

Understanding Senior Transportation: Report and Analysis of a Survey of Consumers Age 50+



Understanding Senior Transportation: Report and Analysis of a Survey of Consumers Age 50+

by

Anita Stowell Ritter
Audrey Straight
Ed Evans

AARP

The AARP Public Policy Institute, formed in 1985, is part of the Policy and Strategy Group at AARP. One of the missions of the Institute is to foster research and analysis on public policy issues of importance to mid-life and older Americans. This publication represents part of that effort.

The views expressed herein are for information, debate, and discussion, and do not necessarily represent official policies of AARP.

© 2002, AARP
Reprinting with permission only
AARP, 601 E Street, N.W., Washington, DC 20049

Acknowledgments

The authors gratefully thank the many people who contributed to producing this report. In particular we would like to thank Elizabeth Clemmer of AARP's Public Policy Institute and Gretchen Straw of AARP's Knowledge Management Group for their guidance, support, and review, and Robert Vorek for his help in designing and managing the survey. We would also like to thank our reviewers, inside and outside of AARP, including Frank Ahern of Pennsylvania State University, Joseph Coughlin of the Massachusetts Institute of Technology, Debra Alvarez of AARP's Federal Affairs department, and Laura Polacheck of AARP's State Affairs department. Their contributions were immeasurable.

Finally, we greatly appreciate the patience and fortitude of Jennifer Leslie of AARP's Knowledge Management Group, Sheel M. Pandya, and Vanessa A. Woodard-Kinard of AARP's Public Policy Institute as they provided the administrative and technical support without which this report could not have been produced.

Table of Contents

FOREWORD	V
EXECUTIVE SUMMARY	VI
1. INTRODUCTION AND OVERVIEW	1
BACKGROUND	1
PURPOSE	2
METHODOLOGY	2
ORGANIZATION OF THE REPORT	3
2. HEALTH AND DISABILITY PROFILES	5
OVERVIEW	5
RESPONDENTS’ HEALTH STATUS	5
RESPONDENTS’ PHYSICAL DISABILITIES	5
3. TRANSPORTATION MODE USE	9
OVERVIEW	9
DRIVING	9
INFLUENCE OF HEALTH AND DISABILITY STATUS (HDS) ON DRIVING	11
DRIVERS IN HOUSEHOLD	12
RIDE SHARING.....	12
WALKING	14
PUBLIC TRANSPORTATION	14
USE OF MULTIPLE TRANSPORTATION MODES	15
4. PERSONAL MOBILITY	18
OVERVIEW	18
OUTINGS THE PREVIOUS DAY	18
OUTINGS IN A TYPICAL WEEK.....	21
5. PROBLEMS WITH DIFFERENT TRANSPORTATION MODES	25
OVERVIEW	25
PROBLEMS WITH DRIVING CITED BY LICENSED DRIVERS	25
PROBLEMS WITH DRIVING CITED BY FORMER DRIVERS	28
PROBLEMS WITH RIDE SHARING.....	29
PROBLEMS WITH PUBLIC TRANSPORTATION	32
PROBLEMS WITH WALKING	33
PROBLEMS WITH TAXIS.....	36
PROBLEMS WITH SENIOR OR COMMUNITY VANS	37
6. MOBILITY AND SOCIAL INTERACTION	38
OVERVIEW	38
SOCIAL CONTACTS WITH PEOPLE OUTSIDE THE HOME	38
TRANSPORTATION AND THE ABILITY TO ENGAGE IN SPECIFIC ACTIVITIES	39

COMMUNITY DESIGN AND ACCESS TO SOCIAL ACTIVITIES	41
DRIVING AND RESIDENTIAL OPTIONS.....	42
7. SATISFACTION WITH MOBILITY.....	44
OVERVIEW	44
RESPONDENTS’ MOBILITY SATISFACTION RATINGS.....	44
8. INTERVIEWS WITH PROXY RESPONDENTS.....	46
OVERVIEW	46
FINDINGS FROM THE PROXY INTERVIEWS	46
IMPLICATIONS OF PROXY INTERVIEW FINDINGS.....	48
9. SUMMARY AND POLICY IMPLICATIONS	50
OVERVIEW	50
SUMMARY	50
POLICY IMPLICATIONS.....	54
REFERENCES.....	57
APPENDIX A: DEMOGRAPHIC PROFILE OF SURVEY RESPONDENTS	58
APPENDIX B: ANNOTATED SURVEY QUESTIONNAIRE	60

Table of Tables

TABLE 2-1: RESPONDENTS AGE 50+ WITH PHYSICAL LIMITATIONS, BY AGE	7
TABLE 3-1: LICENSED DRIVERS AND REGULAR DRIVERS AGE 75+, BY AGE, GENDER.....	10
AND INCOME	10
TABLE 3-2: RIDE SHARERS AGE 75+, BY AGE, HEALTH AND DISABILITY STATUS, AND	13
DRIVING STATUS.....	13
TABLE 3-3: MODAL CHOICE OF RESPONDENTS AGE 75+, BY AGE.....	16
TABLE 3-4: MODAL CHOICE OF RESPONDENTS AGE 75+, BY COMMUNITY TYPE	17
TABLE 4-1: NUMBER OF OUTINGS THE PREVIOUS DAY REPORTED BY RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS	20
TABLE 4-2: NUMBER OF OUTINGS IN A TYPICAL WEEK AMONG RESPONDENTS AGE	23
75+, BY AGE, DRIVING STATUS, AND HEALTH AND DISABILITY STATUS	23
TABLE 5-1: LARGE PROBLEMS WITH DRIVING CITED BY LICENSED DRIVERS AGE 50+	27
THAT VARY BY AGE	27
TABLE 5-2: LARGE PROBLEMS WITH DRIVING CITED BY LICENSED DRIVERS AGE 75+, BY HEALTH AND DISABILITY STATUS.....	28
TABLE 5-3: LARGE PROBLEMS WITH DRIVING CITED BY DRIVERS AND FORMER DRIVERS AGE 50+	29
TABLE 5-4: LARGE PROBLEMS WITH RIDE SHARING CITED BY RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS	31
TABLE 5-5: LARGE PROBLEMS WITH PUBLIC TRANSPORTATION CITED BY RESPONDENTS AGE 75+, BY DRIVING AND HEALTH AND DISABILITY STATUS	33
TABLE 5-6: LARGE PROBLEMS WITH WALKING CITED BY RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS.....	36
TABLE 6-1: ACTIVITIES WITH WHICH TRANSPORTATION PROBLEMS OFTEN INTERFERE FOR RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS	41

