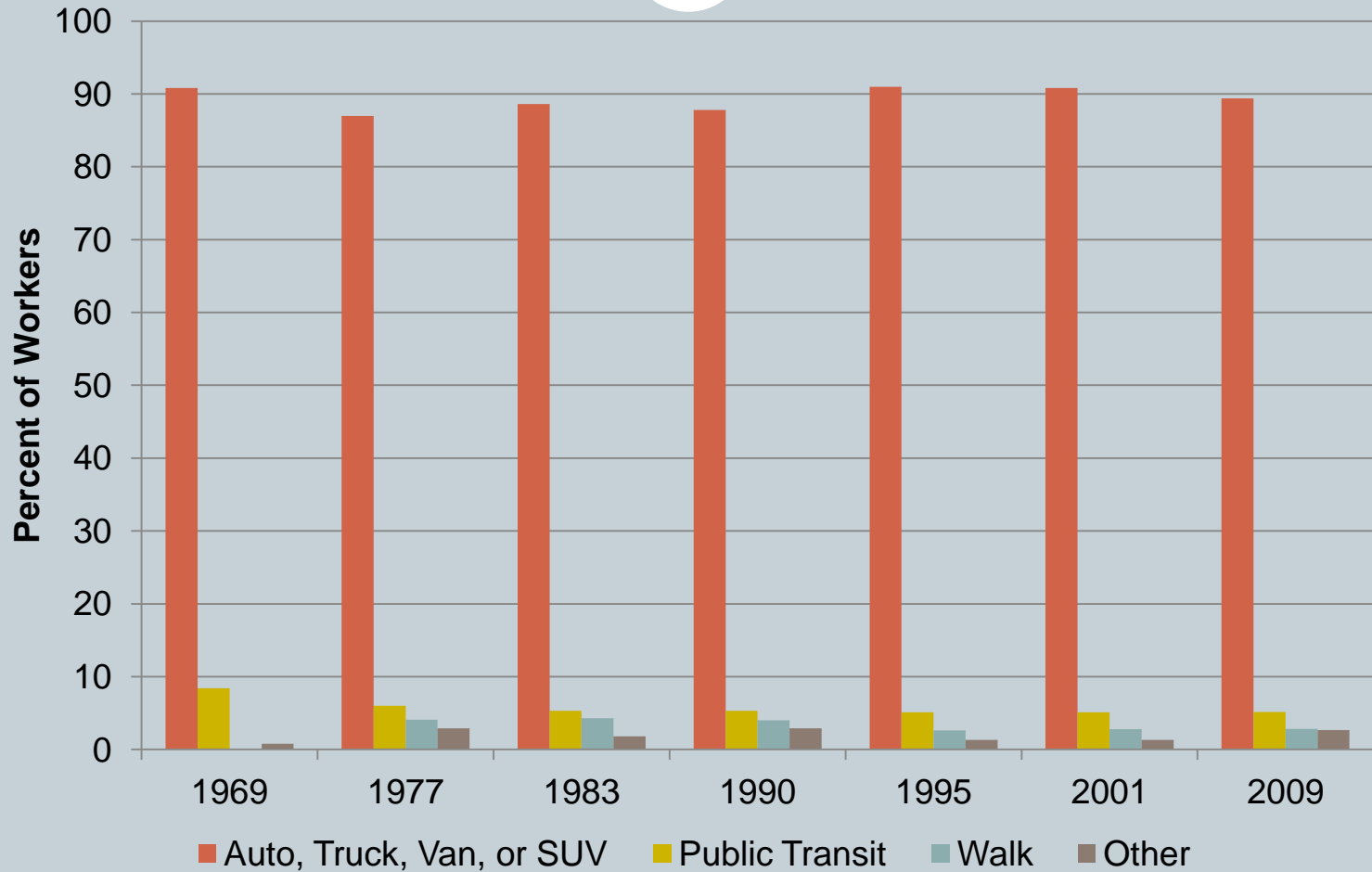
Number of On-Line Purchases Delivered



Nearly 9 percent of workers work exclusively at home, and another 6 percent have that option:

