Working Retirement – Travel Trends of the Aging Workforce

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ABSTRACT

The proportion and number of older workers (those over the age of 65) is expected to increase significantly in the coming decades, and examining this cohort's travel behavior may provide insight into this potential future boom. This paper is an exploratory analysis to describe working patterns of the older population today, to examine their work trips, and to make some guesses about how the baby boomer generation will be similar or differ from today's older population. Using available literature on elderly travel, and data from the 2000 U.S. decennial Census and the 2001 National Household Travel Survey (NHTS), this paper explores commute and occupational characteristics of older workers in the work force. Topics covered include projected increase in miles driven by older population groups, trends in labor force participation, occupations of older workers, overall travel patterns, travel time, and mode-to-work characteristics; examination of race and ethnic origin of older workers, and description of older worked-at-home population.

KEYWORDS: ELDERLY, OLDER WORKERS, DECENNIAL CENSUS PUMS, TRAVEL TRENDS, COMMUTE, JOURNEY-TO-WORK, WORKED-AT-HOME, OCCUPATION, RETIREMENT.

INTRODUCTION

In a few years, the first of the baby boom generation (the 76 million of Americans born between 1946 and 1964) will reach traditional retirement age. The generation that overflowed schools in their early years and generated a suburban housing boom in their middle years will possibly change the nature of travel and commuting as they shift into 'working retirement'.

This paper is an exploratory analysis to describe working patterns of the older population today, to examine their work trips, and to make some guesses about how the baby boomer generation will be similar or differ from today's older population. For instance, baby boomer women have a long history of labor force participation, and are nearly fully licensed to drive, both of which will influence their working and commuting choices as they age.

Older Americans (age 65 and over) are the fastest growing segment of the U.S. population-- in 2000 one in eight people were in this age group. The first of the baby boomers will reach the age of 65 starting in 2011. From 2011 to 2029, the baby boomers will swell the ranks of the older population to one in five of all Americans.

Most older Americans remain in the houses where they raised their families (1), older people are half as likely to move than younger people (2). The 2000 Census finds that about 80 percent of people age 65 and over were in the same house as 10 years ago or more. If this holds true in the future and baby-boomers 'age in place' then the impact of the change in travel will be felt in the suburban areas where baby-boomers now reside.

The aging of the population raises many issues for the transportation planning community. Rosenbloom, Burkhardt, Mcgavock, Coughlin, Kihl, and Howe are key researchers addressing travel patterns of the elderly (1,3,4,5,6,7,8,9), but in general, researchers have not specifically focused on working in retirement, as we attempt here.

Currently, about 18 percent of men and nearly 10 percent of women over the age of 65 participate in the labor force. Baby boomers especially may not stop working altogether at age 65--this generation delayed most major life events, and retirement and mobility declines may also be delayed.

Total labor force participation by women continues to rise, and baby boomers, especially women, are better educated than previous generations. The nature of work changes with better education, and workers in this generation are less likely to work in physically demanding service or factory jobs and more likely to have professional or technical careers that can be kept into older working years. In addition, changes to Social Security legislate a delay in benefits; about half of this generation will wait until age 67 to obtain full benefits. Many people may change careers, work part-time, consult in the careers they have worked in for many years, and otherwise participate in the paid labor force.

The aging of the population accompanied by a larger proportion of people in 'working' retirement means that more older drivers can be expected on the road at least for the next two decades.

This paper discusses "working retirement" by presenting data on:

- Overall travel of people age 65 and over
- Labor force participation as people age
- Occupations held by older workers
- Commuting characteristics of older workers
- Older workers who work from home
- Older African American and Hispanic workers

OVERALL TRAVEL CHARACTERISTICS

More and more people are driving in their 80s and 90s, and most older Americans rely on the automobile as their primary means of transportation (*10*) until they are no longer able to drive. The NHTS trends show people driving at older ages, 45 percent of 85-95 year olds still drove in 2001 compared to only 36 percent in 1990. The growth in older drivers is especially marked among older women. Spain (*11*) notes that almost all the men under the age of 65 have a license and retain them as they age; nearly three quarters of the men aged 85 and over were still licensed in 1995. By 2010, 90 percent of older women, and almost 100 percent of older men will have driver's licenses, and nearly 50 years of driving experience.