Table of Figures

FIGURE 2-1: PERCENTAGE OF AGE 50+ RESPONDENTS WITH EXCELLENT AND POOR HEALTH AND DISABILITY STATUS (HDS) RATINGS, BY AGE	8
FIGURE 3-1: PERCENTAGE OF RESPONDENTS AGE 50+ WHO ARE LICENSED, RELY ON DRIVING AS THEIR USUAL MODE OF TRANSPORTATION, AND DRIVE REGULARLY	9
FIGURE 3-2: PERCENTAGE OF DRIVERS, BY AGE AND HEALTH DISABILITY STATUS.....	11
FIGURE 3-3: RIDE SHARING AMONG RESPONDENTS AGE 75+, BY AGE AND HEALTH AND DISABILITY STATUS	14
FIGURE 3-4: USE OF MULTIPLE TRANSPORTATION MODES: FOUR MODEL CLUSTERS FOR RESPONDENTS AGE 75+	16
FIGURE 4-1: REPORTED NUMBER OF OUTINGS THE PREVIOUS DAY AMONG RESPONDENTS AGE 50+, BY AGE GROUP	19
FIGURE 4-2: PERCENTAGE OF RESPONDENTS AGE 50+ WHO REPORT NOT GOING OUT THE PREVIOUS DAY, BY AGE	20
FIGURE 4-3: PERCENTAGE OF RESPONDENTS AGE 75+ WHO WENT OUT THE PREVIOUS DAY, BY AGE, HEALTH AND DISABILITY STATUS, AND DRIVING STATUS.....	21
FIGURE 4-4: NUMBER OF OUTINGS IN A TYPICAL WEEK AMONG RESPONDENTS AGE 50+, BY AGE GROUP.....	22
FIGURE 4-5: NUMBER OF OUTINGS IN A TYPICAL WEEK AMONG RESPONDENTS AGE 50+, BY AGE AND HEALTH AND DISABILITY STATUS	24
FIGURE 5-1: PERCENTAGE OF LICENSED DRIVERS AGE 50+ CITING PROBLEMS WITH DRIVING	26
FIGURE 5-2: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH RIDE SHARING...	30
FIGURE 5-3: PERCENTAGE OF RESPONDENTS AGE 75+ CITING PROBLEMS WITH RIDE SHARING, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS	31
FIGURE 5-4: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH PUBLIC TRANSPORTATION	32
FIGURE 5-5: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH WALKING	34
FIGURE 5-6: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH WALKING AS LARGE PROBLEMS, BY AGE GROUP	35
FIGURE 6-1: PERCENTAGE OF RESPONDENTS AGE 50+ REPORTING SOCIAL CONTACT THE PREVIOUS DAY, BY TYPE OF CONTACT	38
FIGURE 6-2: PERCENTAGE OF RESPONDENTS AGE 50+ REPORTING INTERFERENCES WITH SOCIAL ACTIVITIES DUE TO TRANSPORTATION PROBLEMS, BY ACTIVITY	40
FIGURE 6-3: PERCENTAGE OF RESPONDENTS AGE 50+ LIVING WITHIN A HALF MILE OF GOODS AND SERVICES	42
FIGURE 7-1: PERCENTAGE OF RESPONDENTS AGE 50+ BY MOBILITY SATISFACTION RATINGS.....	44
FIGURE 7-2: PERCENTAGE OF RESPONDENTS AGE 75+ WITH DIFFERENT MOBILITY SATISFACTION RATINGS, BY HEALTH AND DISABILITY STATUS AND DRIVING STATUS	45
FIGURE 8-1: PERCENTAGE OF PROXY INTERVIEWS, BY AGE GROUP	47
FIGURE 8-2: PERCENTAGE OF SELF RESPONDENTS AND PROXY RESPONDENTS AGE 50+ REPORTING DIFFICULTY WITH ONE OR MORE INSTRUMENTAL ACTIVITIES OF DAILY LIVING, BY AGE GROUP	48

Foreword

Transportation helps individuals to stay independent as they age. Driving, riding with a friend or family member, walking, or riding a bus or van keeps individuals connected to their community. These transportation options provide the access to the goods, services, and social activities that are essential to a good quality of life. As individuals grow older, however, they may experience changes in health and physical functioning that challenge their ability to use their usual transportation mode. The promotion of transportation alternatives that can help individuals overcome these challenges and remain independent is a strategic priority for AARP.

AARP conducts both qualitative and quantitative research in its effort to better understand older consumers' views of their transportation needs, preferences, and activity. Previously, AARP has explored transportation as part of consumer surveys for its report on *Understanding Senior Housing* (1986, 1989, 1992, 1996); in a consumer survey that explored barriers to mobility (*Community Transportation Survey*, 1997); and through focus groups conducted with persons age 75+ (*Transportation and Older Persons: Perceptions and Preferences*, 2001).

Understanding Senior Transportation continues AARP's efforts to expand knowledge about older persons and transportation. The report presents the results of a telephone survey of approximately 2,400 adults age 50+. Because we know that mobility (as measured by trips made and miles traveled) shrinks as individuals age, the survey focuses on adults age 75+. Special efforts were made to reach adults age 85+.

As the baby boom generation ages, the number of people who need transportation options will grow. AARP hopes that *Understanding Senior Transportation* will contribute to the ability of policymakers and planners, as well as private transportation designers and providers, to meet the transportation needs of an aging society.

Audrey Straight, J.D.
Senior Policy Advisor
AARP Public Policy Institute

Executive Summary

Background

Transportation is an essential part of the community infrastructure that individuals need to gain access to the goods, services, and social contacts that support their day-to-day existence and quality of life. To date, however, there has been little research on the transportation needs and preferences of America's older persons. Accordingly, AARP commissioned the *Understanding Senior Transportation Survey*, a nationwide telephone survey of adults age 50 and older (50+), to better understand the transportation needs and preferences of mid-life and older adults. The survey particularly focused on understanding transportation concerns of adults age 75 and older (75+), because it is known that personal mobility (as measured by how often a person leaves home) shrinks as individuals age. It is the first national survey to examine a representative sample of adults age 85 and older (85+)—the fastest growing age group in America.

Purpose

The purpose of this paper is to better understand how older persons connect with their communities and to explore the problems of persons age 50+, and particularly those 75+ and 85+, in relation to transportation. This information is essential to the development of policies that expand and improve transportation options for older persons and the mobility that those options provide.

Methodology

International Communications Research (ICR) of Media, Pennsylvania, conducted a telephone survey among a national, stratified sample of 2,422 adults age 50+. The sample contains 578 persons age 50 to 74; 603 persons age 75 to 79; 598 persons age 80 to 84; and 643 respondents age 85+. The survey was conducted from October 6, 1998, to January 8, 1999. Respondents were asked about their health and disability status (HDS), driving status, modes of transportation they use, problems with transportation use, their social interaction, and their overall satisfaction with their mobility. The responses of the 2,422 respondents were weighted by age and gender to match the U.S. population's age and gender distribution in 1998. All comparisons reported by age or gender are statistically significant.

To gauge the degree to which health-based nonresponse might bias the findings of the survey, a series of health-related questions was asked of a proxy informant when an age-eligible respondent was identified within a sample household but was unable to participate. A total of 475 proxies were interviewed representing 16 percent of the combined respondent total (2,897).¹

By its nature, a telephone survey is likely to miss some of the individuals living in the community with the most severe health problems and disabilities. As a result, the survey results

¹ Age data were available on only 362 of the 475 proxy interviews.

presented here probably understate the proportion of the older population that experiences problems with transportation.

Findings

Influence of Health and Disability on Mobility

Perhaps the most striking finding of the *Understanding Senior Transportation Survey* is the extent to which health and disability status (HDS)—as measured by an HDS index developed for this study²—affects the mobility of adults age 75+. The survey data show that age alone is not the best indicator of transportation mode use, transportation problems, or personal mobility. HDS has its own unique impact on mobility and is a strong predictor of mobility in the population age 75+. About one in five respondents age 50 to 74 (22%) has *excellent* HDS compared with one in eight respondents age 75 to 79 (12%) and one in 10 respondents age 80+ (8%). Compared with those with *poor* HDS, those with *excellent* HDS are:

- More likely to have gone out on the previous day or in the typical week;
- More likely to drive;
- More likely to have a driver in the household;
- More likely to walk regularly; and
- Less likely to be passengers in cars (to “ride share”).

Most notably, those 85+ with *excellent* HDS are more mobile than their younger counterparts with *poor* HDS.

Modes of Transportation Used by Mid-Life and Older Americans³

- **Driving** is the usual mode of transportation for more than four out of five adults age 50+. The percentage of individuals who are licensed and drive regularly declines slowly with age up to age 85, and there is a substantial drop in driving among those respondents age 85+. Individuals with *poor* HDS are far less likely to be drivers than individuals with *excellent* HDS. Among those age 85+, for example, 82 percent of those with *excellent* HDS drive compared with 44 percent of those with *poor* HDS.
- **Ride sharing** is the second most common mode of transportation among adults age 50+. More than one in 10 adults age 50+ (13%) rely on ride sharing as their usual mode of transportation. Ride sharing as a usual mode of transportation increases with age. Although it is the usual mode for only one in 10 respondents age 50 to 74 (10%),

² Individuals’ HDS was measured by an index based on data from the AARP survey that combines individuals’ subjective assessments of their health status with measures of their self-reported disabilities with respect to five tasks: reading, hearing, lifting, climbing stairs, and walking. Survey respondents are classified in one of four groups based on their HDS scores: *excellent* HDS (a score of 5), *good* HDS (a score of 3 or 4), *fair* HDS (a score of 1 or 2), or *poor* HDS (a score of 0 to -4). See Chapter 2, Health and Disabilities Profiles.