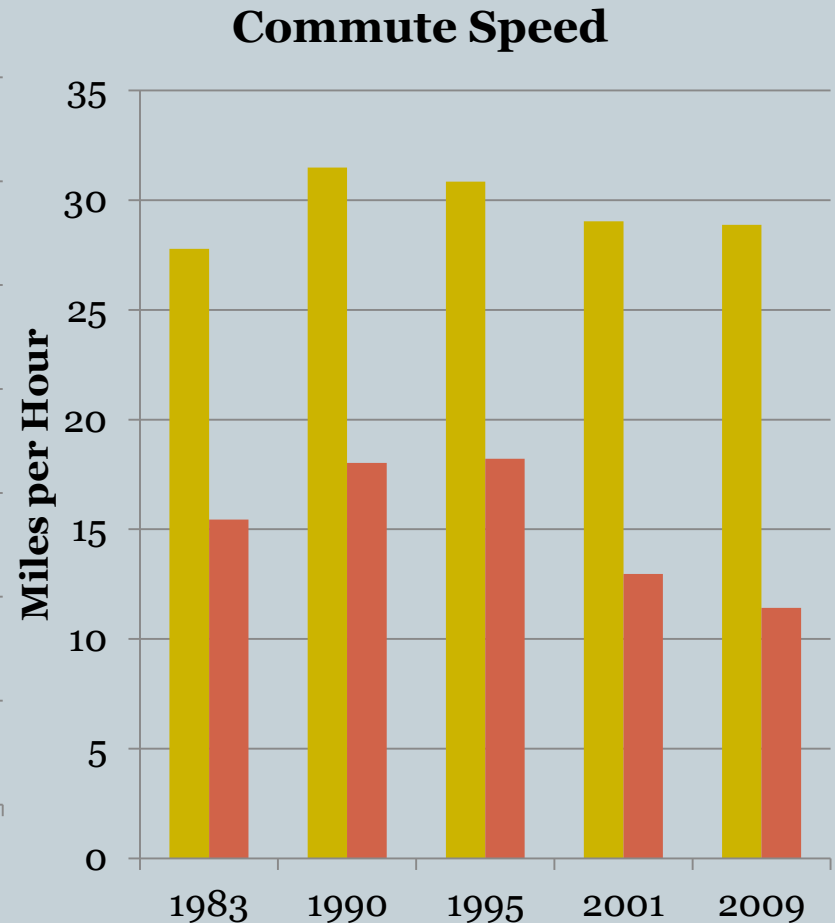


About 90 percent of workers commute by POV, that has remained virtually unchanged since 1969

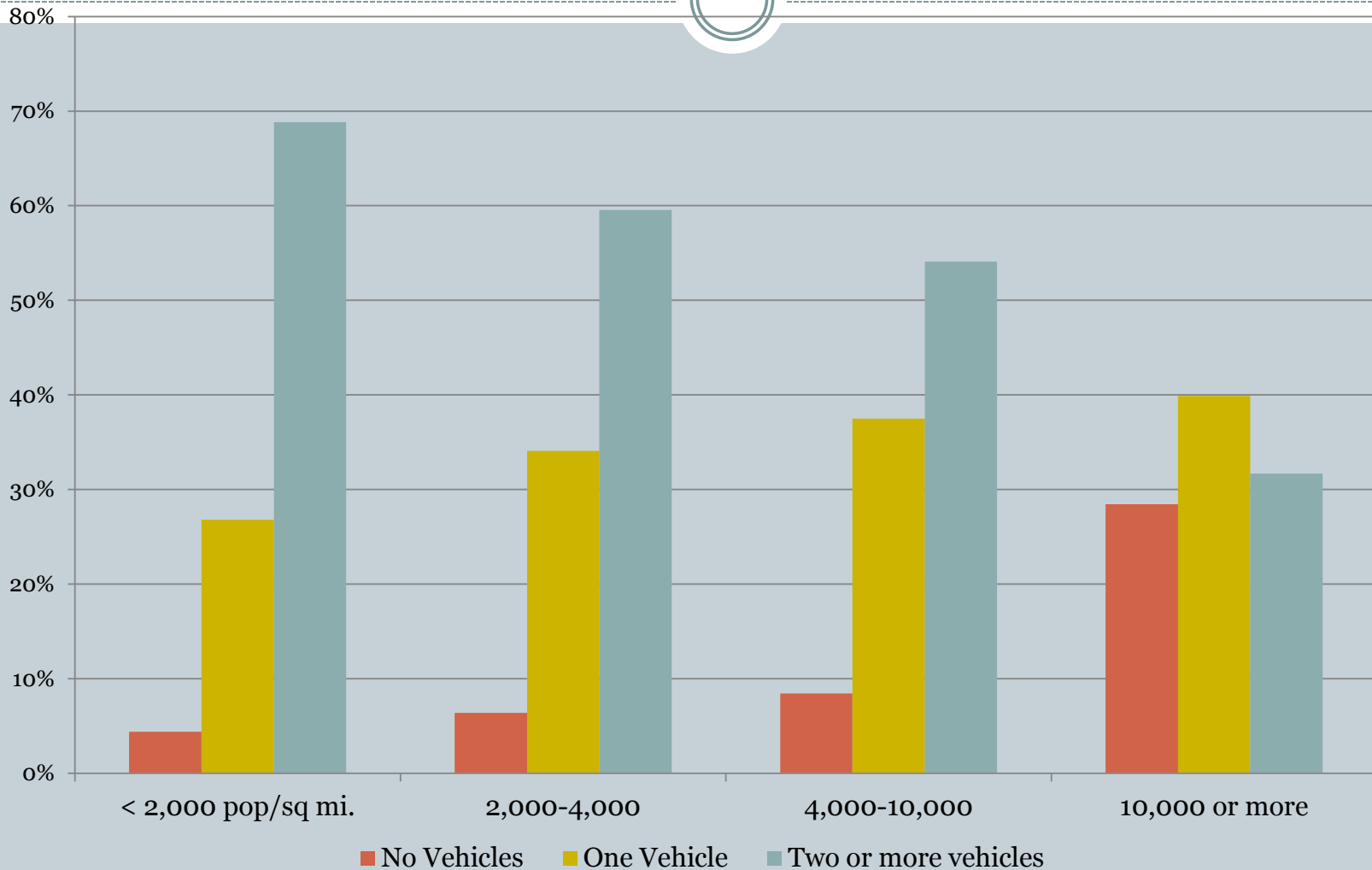


Source: NHTS data series, Summary of Travel Trends 2009, 1969 did not include 'Walk'