Even if baby boom men and women drive at the same (reduced) rates as the current older population, their sheer numbers will add many more vehicle miles of travel by older age groups. Figure 1 shows the authors' projection of the increase in miles driven for men and women aged 65 and over using current estimates of annual driver miles (from 2001 NHTS) and the population projections from the U.S. Census Bureau. In the next forty years, this conservative projection shows that the miles driven by older men will more than double (from 147 to 332 billion miles per year), while women's miles will double from 100 billion in 2000 to 200 billion in 2040.



FIGURE 1 Projected Annual Vehicle Miles of Travel for Men and Women Age 65 and Over.

Source: Authors' projection using 2001 National Household Travel Survey. Data accesssed from FHWA, <u>http://nhts.ornl.gov</u>. Accessed July 15, 2005.

Spain, using the 1995 NPTS, compared travel profiles of women aged 40-49 with women aged 75 and over, and with men aged 75 and over. She hypothesizes that middle-aged (baby boomer) women are more likely to mimic the driving behavior of their fathers than their mothers when they reach retirement age. Under this hypothesis, there will be a far greater increase in VMT by older drivers than shown in Figure 1.

The pattern of travel shifts with age, however, especially the purpose and time of day. Figure 2 (12) shows percent of trips by purpose by age group. The percent of trips for work peaks at 21 percent of all trips for people aged 30-54, and starts to decline. The percent of trips for shopping, recreation, and other purposes (including medical and visiting friends) increase as the traveler ages.



FIGURE 2 Percent of Trips By Purpose and Age Group.

Source: Federal Highway Administration. 1995, and 2001 National Household Travel Survey. <u>http://nhts.ornl.gov</u>. Accessed July 15, 2005.

TRENDS IN LABOR FORCE PARTICIPATION

Munnell, Cahill, and Jivan, (13) note that "the trend toward earlier retirement has slowed and, perhaps, even reversed. A host of explanations are possible: the elimination of mandatory retirement, the cessation of the expansion of Social Security, the reduction of retirement incentives within Social Security, and the changing nature of the private pension system." Many service, and retail trade institutions are making determined efforts to encourage retired population to work part time (14). Until the mid-1980's the age at which people retired declined, in the mid 1980s, the decline ended, and may even have reversed in the last few years, with older women's participation increasing dramatically.(15, 16)

Today, we find that between the ages of 23 and 50, labor force participation is currently uniformly at about 80 percent of the population, but then begins to decline. By age 55, there is decline in participation to 71 percent, and by age 60, a decline to 57 percent (Figure 3). The largest decline in single years is not between age 64 and 65, but between ages 61 and 62 (10 percent drop).(*17*) Currently, social security benefits can be accessed at age 62.

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FIGURE 3 Labor Participation by Age, 2000.

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

In coming years, labor force participation of people aged 65-74 may exceed current levels, especially among women. Haider and Loughran cite 1994 study by Pienta, Burr and Mutcher (18) that found a strong positive correlation between women's labor force participation early and later in life.

In 2000, 10 percent of the workforce were workers aged 45-64, and 3 percent of the workforce were workers over the age of 65(19). Looked at another way, 18 percent of men and 10 percent of women over the age of 65 participate in the labor force, and for the 'younger' elderly, people between 65 and 74 years of age, 25 percent of men and 15 percent of women continue to work.

By 2012, people over the age of 54 will constitute 19 percent of the workforce, up from 14 percent in 2002, mostly due to the aging of the baby boomers (20), while labor-force participation rates of the people 65 or over is expected to increase to 24 percent from 20 percent in 2000. Assuming that the labor force participation remains the same by age, Fullerton, Jr.(21) estimates that by 2025, about 5 percent of the labor force (8.4 million people) will consist of older workers. Extrapolating trends in labor force participation, Toossi (22) estimates the labor force strength of the elderly to be over 10 million in 2030.