³ Most respondents gave only one response to this question that resulted in these data, however, 4 percent listed multiple transportation modes as their usual mode.

it is the usual mode for two in 10 respondents age 75 to 79 (19%), for one in four respondents age 80 to 84 (26%), and for four in 10 respondents age 85+ (40%). Not surprisingly, more older nondrivers than older drivers report that ride sharing is their primary transportation mode.

- ***Walking, public transportation, taxis, and community or senior vans*** were each cited as their usual transportation mode by fewer than 5 percent of the respondents.

Personal Mobility

Personal mobility among adults age 50+ significantly declines with age.⁴ Adults age 50 to 74 report leaving home an average of 3.5 times the previous day, while those age 75+ report going out an average of only 2.5 times the previous day.

Individuals with *excellent* HDS are far more likely than individuals with *poor* HDS to be mobile. Older persons with *excellent* HDS go out more frequently in a typical week than do younger persons with *poor* HDS. Drivers age 50+ also go out much more frequently in a typical week than do their nondriving counterparts.

Problems with Different Transportation Modes

Survey respondents age 50+ were given a list of potential problems with specific modes of transportation—driving, ride sharing, public transportation, walking, and senior or community vans—and asked to rate if they were small or large problems or not a problem. This question was asked of all respondents regardless of whether or not they reported using that mode. This executive summary lists the problems identified as large problems. The full report provides percentages of those describing problems as either large or small problems.

- ***Driving.*** The most commonly identified problem with driving among adults age 50+ is inconsiderate drivers. Nearly one out of five adults age 50+ consider this a large problem. Other commonly identified problems with driving are traffic congestion, night driving, poor roads, driving cost, crime, and fast traffic.

Individuals with *poor* HDS are more likely than those with *excellent* HDS to consider these large problems.

- ***Ride Sharing.*** Feelings of dependency or concerns about imposing on others emerge as the most compelling problems associated with ride sharing among adults age 50+. Nearly a quarter of adults age 50+ say that feelings of dependency or concerns about imposing are a large problem with ride sharing. Individuals with *poor* HDS are more likely than those with *excellent* HDS to say that feelings of dependency and concerns about imposing on others are large problems. None of the potential problems with ride sharing increase with age.

⁴ The term mobility is used in this report to refer to travel in an individual's community, not to long-distance or vacation travel. Commonly used measures of personal mobility include the numbers of trips individuals make in a given time period.

- **Public Transportation.** Approximately one quarter of adults age 50+ cite unavailable destinations and accessibility as large problems with public transportation. Fear of crime is a large problem associated with using public transportation for nearly one in five adults age 50+. Another problem is difficulty boarding, especially among respondents age 75+. Adults age 75+ with *poor* HDS report more large problems with all aspects of public transportation than their counterparts with *excellent* HDS.
- **Walking.** About one in four adults age 50+ consider “everything is too far away” and “walking is too hard” to be large problems with walking. One in five consider “no place to rest” to be a large problem with walking. Respondents with *poor* HDS are many times more likely than their counterparts with *excellent* HDS to report large problems with walking.
- **Taxis.** The problem with taxis cited most frequently by adults age 50+ is the cost of taking a taxi. The percentage of individuals citing this as a problem declines with age.
- **Senior or Community Vans.** Although most adults age 50+ had had no direct experience with senior or community vans, they generally believe there are few problems in using such vans.

Mobility and Social Interaction

Fewer than one in eight respondents age 50+ say transportation problems at least *sometimes* interfere with their ability to get to the doctor, their place of worship, the grocery or drug store, shopping for clothes or household items, entertainment, volunteer activities, or to visit with family or friends. Among respondents age 75+, fewer than 5 percent say they *often* experience problems that interfere with their ability to get to important social and other activities. Individuals with *poor* HDS and those who do not drive are most likely to have transportation problems that interfere with their ability to engage in these activities.

Satisfaction with Mobility

More than two out of three adults age 50+ report being completely satisfied with how they get around their community when they need or want to go someplace. Only a small percentage (2%) of adults age 50+ report being at least somewhat dissatisfied with their mobility. Satisfaction with mobility is correlated not with one’s age but with one’s HDS and driving status. Individuals with *excellent* HDS are more satisfied than individuals with *poor* HDS; drivers are more satisfied than nondrivers.

Conclusions: Implications for Policy

The overarching goal for transportation policy is to keep people mobile and thus able to access the goods, services, work, and social opportunities of their communities. The *Understanding Senior Transportation Survey* provides new information about the transportation mode use, personal mobility, problems with different transportation modes, mobility and social interaction, and satisfaction with mobility among adults age 50+, focusing in particular on adults age 75+. Policymakers can use this information to tailor transportation policies and programs to

enhance the quality of life of America's seniors.

Breaking the Link Between Poor Health and Disability Status (HDS) and Reduced Mobility

The *Understanding Senior Transportation Survey* found that *poor* HDS has a negative correlation with almost every aspect of transportation explored—use, personal mobility, social interactions, and satisfaction with mobility. The survey also found that adults age 50+ with *poor* HDS perceive more and larger problems with every mode than their counterparts with better HDS. Breaking the link between *poor* HDS and reduced mobility among older Americans, therefore, is one area for policy development. Additional research is needed to understand how to encourage and facilitate the use of transportation options by senior citizens with *poor* HDS. One important question for research in this area is whether people with *poor* HDS would travel more if various transportation options were made more accommodating.

Addressing Problems with Specific Modes of Transportation

This survey explored what older persons see as problems with their various mobility options. In many cases, policymakers could take steps to alleviate these problems.

- ***Driving.*** Policymakers could address the inconsideration shown by other drivers via stepped-up enforcement of traffic safety laws (particularly laws that target forms of aggressive driving). Increasing resources for road improvement might ameliorate problems such as traffic congestion and poor roads, cited as problems by more than one in four survey respondents.
- ***Ride Sharing.*** The problems with ride sharing most commonly cited by survey respondents age 50+ are emotional and personal—for example, not wanting to feel dependent or to impose on others. Subsidizing costs of transportation provided by caretakers might help to reduce the perception of the rider that he or she is imposing a burden on the driver. Another policy option might be to specify that the federal Family and Medical Leave Act cover time away from work to drive family members for medical appointments, thereby encouraging family members to provide transportation. In addition, policymakers could support the expansion of more formal ride sharing opportunities such as are found in volunteer transportation programs across the country.
- ***Public Transportation.*** Policymakers could address fear of crime, the problem with public transportation most commonly cited by adults age 50+, through increased deployment of security mechanisms such as good lighting, emergency call boxes, and security personnel. Policymakers also could address operational problems (e.g., unavailable destinations, accessibility) by requiring transportation providers and planners to assure that public transportation efficiently and conveniently serves the destinations sought by older persons. The survey's finding that persons age 75+ with *poor* HDS report greater problems with all aspects of public transportation suggests that policymakers should give priority to addressing the needs of this subgroup.
- ***Walking.*** Policy encouraging zoning that allows for mixed residential and commercial use could help reduce the separation between homes and goods and

services for pedestrians (as well as contribute to cost-efficient public transportation), thereby reducing the difficulties that people encounter with walking. In addition, transportation planners could seek to improve the infrastructure for walking by including in their short- and long-term plans the installation of places to sit at regular intervals.

- **Taxis.** Although taxis offer many of the desired attributes of the car, such as comfort and security, many people age 50+ see their cost as a significant problem. Policymakers could explore reducing the costs to the consumer by providing vouchers to cover some or all of the costs. Human services programs in some cities are currently taking this approach to provide transportation for clients.

As baby boomers age, the issue of continued mobility will grow. Ensuring that transportation exists as a part of a community's infrastructure for this growing population must be a priority for transportation policymakers and planners.

1. Introduction and Overview

Background

Transportation is an essential part of the community infrastructure that individuals need to gain access to the goods, services, and social contacts that support their day-to-day existence and quality of life. As people grow older, they may experience changes in health and physical functioning that challenge their ability to use their usual transportation mode.

Understanding how people travel in their communities and how they perceive their transportation options is crucial to designing satisfactory transportation policy and programs that support access. Despite the importance of transportation to older individuals' quality of life, however, very little research to date has focused on the transportation needs of older individuals.