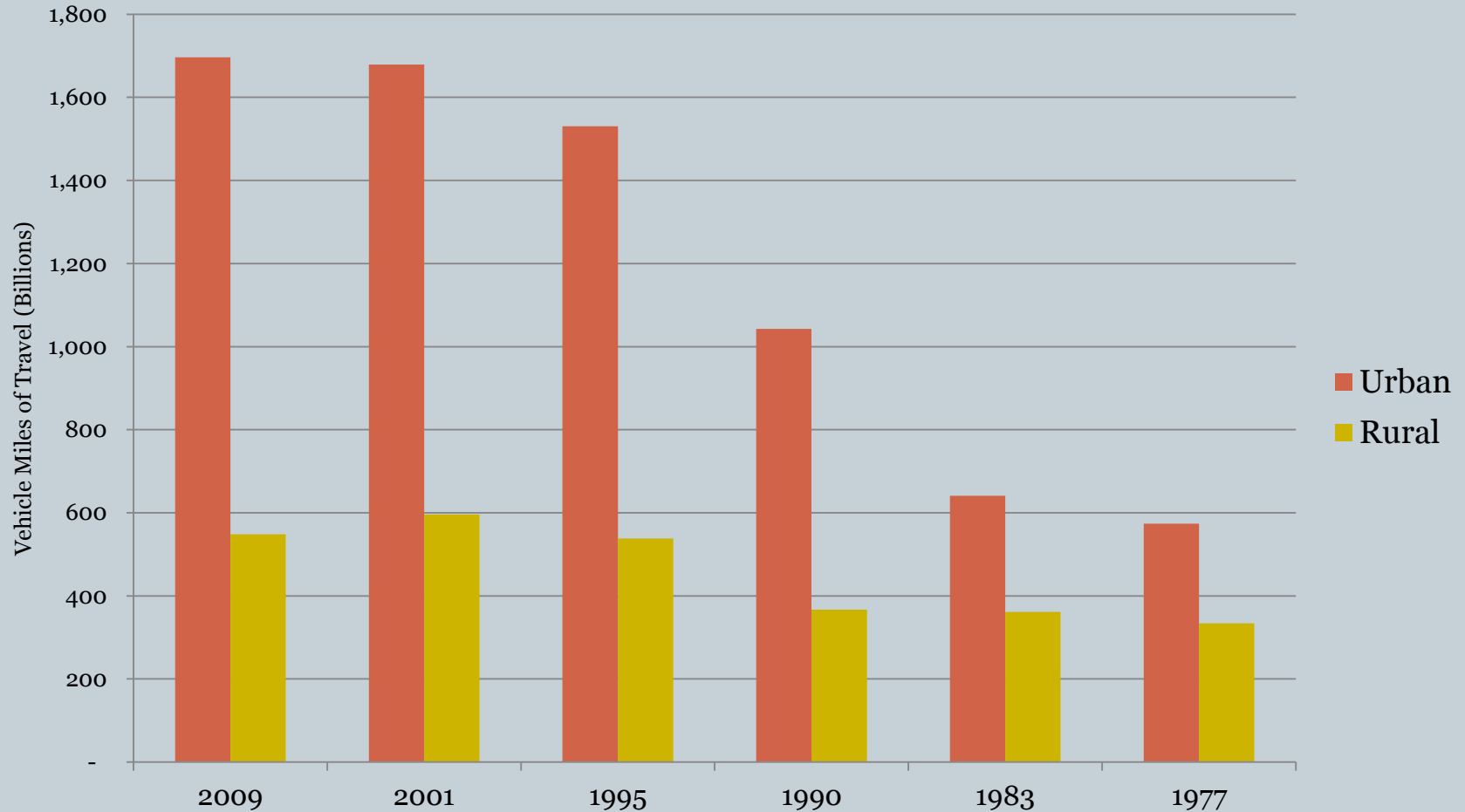
Commuters on transit and in vehicles travel about the same distance, but transit is much slower:



Density and vehicle ownership is highly correlated...

