

ANALYSIS BRIEF

ANALYZING TRENDS IN WALKING



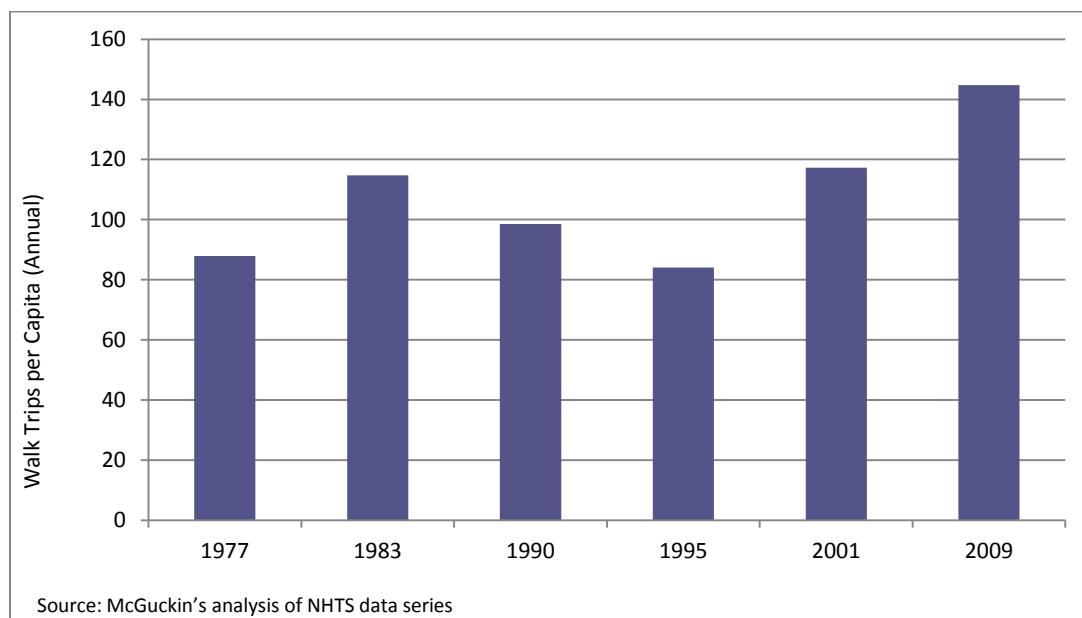
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Tracking trends in the amount of walking by the American public is important for performance measures related to pedestrian safety and active travel. However, consistently obtaining full reports from people on how much they walk is quite complicated. Incidental walk trips are commonly forgotten when people recall their travel, and many people just don't think some walks—like walking the dog—are worth reporting.

The National Household Travel Survey (<http://nhts.ornl.gov>) has been a major source of information on the travel by the American public since 1969. That very first survey did not obtain walks except as part of travel to work. But since 1977 the goal of the national survey has been to obtain information on all trips, by all means of transportation, and for all purposes.

Exhibit 1 shows the trends in walk trips per capita from the NHTS data series, starting in 1977. Per capita estimates include all walk trips divided by all people aged 5 and older, whether they reported walking on the travel day or not.

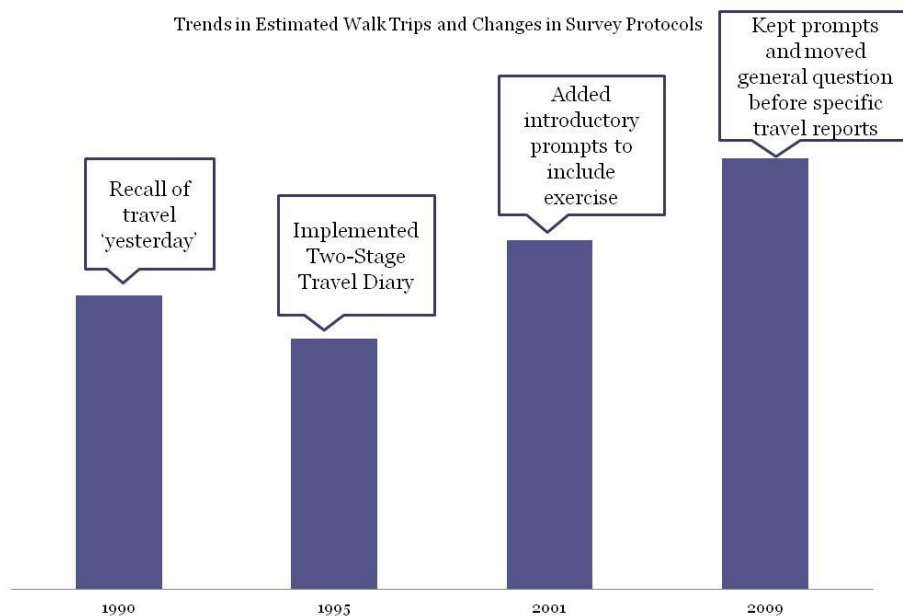
Figure 1 – Per Capita Walk Trips, NHTS Data Series 1977-2009 (people aged 5 and older)



The first thing to note about the data in Figure 1 is that walking seems to go up, and then down some, and then up a lot in the recent surveys. These results are partially due to subtle changes in the survey methods and questionnaire that have impacted the reporting of walk trips, making it difficult, if not impossible, to accurately measure trends in walking from the NHTS data series.