The Nationwide Personal Transportation Survey (NPTS) (U.S. Federal Highway Administration, 1995) conducted in 1969, 1977, 1983, 1990, and 1995 by the Federal Highway Administration is a key source of data on modes of transportation used by Americans. Although the NPTS primarily focuses on the behavior and needs of commuters—who generally are ages 24 to 65—recent NPTS data show that older Americans who do not drive have less mobility than those who do drive. Three out of four individuals age 75+ who were able to drive went out at least once on the day covered by the survey; in contrast, fewer than half of the adults age 75+ who did not drive went out on the day of the survey.⁵ The 1995 NPTS found that more than eight out of 10 of those age 50+ had a driver's license. The percentage of individuals with a driver's license declined with increasing age, however. Whereas more than nine in 10 of individuals age 50 to 74 reported having a driver's license, only about six in 10 of those age 75+ reported having a driver's license.

Other researchers have found that health and mobility play an important part in facilitating activity and social involvement. One study found a generalized reduction in the number of trips individuals make in their communities among the age 75+ population (Baltes, Mayr, Borchelt, Maas, and Wilms, 1993). It found nondrivers in the age 75+ population to be the most homebound. Indeed, recent research suggests that travel, social, and recreational activities tend to decline with age due largely to health issues. These activities drop off precipitously when people reach their late seventies (Lefrancois, Leclerc and Poulin, 1998).

To expand this knowledge base, AARP conducted a series of focus groups in 1997 to assess the role of transportation in the lives of older persons. Essentially, participants equated freedom and independence with driving and the car. Participants defined freedom as the ability to do something or go somewhere, and defined independence as the ability to do anything, anytime, alone, or with someone of their own choosing, without feeling dependent upon the kindness or support of others (Coughlin, 2001). The AARP focus group study furnished an understanding of the emotional and cultural importance of mobility and independence in the lives of older people.

⁵ The NPTS sample of individuals age 85+ is too small to permit analysis of that subpopulation.

Purpose

In 1998, AARP commissioned the *Understanding Senior Transportation Survey* to quantify the findings of the focus groups and to better understand the transportation needs and preferences of mid-life and older adults. This information is essential to the development of policies to expand and improve transportation options for older persons and the mobility that those options provide. The survey particularly focused on understanding the transportation needs of individuals age 75+ to fill gaps in the existing knowledge base. It also is the first survey to examine a representative sample of those 85+—the fastest growing age group in America.

Methodology

A national telephone survey was conducted among a national, stratified sample of 2,422 adults age 50+. International Communications Research (ICR) of Media, Pennsylvania, fielded the telephone survey in the fall of 1998. In addition to being asked demographic questions (see Appendix A: Demographic Profile of Survey Respondents), respondents were asked about their health and disability status (HDS), their driving status, usual modes of transportation, problems with transportation use, their social interactions, and their overall satisfaction with their mobility (see Appendix B: Annotated Survey Questionnaire). The responses for the 2,422 individuals who answered the completed survey have been weighted by age and gender to match the total U.S. population's age and gender distribution in 1998.

To provide a framework for generalizing the findings of this survey to the population age 75+, the sample of survey respondents includes 578 persons age 50 to 74; 603 persons age 75 to 79; 598 persons age 80 to 84; and 643 persons age 85+. The survey over-samples the population age 75+. This over sampling provides a sufficient number of respondents in the older age cohorts to allow detailed analysis by age. Further, the stratification was necessary to elicit responses from a sample of nondrivers sufficient for analysis.

Individuals in the cohort of those age 50 to 74 were sampled using random-digit-dialing, and existing samples of targeted age groups were used to locate respondents in the older cohorts. Listed samples, purchased from Info USA, were necessary to minimize the expense of reaching 1,800 respondents over age 75. Each interview took an average of 20 minutes to complete. Calling took place between October 6, 1998, and January 8, 1999. Calls were placed both during the day and evening, Sunday through Saturday. Interviews were conducted in English only. The survey had a response rate⁶ of 58 percent.

Based on a sample of 2,422 respondents, the survey has a sampling error of ± 2 percent. This means that in 95 out of 100 samples of this size drawn from the national population, the results obtained in the sample would fall in the range of ± 2 percentage points of what would have been obtained if every household with a working telephone had been interviewed. Larger sampling errors are present when analyzing subgroups of the sample or for questions that were not asked of all respondents. For example, a question asked of 500 respondents would have a margin of error of ± 4.5 percent.

⁶ Response rate is calculated by dividing the proportion of individuals who fully completed the interviews by the number of working telephone numbers tried during the study period.

The survey also was designed to capture responses that accurately represent the characteristics of the community-dwelling population age 50+. To gauge the degree to which health-based nonresponse may bias the findings of the survey, a series of health-related questions was asked of a proxy informant when an age-eligible respondent was identified within a sample household but was unable to participate. A total of 475 proxies were interviewed, representing 16 percent of the combined respondent total (2,897). As expected, the percentage of proxy responses increases between age groups from 10 percent among the 50 to 74 age cohort to 25 percent in the 85+ age group.

Organization of the Report

The chapters that follow present the detailed findings of the AARP *Understanding Senior Transportation Survey*, as well as a discussion of the implications of these findings for transportation policy:

- **Ch. 2: Health and Disability Profiles.** This chapter provides an overview of the survey respondents' health and disability profiles and describes the health and disability status (HDS) index used as a variable in analyses of survey data.
- **Ch. 3: Transportation Mode Use.** This chapter discusses the extent to which respondents use various transportation modes: driving an automobile, getting a ride (referred to as ride sharing), using public transportation, taking a taxi, taking a community or senior van, and walking.
- **Ch. 4: Personal Mobility.** This chapter presents data on the extent to which adults age 50+ are likely to have gone out on any given day or how often they go out in a typical week. These are measures of how connected people are to their communities, and, by inference, their access to community goods, services, and social opportunities.
- **Ch. 5: Problems with Different Transportation Modes.** This chapter discusses respondents' views of the extent to which various potential problems associated with specific transportation modes pose actual problems for them.
- **Ch. 6: Mobility and Social Interaction.** This chapter reports on social interaction experienced by survey respondents and discusses the extent to which transportation limits these social interactions.
- **Ch. 7: Satisfaction with Mobility.** This chapter provides insight into respondents' overall satisfaction with their ability to get to the places they want to go.
- **Ch. 8: Interviews with Proxy Respondents.** This chapter presents the findings from interviews with proxy respondents in households where an age-eligible survey respondent was unable to come to the phone.
- **Ch. 9: Summary and Policy Implications.** The final chapter synthesizes key findings from the AARP *Understanding Senior Transportation Survey* and discusses policy implications.

Each chapter provides data for all respondents age 50+. In addition, detailed information is furnished on respondents age 75+. Where significant differences occur among this group based on age, data are reported by three age-based subgroups: age 75 to 79, age 80 to 84, and age 85+. Several demographic factors—age, income, gender, living arrangements, driving status, health status, disability, and urbanicity—could influence responses to most questions. Statistical models were created to identify the most significant factors in respondent responses.⁷ *Age, health, disability, and driving status* were identified as key factors accounting for the greatest variance in mobility and satisfaction with mobility. Because of the crucial role of these variables, they are examined in detail throughout this report for respondents age 75+.

Demographic data on survey respondents are summarized in Appendix A: Demographic Profile of Survey Respondents. A full, annotated text of the interview script used with survey respondents and proxy informants is included in Appendix B: Annotated Survey Questionnaire.

⁷The multivariate analyses are described in detail in a technical supplement that is available upon request from Anita Stowell, Knowledge Management Group, AARP.

2. Health and Disability Profiles

Overview

As individuals age, their personal mobility becomes increasingly impaired by their changing health and physical limitations. They need more aid in walking, and their visual and auditory acuity declines. This chapter provides an overview of the health and disability profiles of individuals responding to the telephone survey conducted for AARP's *Understanding Senior Transportation Survey*. The chapter also describes the health and disability status (HDS) index—a measure that combines respondents' health status and their physical disabilities. This index is used throughout the analysis in this report to assess the influence of HDS on older individuals' mobility, transportation usage, problems with specific transportation modes, social interaction, and overall satisfaction with their mobility.