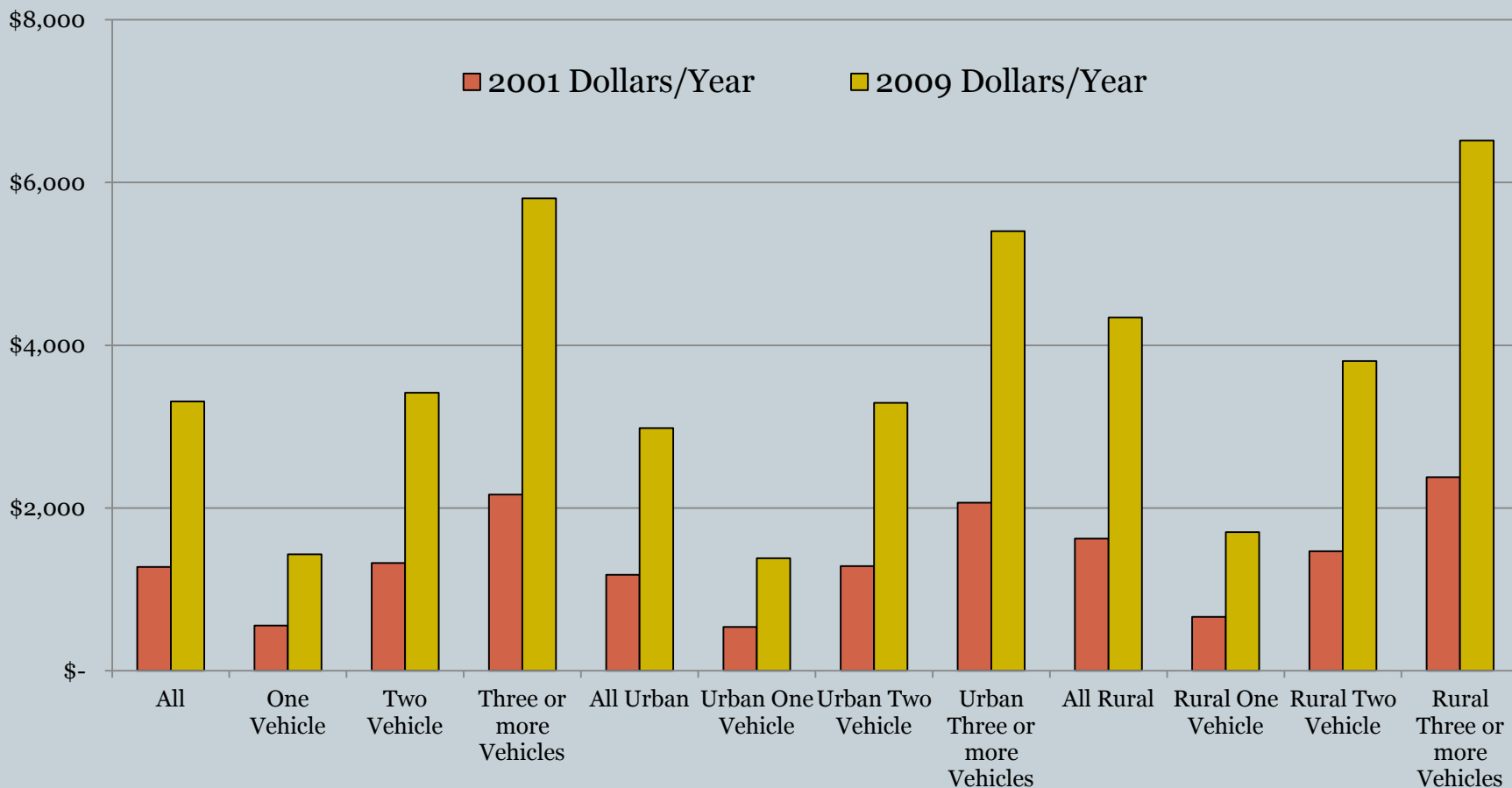


Over the last two decades, Vehicle Miles of Travel (VMT) grew faster in rural areas than urban:



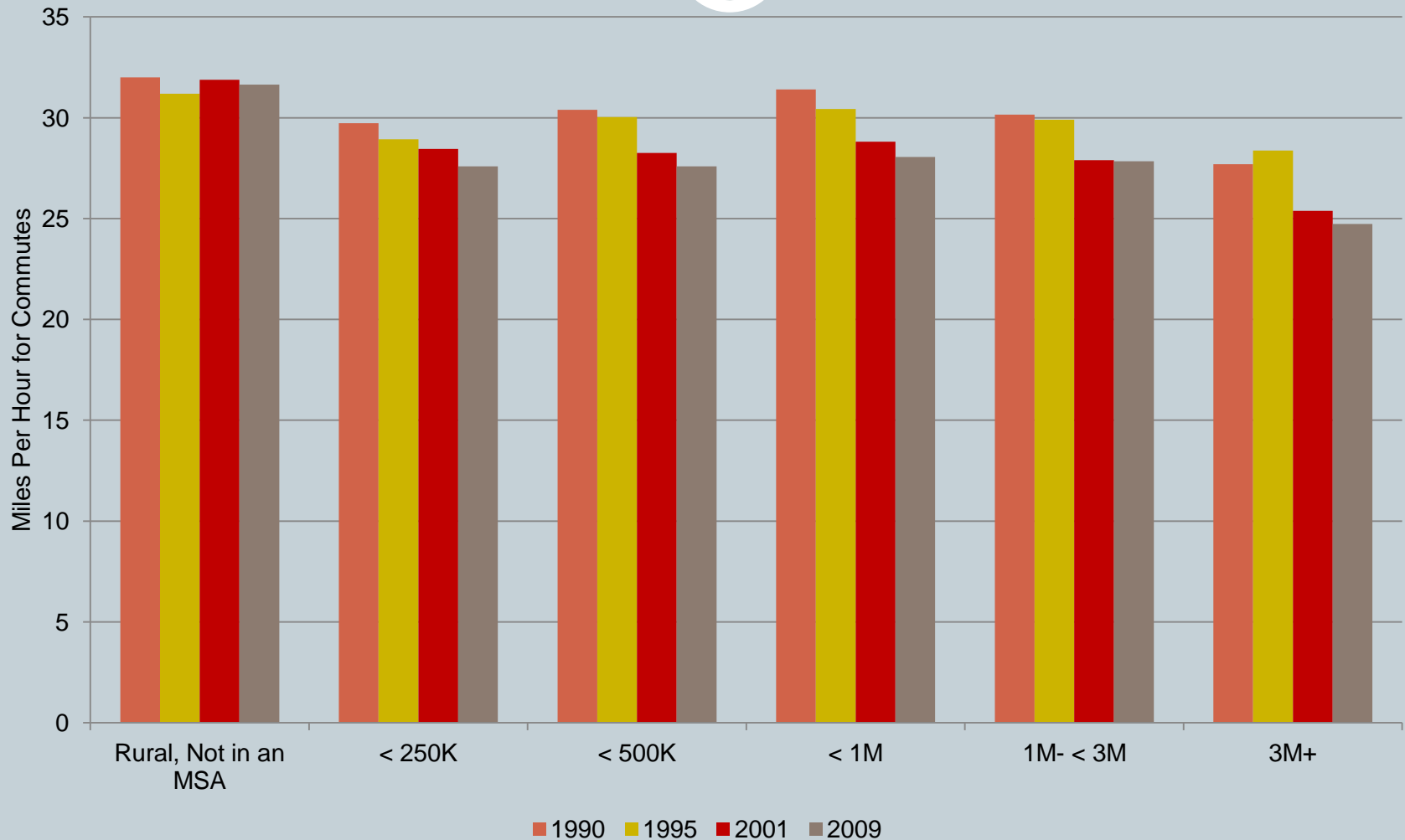
Source: McGuckin's analysis of NHTS data series

Households in rural areas are affected most by increasing gas costs:

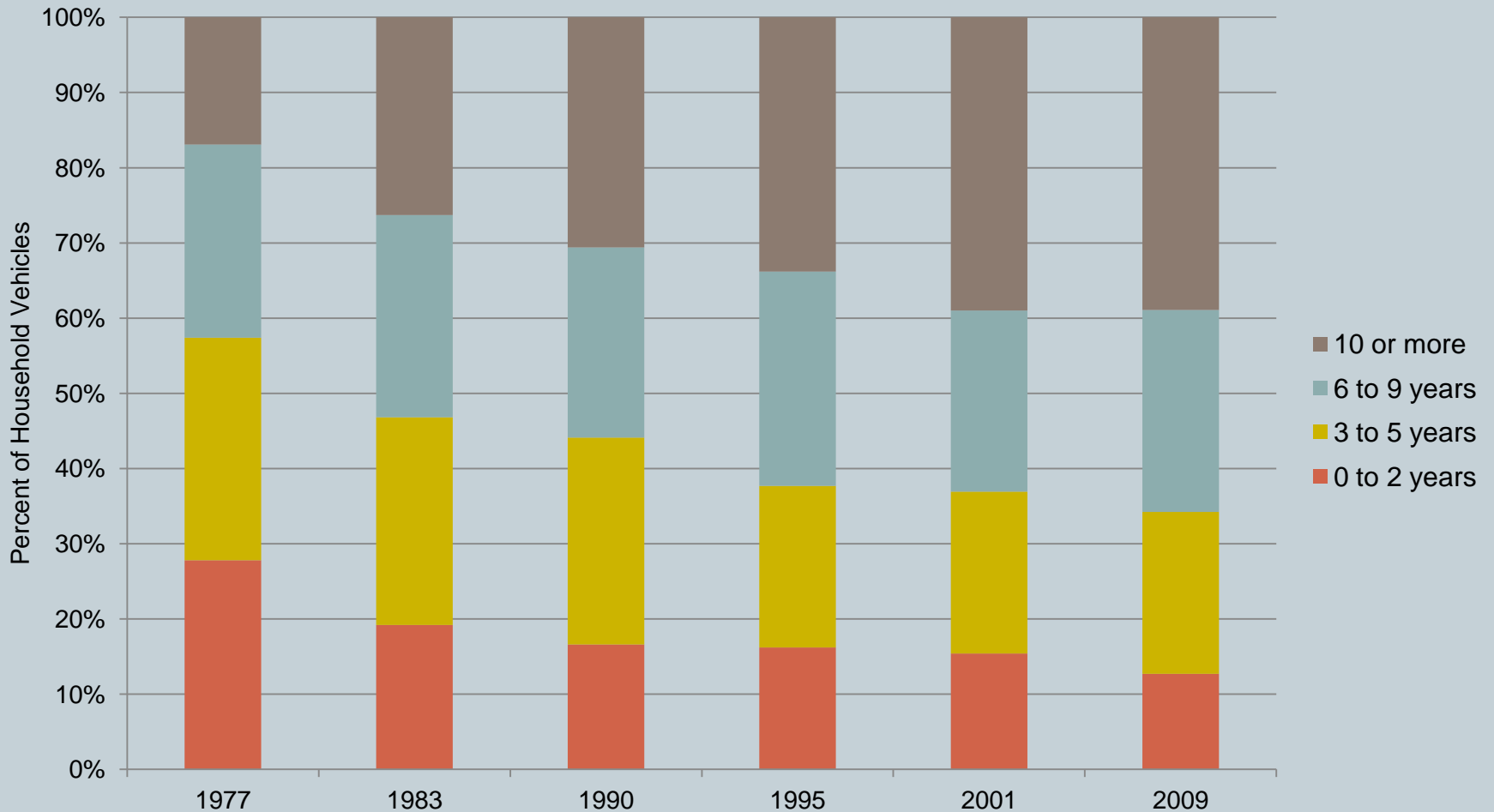


Source: McGuckin's analysis of NHTS data series

Speed of vehicle travel has declined in urban areas of all sizes, but not rural areas:



The vehicle fleet continues to age:



Areas for Further Research

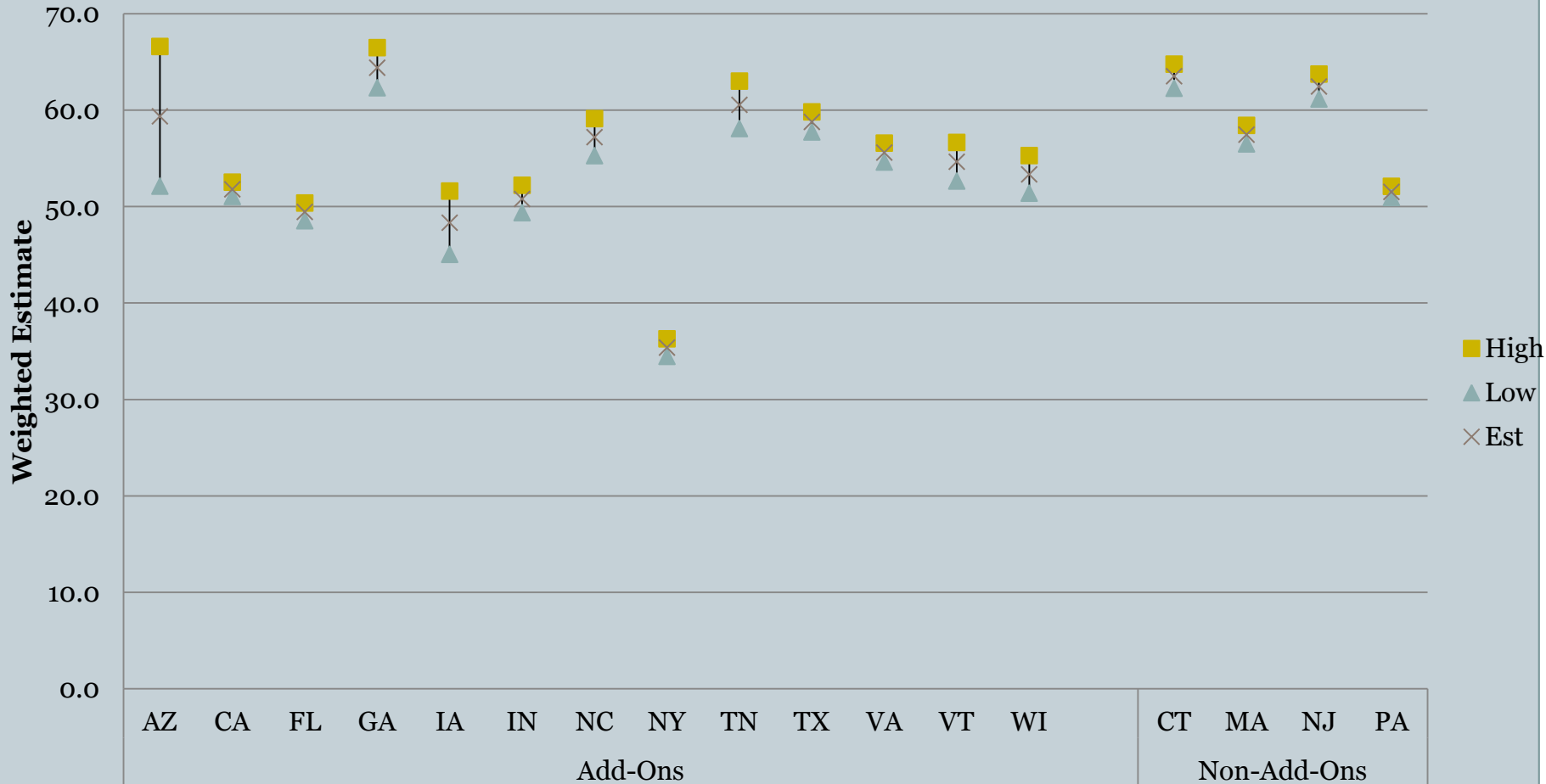


- We should study variability in major indicators based on geography
- We need to look at required sample sizes in a new way (based on confidence limits for major travel indicators)
- Important issues for policy going forward include:
 - Trends in access to medical
 - The effect of increasing on-line purchases on commercial delivery of goods to households