Figure 2 shows some of the changes in protocols that may affect reports of walking. Until 1990, the information about travel was collected from respondents by having each person recall their activities ‘yesterday’. In 1995, a diary day was introduced to improve the travel reports, but it also may have depressed reports of incidental walks. In 2001 the survey still used an assigned diary day for travel reporting, but prompts were added to specifically remind people to report their walk trips, including walks for exercise. Most recently, in the 2009 NHTS a general incidence question on the number of walks ‘last week’ was moved to the beginning of the interview—before the specific details of each trip on the travel day—which may have further prompted respondents to recall and report their walk trips.

Figure 2 – Changes in Protocols Related to Walk Trip Reports in NHTS Data Series

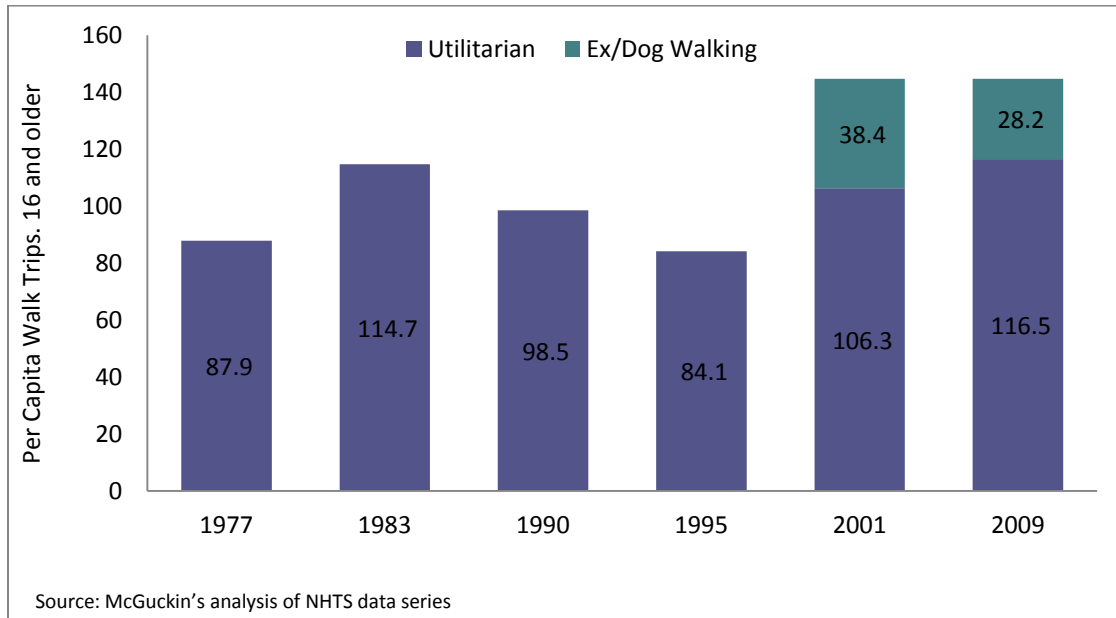


Source: McGuckin's analysis of NHTS data series

The prompts to help respondents remember more walks succeeded—overall reports of walking the dog and walks for exercise increased by 32 percent between 2001 and 2009, while reports of utilitarian walks, such as walks to work or the store, increased by 10 percent. These results

indicate that many people may not have reported walking the dog and exercise walks until prompted. For a reasonable trend analysis, one could ignore the additional reports of exercise and dog-walking and concentrate simply on utilitarian walks, such as those to work or to the store. An example of the results excluding trips for dog walking and exercise (it is important to exclude both the outbound and the return segments) is shown in Figure 3.

Figure 3 – Per Capita Trends in Walking with Exercise and Dog Walks Separated



New designs of surveys designed to obtain information on walk trips will use new technology, such as GPS devices, accelerometers, and smart phones, to track people's movements and will rely less on self-reports. These methods will undoubtedly improve the estimation of active travel and exposure for pedestrians.

But people interested in active travel still need to understand the barriers, opportunities, constraints, and habits of people who walk a lot and people who don't walk at all. Transportation planners need to understand the perceived environment that makes walking enjoyable and the design characteristics that encourage people to walk and ensure the walker's safety. Decision makers interested in tracking the result of investments aimed toward encouraging walking as a mode of travel need trend data that they can trust to develop performance measures.

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