Respondents' Health Status

All survey respondents age 50+ were asked to rate their health status as *excellent*, *very good*, *good*, *fair*, or *poor*. More than half of the respondents indicate their health is either *excellent* (23%) or *very good* (29%).

Respondents Age 75+: One in six respondents age 75+ (16%) reports having *excellent* health compared with one in four respondents age 50 to 74 (25%). The greatest differences in the health status ratings of these two age groups occurs because of a shift from the *excellent* rating to the *good* rating. Three in 10 respondents age 75+ (30%) report their health rating as *good* compared with one in four respondents age 50 to 74 (24%).

Respondents' Physical Disabilities

Given the subjectivity of the self-reported measure of health status, respondents were asked additional questions about their functional abilities.

To assess the respondents' physical functioning, the survey asked two questions:

- Do you use a cane, crutches, or walker; an electric scooter; or a wheelchair to get around?
- Do you have difficulty with *seeing* the words and letters in an ordinary newspaper even when wearing glasses, *hearing* what is said in a normal conversation even when using a hearing aid if you use one, *lifting or carrying* something as heavy as 10 pounds, *climbing* a flight of stairs without resting, or *walking* a quarter mile (about three city blocks)?

Nearly nine in 10 respondents age 50+ (88%) report that they require no assistive device when walking, and more than half (55%) of respondents indicate they experience no difficulties with reading, hearing, lifting, climbing stairs, or walking a quarter mile. More than two in five respondents age 50+ (42%) say they have at least one physical limitation.

Respondents Age 75+: The percentage of respondents who say they use a cane, crutch, or walker increases substantially with age. The percentage of respondents age 75 to 79 who say they use an assistive device when walking (17%) is double that of respondents age 50 to 74 (8%). The percentage of respondents age 85+ who indicate they need support when walking (36%) is nearly four times as great as the percentage of respondents age 50 to 74 who say they need such support (see Table 2-1).

The percentage of respondents reporting difficulties with reading, hearing, and carrying a 10-pound package increases with age, and the greatest changes occur among people age 85+. The percentage of respondents age 85+ reporting problems with these activities (reading, 22%; hearing, 27% and carrying a 10-pound package, 34%) is almost double the percentage of respondents age 50 to 74 reporting problems (reading, 13%; hearing, 12%; and carrying a 10-pound package, 19%). The percentage of respondents reporting difficulties with walking a quarter mile or climbing stairs does not increase with age.

The percentage of respondents age 75 to 79 reporting that they have one or more physical limitations (50%) is higher than the percentage of respondents age 50 to 74 reporting such limitations (38%). Moreover, three in five respondents age 85+ (62%) report at least one physical limitation compared with fewer than two in five of respondents age 50 to 74 (38%).

TABLE 2-1: RESPONDENTS AGE 50+ WITH PHYSICAL LIMITATIONS, BY AGE *

Physical Limitations	Total Age 50+* (%) (N=2,422)	Percentage of Respondents with Limitations by Age Group (%)			
		50-74 (N=1,878)	75-79 (N=239)	80-84 (N=159)	85+ (N=146)
Require aids to get around:					
A cane, crutch, or walker	11	8	17	23	36
An electric scooter	**	--	--	--	--
A wheelchair	2	1	3	4	5
None of these	88	92	83	76	64
Difficulty with specific tasks:					
Reading written words	14	13	14	16	22
Hearing	14	12	21	19	27
Lifting or carrying	21	19	24	29	34
Climbing stairs	17	--	--	--	--
Walking ¼ mile	16	--	--	--	--
None of these	55	59	47	43	35
One or more physical limitations	42	38	50	55	62

*Differences in percent are significant among the subgroups. A dash indicates no statistical significance among subgroups.

**Less than 1 percent.

Source: AARP *Understanding Senior Transportation Survey*

Health and Disability Status (HDS) Index

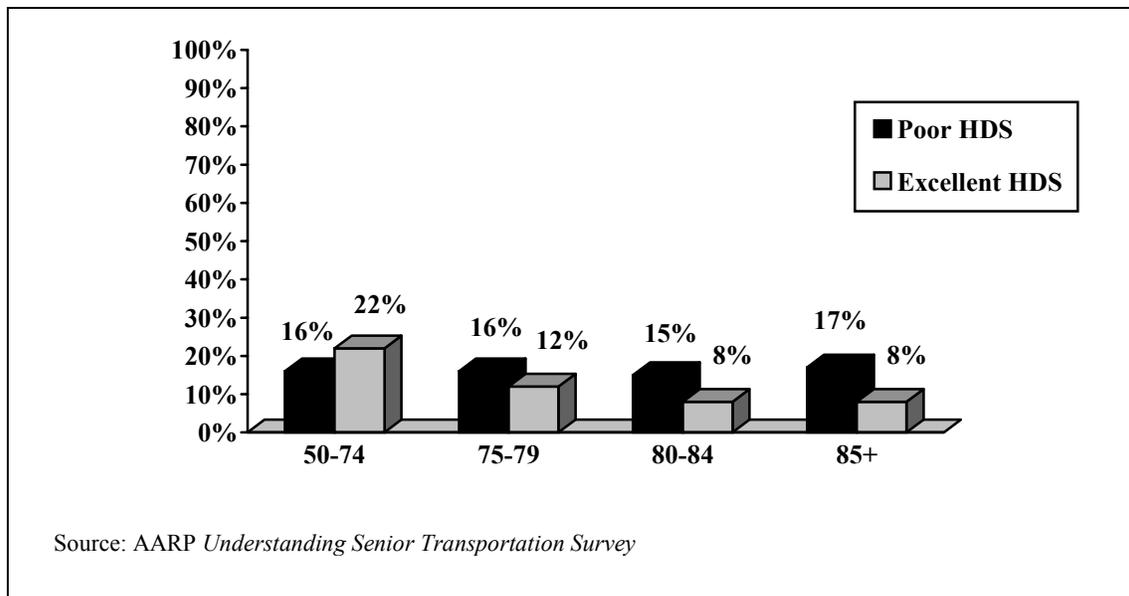
Because health and disability are interrelated, a health and disability status (HDS) index has been created to simultaneously capture the variation in each measure. The HDS index draws on data from two survey questions: *Question 27*, “Would you say your health in general is *excellent, very good, good, fair, or poor?*” and *Question 29*, which assesses the difficulties the respondents have in five areas: reading, hearing, lifting, climbing stairs, and walking (see Appendix B: Annotated Survey Questionnaire).

The health status of a respondent is recorded on a 5-point scale with *excellent* health rated as 5 and *poor* health rated as 1. The count of disabilities is used to describe disability status. For

example, a respondent who reports no disabilities gets a disability score of 0, while a respondent with all five disabilities gets score of 5. The HDS index rating is then calculated by subtracting the number of disabilities from the health rating. Thus, a respondent who reports that he/she is in *excellent* health with no disabilities has an HDS score of 5, while a respondent who reports *poor* health and five disabilities has an HDS score of -4. On the basis of their HDS scores, respondents are classified in four groups: *excellent* HDS (a score of 5), *good* HDS (a score of 3 or 4), *fair* HDS (a score of 1 or 2), or *poor* HDS (a score of 0 to -4).

The percentage of individuals with *excellent* HDS declines with age between ages 50 to 78, and then remains fairly constant (see Figure 2-1). About one in five respondents age 50 to 74 (22%) has *excellent* HDS compared with one in eight respondents age 75 to 79 (12%) and one in 10 respondents age 80+ (8%). Individuals with *poor* HDS make up about one in six respondents in the four age groups that make up the study population (age 50 to 74, 75 to 79, 80 to 84, and age 85+).

FIGURE 2-1: PERCENTAGE OF AGE 50+ RESPONDENTS WITH EXCELLENT AND POOR HEALTH AND DISABILITY STATUS (HDS) RATINGS, BY AGE (N=2,206)



Throughout this report, AARP survey respondents’ scores on the HDS index are used to report on the relationship of respondents’ health and physical limitations to various independent variables.