Because we are staying healthy longer, and because both men and women have long histories of labor force participation, baby boomers, especially women, are more likely to continue working in their 60s and into their 70s. Economic reasons may be a factor in the number of older workers who continue working. The "Senior Citizen's Freedom to Work Act of 2000" eliminated the penalty for Social Security benefits for income over an annual threshold when a person reaches "full retirement age." Full retirement age now varies based on year of birth, ranging from 65 to 67. Thus, more older workers can keep everything they earn without losing their Social Security entitlements.

In addition, with many years of health past traditional retirement age, working retirement offers an opportunity to explore a second career, "give back to the community", or simply to help fill the time. In these cases, older workers may take lower paying jobs that are akin to volunteer opportunities, or switch careers to concentrate on avocations or hobbies.

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TYPICAL OCCUPATIONS OF OLDER WORKERS

Occupations of older workers tend to be more sedentary in nature. With less physically demanding jobs, older workers are able to work well into their 60's and 70's. Figure 4 shows that as workers age their professions tend to be shift to different kinds of jobs. Occupations typically held by older workers include jobs in retail, sales and support, and food/hospitality. Citing the requirement of high level of skills, Dohm suggests that older workers will need to be retained in occupations less conducive to technology driven innovations (e.g.: health and educational services)(23), especially because of opportunities in these professions for working part time with flexible hours.



FIGURE 4 Occupation of Population in the Labor Force by Age, 2000.

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Older workers (especially women) are less likely to work in manufacturing, or farming professions. Examining workers by gender shows that (24) while a majority of older males are employed in managerial and professional occupations, a majority of women are found in technical, sales, and administrative support. However, the distribution among the first baby boomers (currently in the age group of 55-64) shows a comparable percent of women employed in managerial and professional occupations.

TRAVEL PATTERNS AND WORKING RETIREMENT

Mode and Commute Travel Time

Like all workers, older workers usually drive alone to work. Giuliano and Hu point out that the share of transit does not increase as people age (25), in fact, the distribution across modes indicates that older workers are less likely to carpool or use transit. Older whites (in this research Whites refers to non-Hispanic White) are most likely to live in suburban areas (4) where transit availability and accessibility is more limited than in dense urban centers. In

addition, if the older worker works part-time, short shifts, odd hours, or working a few days a week, may make using transit more difficult. Poor health (vision or other medical issues) is often cited as the most important reason for cessation or self-restriction of driving amongst the current elderly population. However, as older people are expected to be healthier in the coming decades, we can expect fewer of them to stop driving (*26, 27*).

		Drove						At
Age	Workers	Alone	Carpool	Transit	Taxicab	Walked	Other	Home
Total	128,268,633	75.7%	12.2%	4.6%	0.2%	2.9%	1.2%	3.3%
16-44	82,502,370	74.3%	13.5%	4.9%	0.2%	3.2%	1.4%	2.5%
45-54	28,312,360	78.9%	10.3%	3.9%	0.1%	2.1%	0.9%	3.7%
55-64	13,191,524	78.5%	9.0%	3.9%	0.1%	2.5%	0.8%	5.2%
65-74	3,314,706	74.0%	8.7%	3.4%	0.2%	3.6%	0.9%	9.2%
75+	94,012	67.7%	9.6%	3.7%	0.3%	4.3%	1.0%	13.3%

TABLE 1 Mode to Work by Age, 2000

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Older workers are more likely to start their commute after the traditional peak period. Collia et.al. (28) point out that over 60 percent of daily travel by older adults is done between 9 a.m. and 4 p.m. Older adults have a greater concern for congestion compared to younger adults and are more likely to limit their driving to daytime than younger drivers. More than a quarter of older workers (26.4 percent) commute after 9:00 a.m., compared to 18.4 percent of workers in the age group of 55-64. This may be another reason that they less likely to use public transit for their commute, as peak period transit service is often faster with more express service and shorter headways.