We should study the effect of geography on our basic indicators of travel:



95% CI - VMT per Household

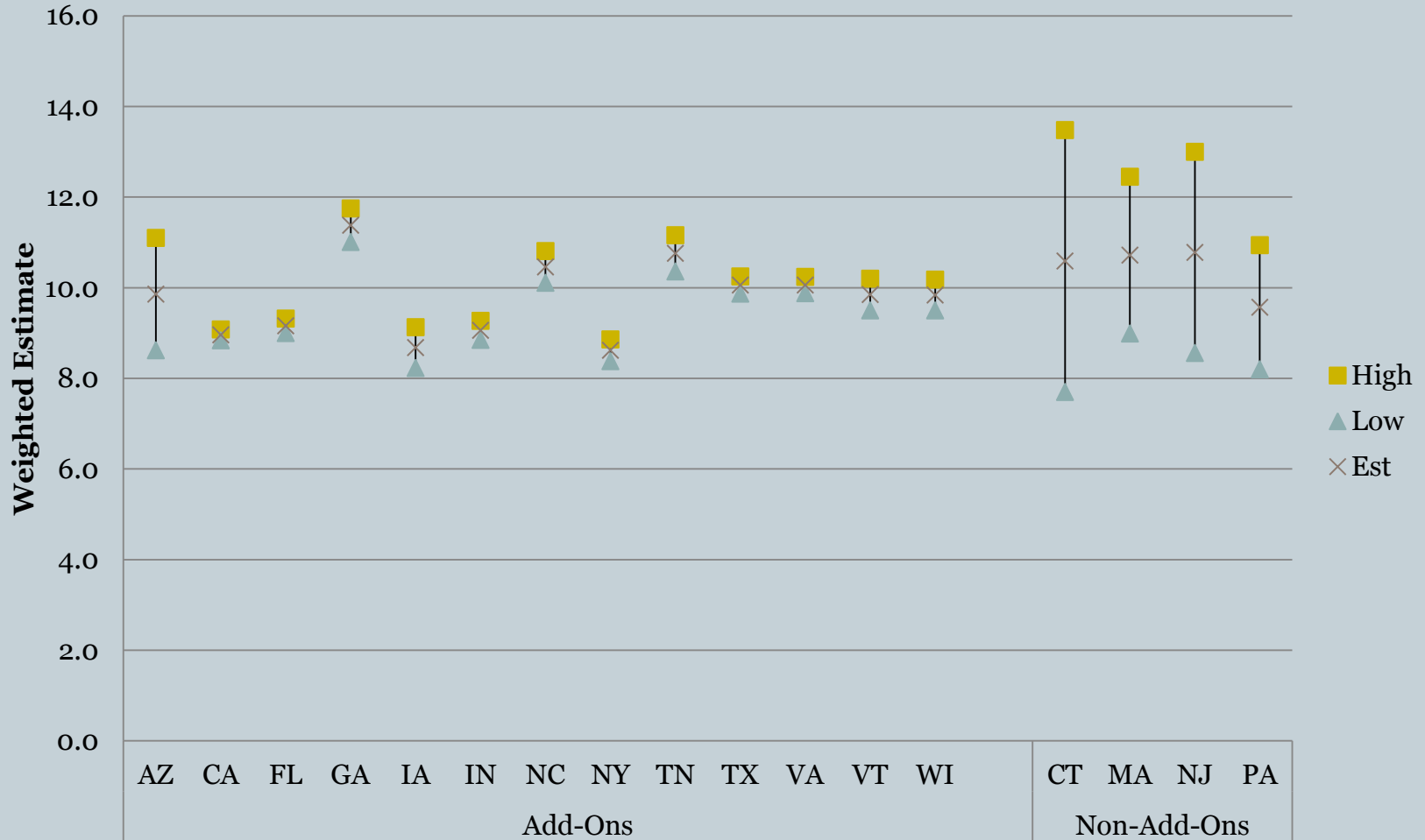


Source: Authors analysis of 2009 NHTS with margin of error confidence interval (CI)

We need to understand the variability in important measures and the impact on sample size:



95% CI - Mean Vehicle Trip Length

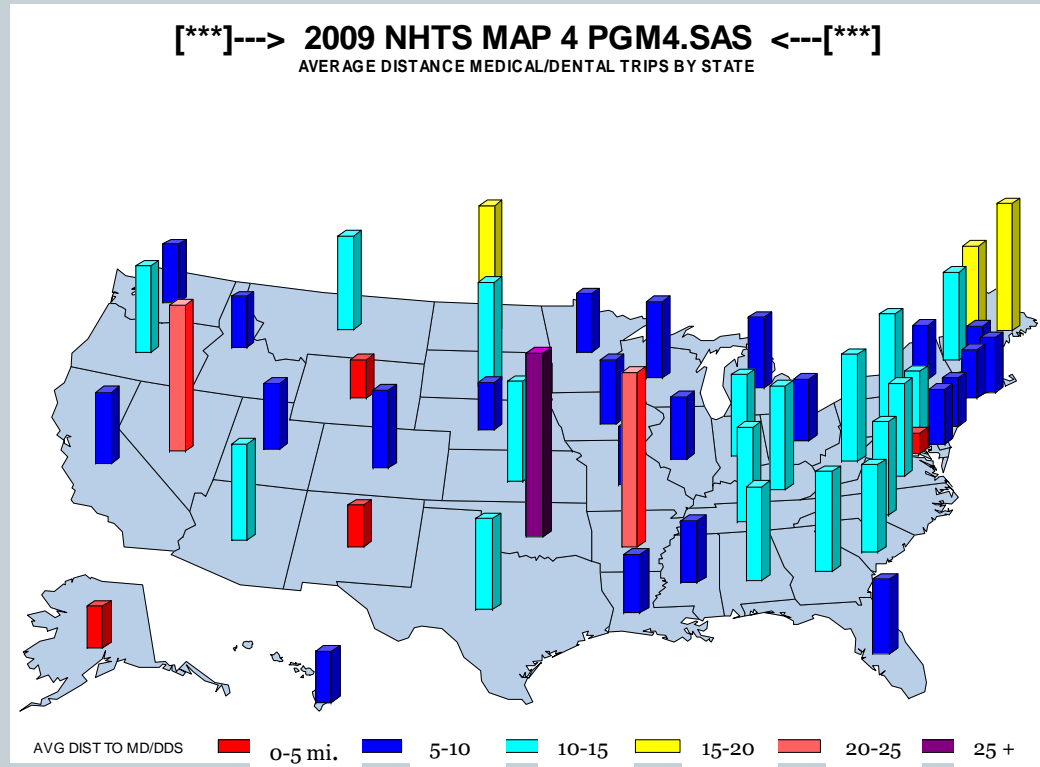
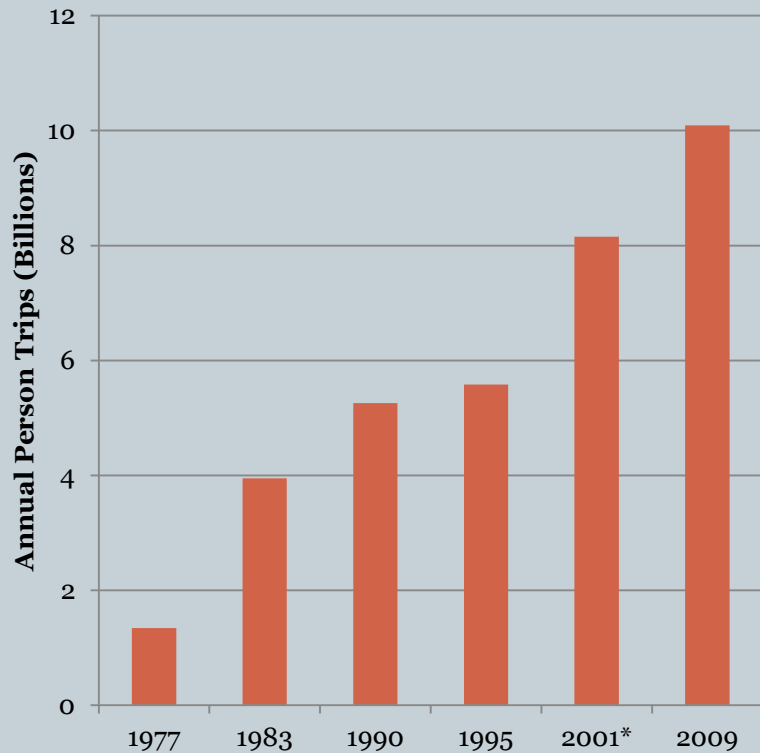


Source: Authors analysis of 2009 NHTS with margin of error confidence interval (CI)

Looking forward, we should pay heed to trends in access to medical care:



Number of Trips for Medical Care



The number of trips for medical care, and the average distance, are both increasing.

Source: Nancy McGuckin and Yuki Nakamoto's analysis of NHTS

In summary:



- Without sound data on travel behavior we cannot see where we have been and where we are going
- This is especially important at times of real change (such as now):
 - Trends seem to be slowing or reversing: growth in per capita travel
 - Demographic shifts: 1/3 of households have no worker)
 - New technology is shifting the source of travel: internet use=home delivery
- New analysis tools allow better data analysis (e.g. margin of error) which informs data collection (e.g. sample size)