3. Transportation Mode Use

Overview

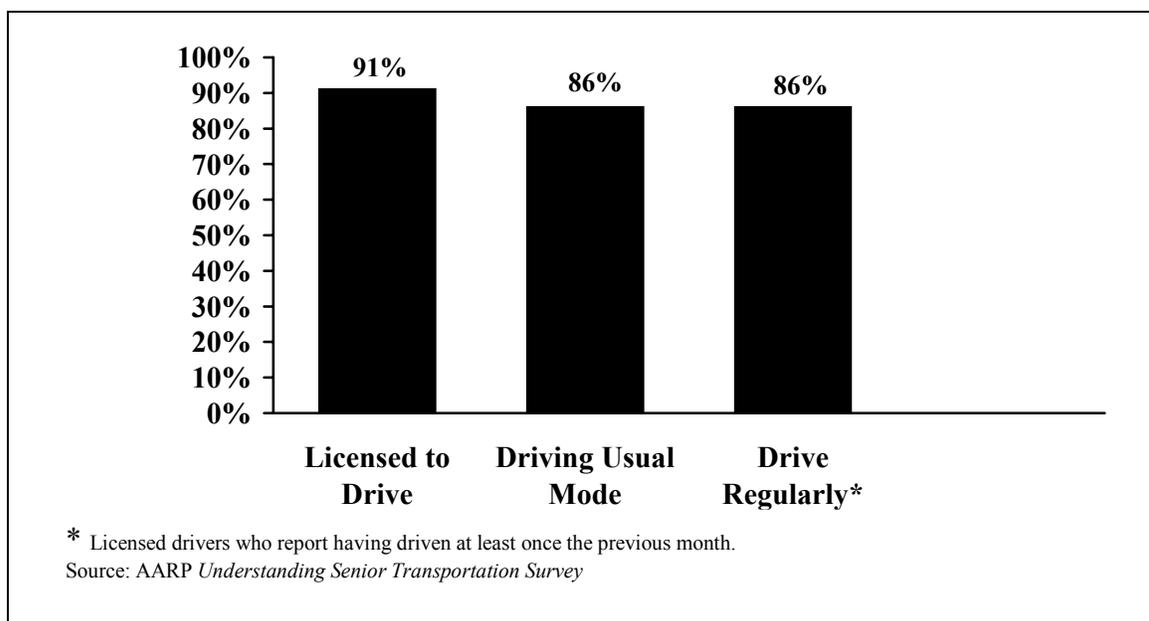
This chapter examines in detail the modes of transportation used by survey respondents. Nearly all respondents depend on the automobile—whether as a driver or as a passenger—to get where they need to go. Few respondents, regardless of age, use public transportation, taxis, senior vans, or walking. Those respondents with a poor HDS rating are more likely than others to only ride share (use the car as a passenger).

Driving

To determine their driving status, respondents were asked two questions: (1) whether they have a driver’s license, and (2) whether they have driven in the past month. Those who had driven in the past month were classified as “regular drivers.”

Among respondents age 50+, more than nine in 10 (91%) report having a driver’s license (see Figure 3-1). The percentage of respondents age 50+ *not* licensed to drive in this age group is higher among women (14%) than among men (3%). The percentage of respondents who are not licensed is also higher among individuals with an annual income of less than \$30,000 (14%) than among individuals with higher incomes (2%). Among respondents age 50+, more than eight in 10 (86%) report having driven in the *past month*. Of the remaining 14 percent of licensed drivers who report not having driven in the past month, more than half indicate they *never* drive.

FIGURE 3-1: PERCENTAGE OF RESPONDENTS AGE 50+ WHO ARE LICENSED, RELY ON DRIVING AS THEIR USUAL MODE OF TRANSPORTATION, AND DRIVE REGULARLY (N=2,422)



All respondents were next asked: “In general, when you need to get somewhere, how do you usually get there?”⁸ About five in six respondents age 50+ (86%) say that driving is their usual mode of transportation. One in seven respondents reports using another form of transportation as the usual mode.

Respondents who indicated they did not have a driver’s license were asked if they had ever been licensed. Although slightly more than one in four nondriving respondents age 50 to 74 (27%) report they had once had a license, two in five nondriving respondents age 75+ (38%) report they had once had a license.

Respondents Age 75+: More than four in five respondents age 75+ (84%) report being licensed to drive. Not all of those with licenses, however, actually drive; one in four respondents age 75+ (25%) is a licensed driver who reports not having driven at least once the previous month. The gap between licensed drivers and those who say they had driven at least once the previous month is greater among respondents age 85+ (75% vs. 60%, a 15 percentage point difference) than among respondents age 75 to 79 (88% vs. 82%, a 6 percentage point difference) (see Table 3-1).

TABLE 3-1: LICENSED DRIVERS AND REGULAR DRIVERS AGE 75+, BY AGE, GENDER AND INCOME

	Total 75+* (%) (N=1,844)	Percentage of Respondents by:						
		Age (%)			Gender (%)		Income (%)	
		75-79 (N=809)	80-84 (N=539)	85+ (N=496)	Male (N=657)	Female (N=1,187)	<\$30,000 (N=904)	\$30,000+ (N=935)
Licensed driver	84	88	87	75	95	78	81	87
Regular driver**	75	82	78	60	91	66	71	79

*Differences in percent are significant among the subgroups.

**The term regular drivers refers to licensed drivers who report having driven at least once the previous month.

Source: AARP *Understanding Senior Transportation Survey*

Income and gender significantly influence both licensing and driving status of adults age 75 and over. The percentage of higher income respondents who are licensed and driving (87%) is higher than the percentage of their lower income counterparts (81%) who are doing so (Table 3-1). Similarly, men (95%) are far more likely than women (78%) to be licensed and to say they have driven at least once the previous month. At older ages, the difference between men and

⁸ Most respondents gave only one response to this question, however, 4 percent listed multiple transportation modes as their usual mode.

women is wider. For respondents age 75 to 79, the gap between men (94%) and women (74%) who are classified as drivers is 20 percentage points; at age 85, the gap between men (83%) and women (52%) who are classified as drivers is 31 percentage points.

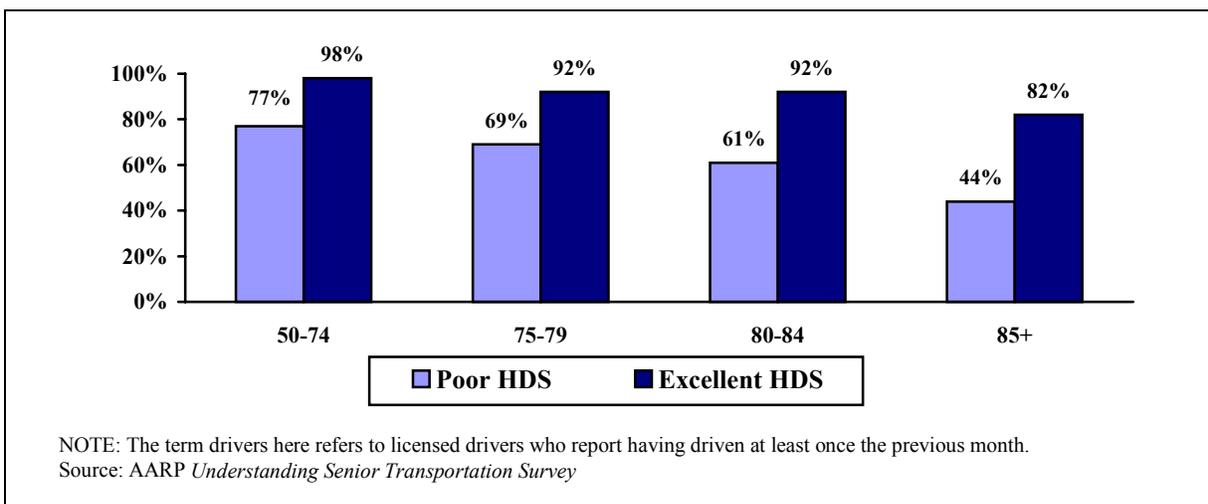
Whereas four in five respondents age 75 to 79 (83%) and age 80 to 84 (78%) report that driving is their primary mode of transportation, only three in five respondents age 85+ (60%) report that driving is their primary mode. Notably, the percentages of our respondents age 75+ who report that they are licensed to drive are significantly higher than the data on licensed drivers available in *Highway Statistics 1998*, published by the Federal Highway Administration (FHWA). We speculate that these differences probably occur because the FHWA estimates are based on the full population of persons age 75+, both institutionalized and noninstitutionalized. Our survey data reflect the responses of those persons who are noninstitutionalized and who are physically capable of participating in a telephone survey.