Older workers are far more likely to take jobs that are close to home—over 50 percent of commute trips for workers over 65 usually take 15 minutes or less (Figure 5, Table 2)--and more likely to walk to work. Choosing jobs that may be closer to home, or at home, will likely reduce VMT compared to younger workers. However, it is most likely that these older workers will continue to prefer driving a car for commuting.



FIGURE 5 Percent of Workers by Commute Time and Age, 2000.

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

	Drove		
Age	Alone	Carpool	Transit
Total	24.1	28.5	49.4
16-44	24.0	28.2	48.2
45-54	24.6	29.6	52.4
55-64	24.0	29.5	52.5
65-74	21.6	26.7	50.6
75-84	21.3	23.6	47.1
85 or			
above	22.0	24.8	50.1

TABLE 2 Average Travel Time to Work by Mode and Age, 2000

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Except for older workers in the Service sector, older commuters in almost all other work categories travel about 3 minutes less than younger workers.

			<u> </u>	<u> </u>		
	All	Management and		Sales and	Heavy and All	
Age	professions	Professional	Service	Support	Other	Armed
All Ages	25.5	26.0	22.9	24.2	27.9	20.0
16-44	25.5	26.2	22.5	24.2	27.8	19.6
45-54	26.1	26.0	24.5	24.8	28.5	24.1
55-64	25.5	25.7	23.6	23.9	28.1	35.8
65-74	22.9	23.4	22.5	21.6	24.3	-
75-84	22.1	23.0	20.9	20.9	24.0	-
85 or above	22.8	21.8	22.6	23.7	23.5	-

 TABLE 3 Average Travel Time to Work by Occupation and Age, 2000

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Working Part-Time

As the baby-boomers shift into retirement, most transportation planners expect work trips to decline precipitously. Continued working by older baby-boomers may dampen the decline, even if older workers work part-time. In 2002, nearly half (over 46%) of older workers were employed part-time (29).

Several research studies cited in Haider and Loughran (2001) (30) find older workers often transition from full-time to part-time employment, and this transition is often simultaneous with changing employers and the characteristics of the job. Haider and Loughran (op cit.) cite Iams (31) who found that upon initial receipt of Social Security benefits, workers tended to shift into service-oriented jobs. Haider and Loughran find that older workers are generally wealthy, and are working for comparatively low wages. They conclude that many are working for "non-pecuniary" reasons, and that work is closer to leisure for many.

Analysis of 2001 NHTS data shows that older workers (ages 65 or over) work fewer hours (5-6 hours) on a typical day (*32*) than younger workers (ages 45 or younger). One of the limitations of traditional household travel/activity surveys is that only one day is typically included. Therefore, we don't know if part-time workers are working for a few hours on 4 or 5 days, or working full days 1 or 2 days a week.

Work Trips

Retirement can mean many things, but it may not mean an end of work travel. The national travel survey has coded the "life cycle" of participating people, based on age, work status (in direct response to questions on primary activity), and the presence of children in the household. Two categories are reserved for "Retired"; single and dual adult households with no children present, where the adults answer that their primary activity "last week" was "Retired".

The data show that "Retired" people do make trips they consider to and from work, and that the number of such trips has increased since 1990 in every age category over 55 (Figure 6). In fact, people aged 55-59 in 2001 made half of the weekday work trips per person of non-retired people in the same age category (1.14 for all vs. 0.61 for "retired").



FIGURE 6 Weekday Work Trips per "Retired" Person 1990 and 2001.

Source: Federal Highway Administration. 1990, and 2001 National Household Travel Survey. <u>http://nhts.ornl.gov</u>. Accessed July 15, 2005.

We know that the NPTS series of questions on the purpose of trips may confuse some respondents, and that trips to volunteer activities, baby-sitting, or other activities that may not be strictly "work for pay or profit" might be called work trips by the respondent. However, the series of questions has remained virtually the same and coding is similar between the 1990 and 2001, so these trend data are showing an increase in activity that the respondent calls travel to and from "work".

Working from Home

Older workers are far more likely to report that they work from home, 10 percent compared to 3 percent for workers of all ages, but their occupations are similar--a predominance of professional and management activities, as well as sales. The average number of hours worked peaks at age 45-49 (1,972 hours worked in 1999), and declines thereafter. The average number of hours worked in 1999 for those aged 60-64 was 1,691 hours, dropping to 1,346 hours for those between 65-69, and 1,177 hours for those 70 to 74.

Even people who work at home generate trips related to their work. These can include going to meetings (for professionals); marketing and sales and service trips that originate from home rather than a business or office; purchasing supplies for work.

CHARACTERISTICS BY RACE AND HISPANIC ORIGIN

For this paper, three categories are used: White, Non-Hispanic; Black; Non-Hispanic and Hispanic. For simplicity, "White" will be used for "White, Non-Hispanic" category. Hispanics can be of any race.

Labor force participation

Whites enter the paid labor force earlier than Blacks and Hispanics and in every age group have higher workforce participation (Figure 7). After the age of 65, workforce participation by older Americans, regardless of race/ethnic origin is similar.



FIGURE 7 Labor Force Participation by Age and Race/Ethnic Origin, 2000.

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Differences in driver's licensing

Whites drive at an earlier age than Blacks and Hispanics. While most White workers have access to a private vehicle (92.7 percent of households), Black (76.2 percent) and Hispanic (82.8 percent) older workers are less likely to have a vehicle available in their household. This difference affects women more than men, as half of older Black and Hispanic women don't drive. As the baby boomer cohort moves into retirement, growth in drivers in the older age groups will come from women, especially women of color.

Mode to Work and Commute Time

Older Blacks and older Hispanics are far more likely to live in urban centers than older Whites, who moved to the suburbs in their younger years (*33*). While older White workers are more likely to work at home (11 percent of older workers versus 4 percent in younger ages), the distribution of modes used for work trips are nearly the same for older and younger Blacks and Hispanic workers. For Black and Hispanic workers, there is a small increase in working at home, and a decrease in carpooling when comparing workers between 20-64 to those 65 and over.

However, the shares of driving alone and using transit remain virtually the same across the two age groups (Table 4).

		Drove			Worked at		
Race/Ethnic Origin	Age	alone	Carpooled	Walked	home	Transit	Other
White Alone, Not	20-64	80.5%	9.7%	2.3%	3.6%	2.8%	1.1%
Hispanic	65 or over	74.2%	8.0%	3.7%	10.9%	2.3%	1.0%
Black Alone, Not	20-64	67.4%	15.4%	2.7%	1.5%	11.5%	1.5%
Hispanic	65 or over	66.7%	12.6%	3.1%	4.2%	11.5%	2.0%
	20-64	61.8%	22.1%	3.6%	1.8%	8.5%	2.2%
Hispanic	65 or over	63.0%	15.3%	5.3%	6.3%	8.1%	2.1%

TABLE 4 Mode to Work, Percent of Workers by Age and Race/Ethnic Origin

Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Older Black and Hispanic workers have commute travel times similar to younger workers, but White older workers are the most likely to shift to jobs closer to home after they retire (Figure 8). Older Hispanic workers and older African American workers are much more likely to travel 30 minutes or more for their commutes (36 and 37 percent respectively) compared to White (non-Hispanics) (25 percent). These longer travel times are attributable to the much larger share of workers using public transit to get to work (8 percent for Hispanic, 11 percent for Black, and 2 percent for White older workers).

Older White women exhibit the shortest commute of any age group. Differences in travel time between older workers and younger workers are to a large extent, driven by the propensity of older White women to work close to home which shortens their commutes.









FIGURE 8C Commute Time Distribution for Black, Not-Hispanic Workers by Age.



Source: U.S. Census Bureau. *Census 2000 PUMS 1% sample files*. <u>http://www.census.gov/main/www/pums.html</u>. Accessed on July 15, 2005.

Conclusions

"Retirement" is not a steady state. Modern workers have been less tied to individual jobs or individual employers through their working lives. Retirement now may mean that a career job is followed by a break in working, and then a return to another, part-time job with flexible schedules, close to home. Transitions in labor force participation among older workers may occur with other changes, including health of self and/or spouse, so that transitions in and out of the labor force continue in "retirement."