Influence of Health and Disability Status (HDS) on Driving

The percentage of respondents age 50+ who are drivers declines with declining HDS. For purposes of this analysis, the term *drivers* henceforth refers to individuals who are licensed to drive and report having driven during the past month. *Nondrivers* are individuals who fall into any of the following categories: (1) individuals who are licensed but report not having driven in the past month, (2) individuals who have surrendered their driver’s license, and (3) individuals who have never been licensed.

Nearly all respondents age 50+ with *excellent* HDS (97%) drive, but only three-quarters of those with *poor* HDS (74%) drive. As age increases, the percentages of individuals with *poor* HDS who continue to drive declines (see Figure 3-2). Among respondents age 85+, four out of five (82%) of those with *excellent* HDS are drivers compared with slightly less than half (44%) of those with *poor* HDS.

FIGURE 3-2: PERCENTAGE OF DRIVERS, BY AGE AND HEALTH DISABILITY STATUS (N=2,209)



Drivers in Household

The more individuals there are living in a household, the more likely there are to be drivers. Six in 10 respondents age 50+ (60%) live with at least one other person, and the average number of drivers per household is 1.5. The average number of drivers per household for respondents age 50 to 74 is 1.6. Seventeen percent of respondents age 75+ have no drivers in their household. Nearly half (49%) of all households surveyed have two or more drivers, and two in five (40%) have one driver. One in 10 households surveyed (10%) has no drivers.

A sizable percentage of respondents age 50+ with *poor* HDS have no drivers in their household. The percentage of respondents with *poor* HDS reporting there is no driver in the household (29%) is higher than the percentage of respondents with *excellent* HDS reporting no driver (9%).

Respondents Age 75+: Older respondents are more likely to live alone than their younger counterparts. More than twice as many respondents age 85+ live alone compared with those respondents age 50 to 74.

As age increases and household size declines, the number of drivers per household similarly declines. Approximately one in 10 respondents age 75 to 79 (11%) and one in seven respondents age 80 to 84 (14%) have no drivers in their home. The greatest change occurs among respondents age 85+. For those age 85+, the average number of drivers per household declines to less than one (0.7). Three in 10 respondents age 85+ (29%) say they have no driver in their household compared with less than one in 10 respondents age 50 to 74 (7%). Among respondents ages 75+, the percentage of respondents with *poor* HDS who say there is no driver in their household (29%) is more than three times as high as the percentage of respondents with *excellent* HDS who say there is no driver (9%).

Ride Sharing

One in eight respondents age 50+ (13%) reports ride sharing⁹ is his/her usual mode of transportation. More than four in 10 respondents age 50+ (43%), however, indicate that they ride share at least once a month.

Respondents Age 75+: Those who are older and who are nondriving (see Table 3-2) ride share more frequently than their counterparts.

⁹ Respondents were asked, "In general, when you need to get somewhere how do you usually get there? Thirteen percent indicated that they get a ride. This percentage does not include those who say they take taxis, public transportation, senior or community vans, or transportation services for persons with disabilities. In this report, these persons are referred to as ride sharers or as ride sharing.

TABLE 3-2: RIDE SHARERS AGE 75+, BY AGE, HEALTH AND DISABILITY STATUS, AND DRIVING STATUS

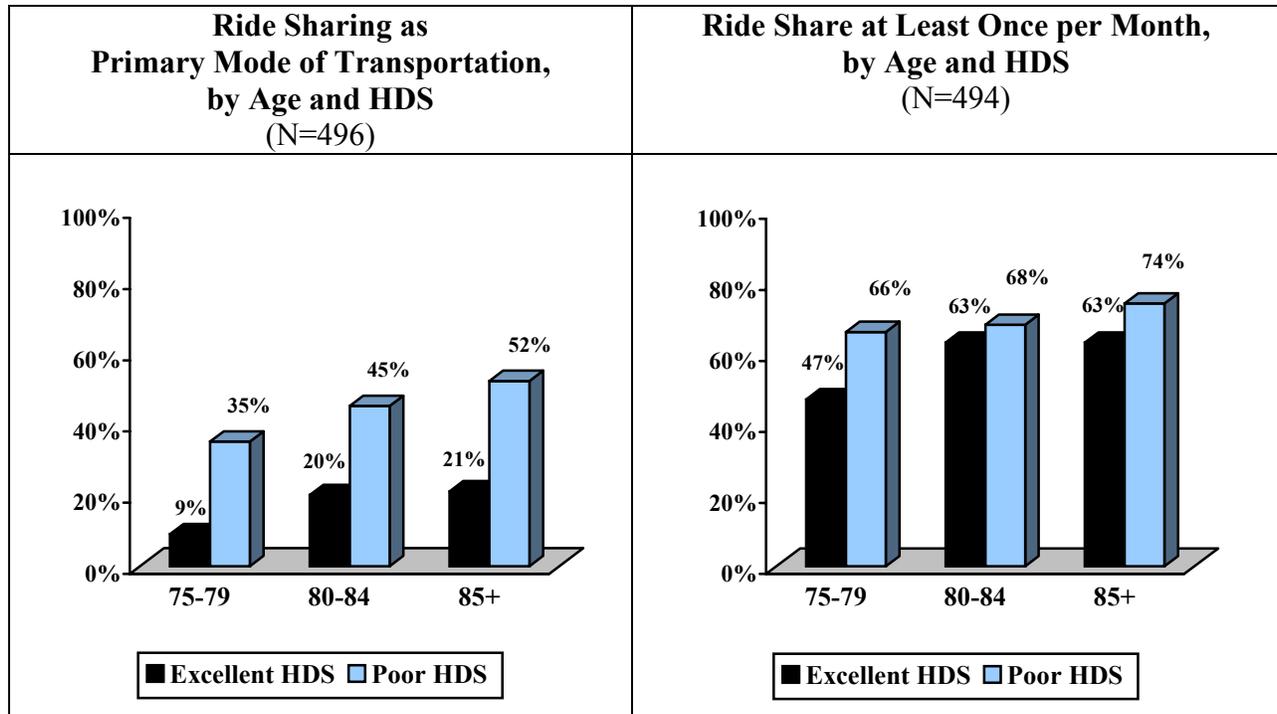
Extent of Ride Sharing	Total 75+* (%) (N=1,844)	Age (%)			HDS (%)		Driving Status (%)	
		75-79 (N=809)	80-84 (N=539)	85+ (N=496)	Poor (N=284)	Excellent (N=167)	Driver (N=1,383)	Nondriver (N=461)
Ride sharing as primary mode	26	19	26	40	43	14	12	69
Ride share at least once per month	60	54	63	67	72	56	53	86

*Differences in percent are significant among the subgroups.

Source: AARP *Understanding Senior Transportation Survey*

As age increases, ride sharing is also strongly influenced by HDS (see Figure 3-3). More of those with *poor* HDS status both rely on ride sharing and obtain rides at least once a month than those with *excellent* HDS. And by age 80, even those with *excellent* HDS tend to ride share more than those with *excellent* HDS who are younger.

FIGURE 3-3: RIDE SHARING AMONG RESPONDENTS AGE 75+, BY AGE AND HEALTH AND DISABILITY STATUS



Source: AARP Understanding Senior Transportation Survey

Walking

Few respondents age 50+ (5%) indicate they walk when they want to go someplace, but nearly two in five (38%) say they walk when they want to go someplace at least once a month.

Respondents Age 75+: No significant variations in response occur based on age alone. HDS, however, has a major influence on how frequently older respondents report walking. One in three respondents age 75+ (33%) reports walking on a monthly basis. The percentage of respondents age 75+ with *poor* HDS who report walking on a monthly basis (21%) is only about half the percentage of respondents age 75+ with excellent HDS who report doing so (47%).