Baby boomers especially may exceed current labor force participation rates of 15 to 25 percent between ages 65 to 74. Trends already show small increases in travel to work for every age group 55 and older, when comparing 1990 and 2001 national travel data. Much of the future growth in work travel will come from baby boomer women who will likely continue to work, as their work history has been similar to that of men, compared to previous generations.

Baby boomers, like today's older workers, are most likely to take jobs closer to home that may not pay very well, but provide for social engagement and psychological and social benefits (self-esteem, contribution to society). They will continue to commute by car to jobs in suburban locations close to home, and they are attracted to jobs that are close enough to walk to.

Older workers may retire into part-time work. This means survey researchers need to be careful about how definitions about work status are made and what specific questions are asked, including how many days a week are typically worked, number of hours per day, with careful coding of the purpose of the activity.

If today's trends continue, baby boomers will find jobs they can do from home. These jobs also generate work-related travel, although these trips are more likely to occur off-peak.

Even as they reduce their working hours, or shift from paid work to volunteer activities, baby boomers in retirement will travel more often and farther than does the current retired population. Boomers will accumulate more driving miles, especially women. As we watch this cohort age, the purpose and time of day of travel will change significantly. Because this generation was raised driving they will likely drive for many discretionary trips throughout the rest of their lives.

Because of this potential shift toward "working" retirement, research is needed to improve the scope of the data used to forecast travel. We need more information about expectations of baby boomers, especially about participation in labor force, and choices for retirement housing and location. In their "working" retirement, older Black and Hispanic people differ from Whites in the nature of employment, location of work, hours worked, and commute times..

Implications for Travel Demand Forecasting

Travel demand models often use the variable "number of workers in the household" to determinant trip generation rates. Because people may identify themselves as "retired," they may also be classified as households without workers, and yet, work trips are being made, because they continue to work.

We need to improve the scope of the data used to forecast travel. We need more information about expectations of baby boomers, especially about participation in labor force, and choices for retirement housing and location. As our forecasts have horizon years of 2030 and beyond, we need to know more about the travel of this large age cohort. Stated Choice surveys are one way to capture future intentions or desires. Continuing research to track trends as the aging workforce moves into retirement is also important.

Longitudinal travel surveys, with particular focus on travel before and after "retirement" would benefit the transportation planning community. The Puget Sound Transportation Panel (1989 thru 2002) is no longer being collected, even so with a small sample, and not many respondents who fall into the baby boomer category, it may not prove a useful dataset to analyze "working" retirement. An added question to the next NPTS on number of days "worked last week", even if workers worked part time, might be enlightening. Future research could also focus on distinguishing older workers with economic need versus those who work for social interaction or other reasons to help shed additional insights on working retirement.

DATA SOURCES

This paper uses data from the Census 2000 1% Public Use Microdata Sample (PUMS) <u>http://www.census.gov/Press-Release/www/2003/PUMS.html</u> and the 2001 National Household Travel Survey (NHTS) <u>http://nhts.ornl.gov/2001/html_files/introduction.shtml</u>

The 2000 decennial Census data includes questions on the usual journey-to-work "last week," including travel mode to work, travel time, departure time, as well as industry and occupation, and place of work. Because of the large sample size of the census "long form," the PUMS data provide rich and exhaustive description of older workers. There are over 45,018 observations of workers age 65 and over (unweighted) in the 1% PUMS.

In order to examine work trips in the context of total daily travel, we have also used the 2001 NHTS despite the limitation that only 1,493 of workers age 65 and over are included in the sample. The 2001 NHTS includes a national sample of 26,083 households, and regional add-on samples, bringing the total sample to 69,817 households. The NHTS was conducted between April 2001 and June 2002. Respondents were asked to complete a travel diary, and a telephone interview was conducted to retrieve the information about all places to which people traveled on an assigned travel day. The survey included all days of the week, and all months of the year.

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