Public Transportation

A small percentage of respondents age 50+ indicate they use public transportation (5%), taxis (1%), or senior vans (1%) as their primary mode of transportation. A slightly larger percentages indicate that they use public transportation (9%), senior vans (4%), or taxis (2%) on a monthly basis.

Respondents Age 75+: A small percentage (5%) of respondents age 75+ say public transportation is their usual mode of transportation. There are no significant differences among the three older age segments (age 75 to 79, 80 to 84, and 85+). Among respondents age 75+, public transportation is the usual mode for one in seven nondrivers (14%) and for one in 100 drivers (1%). Furthermore, about two in 10 nondrivers (19%) in this population ride public transportation on a monthly basis compared with less than one in 20 drivers (5%).

A similar trend is observed with the use of senior vans and taxis in the older population. Overall, taxi usage by respondents age 75+ is uncommon, with only a small percentage of respondents (3%) identifying taxis as their usual transportation mode. Although virtually no drivers age 75+ report taking taxis, about one in 10 nondrivers (10%) say it is their usual mode. One in 10 nondrivers (10%) takes taxis on a monthly basis compared with less than one in 100 drivers (1%).

A small percentage (3%) of respondents age 75+ indicate that senior vans are their usual mode of transportation. A larger percentage (8%) report using senior vans on a monthly basis. Substantially more nondrivers than drivers report that senior vans are their usual mode of transportation (9% and 1% respectively). The percentage of non drivers age 75+ who use senior vans on a monthly basis (17%) is higher than the percentage of drivers who say they use senior vans on a monthly basis (5%).

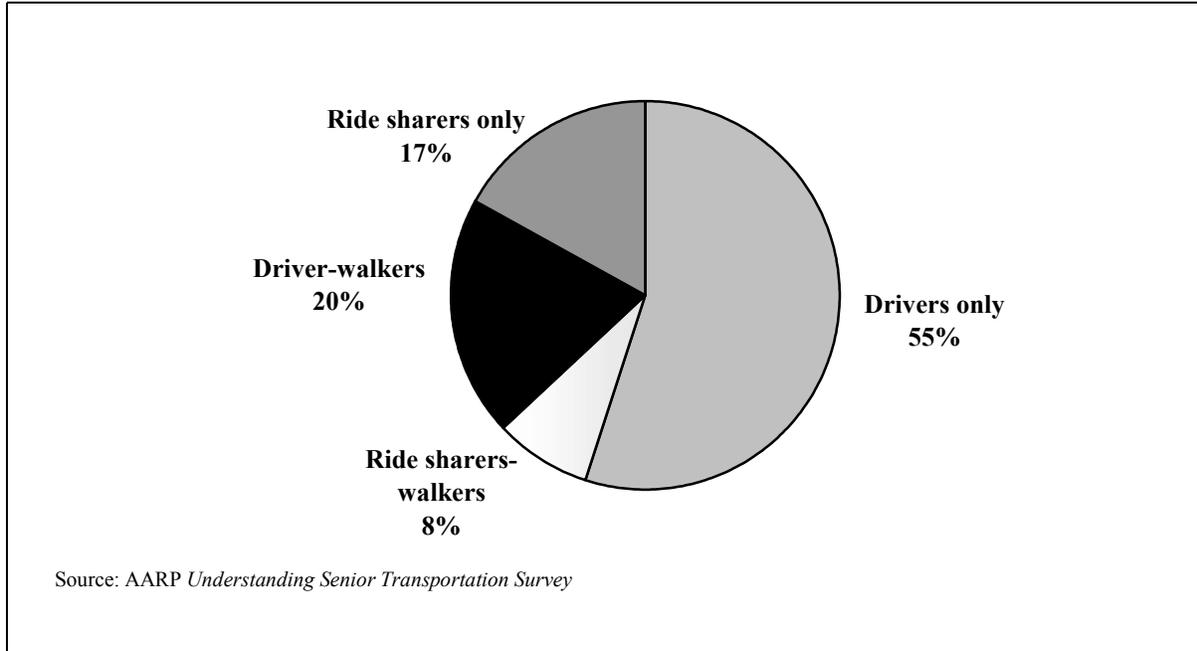
Use of Multiple Transportation Modes

The choice of mode is not necessarily an exclusive one. People typically use multiple modes of transportation. A cluster analysis was conducted on various modes to better understand how modal choices may vary among respondents age 75+. After extensive experimentation, a four-cluster solution was selected as the best reflection of the modal behavior found in the survey. The four clusters are drivers only, ride sharers only, drivers who walk, and ride sharers who walk.¹⁰

Respondents Age 75+: The majority (72%) of older respondents exclusively use one mode of transportation. More than half of older respondents only drive, and about one in five only ride share. However, slightly more than one in four (28%) respondents walk as well as drive or ride share. One in five older respondents drives and walks, and another one in 12 both ride shares and walks (see Figure 3-4).

¹⁰ These four clusters classify respondents by their strongest primary transportation mode. Although some respondents use other modes of transportation occasionally, all respondents are classified into one of these four categories.

FIGURE 3-4: USE OF MULTIPLE TRANSPORTATION MODES: FOUR MODEL CLUSTERS FOR RESPONDENTS AGE 75+ (N=1,826)



Perhaps the most important difference emerging from this four-cluster model relates to personal mobility, or how much a person is likely go out in a typical week. Respondents who depend solely on ride sharing have the least mobility; on average, nonwalking ride sharers have 2.4 outings per week. Other respondents have more than three outings per week on average: ride sharers-walkers (3.2 outings); drivers (3.3 outings), and drivers who also walk (3.5 outings).

As age increases, the percentage of respondents who only drive declines substantially. However, the percentage of older respondents who drive and walk declines slightly. With increasing age, there is a noticeable decline in driving with a concomitant increase in ride sharing (see Table 3-3).

TABLE 3-3: MODAL CHOICE OF RESPONDENTS AGE 75+, BY AGE

Modal choice	Total 75+* (%) (N=1,826)	Age Group (%)		
		75-79 (N=799)	80-84 (N=534)	85+ (N=495)
Drive only	55	61	56	44
Drive and walk	20	21	22	16
Ride sharing and walk	8	7	7	10
Ride sharing only	17	11	15	31

*Differences in percent are significant among the subgroups.
 Source: AARP *Understanding Senior Transportation Survey*

Substantially more older women (24%) than older men (5%) report they only ride share. HDS also influences modal options. Substantially more of respondents with *excellent* HDS either drive only (53%) or drive and walk (35%) than use other modal options; conversely, the majority of respondents with *poor* HDS either drive only (52%) or ride share only (33%).

Where people live also influences modal choice. Substantially more of those who live in the country (70%) and suburbs (60%) than those who live in cities (53%) and small towns (50%) only drive (see Table 3-4). Conversely, those who live in the country (9%) are less likely than those who live in cities (18%), suburbs (16%), and small towns (20%) to ride share only. More of those who dwell in cities and small towns walk as well as either ride share or drive than those who live in suburbs or the country. This suggests that environment and opportunity, as well as HDS, restrict walking.

TABLE 3-4: MODAL CHOICE OF RESPONDENTS AGE 75+, BY COMMUNITY TYPE

Community Type	Usual Transportation Mode (%)			
	Drive Only (N=1,006)	Drive & Walk (N=363)	Ride Share Only (N=316)	Ride Share & Walk (N=140)
City	53	19	18	11
Suburb	60	19	16	5
Small town	50	23	20	7
Country	70	16	9	5

*Differences in percent are significant among the subgroups. A dash indicates no statistical significance among subgroup.
 Source: AARP *Understanding Senior Transportation Survey*

4. Personal Mobility

Overview

Personal mobility can be characterized by how often a person goes out (i.e., leaves home). This chapter presents data on the extent to which adults age 50+ are likely to have gone out on any given day or how often they go out in a typical week. These are measures of how connected people are to their communities, and, by inference, their access to community goods, services, and social opportunities. While respondents overall are likely to have gone out the previous day or during a typical week, older nondrivers and those with *poor* HDS ratings are the least likely to do so.

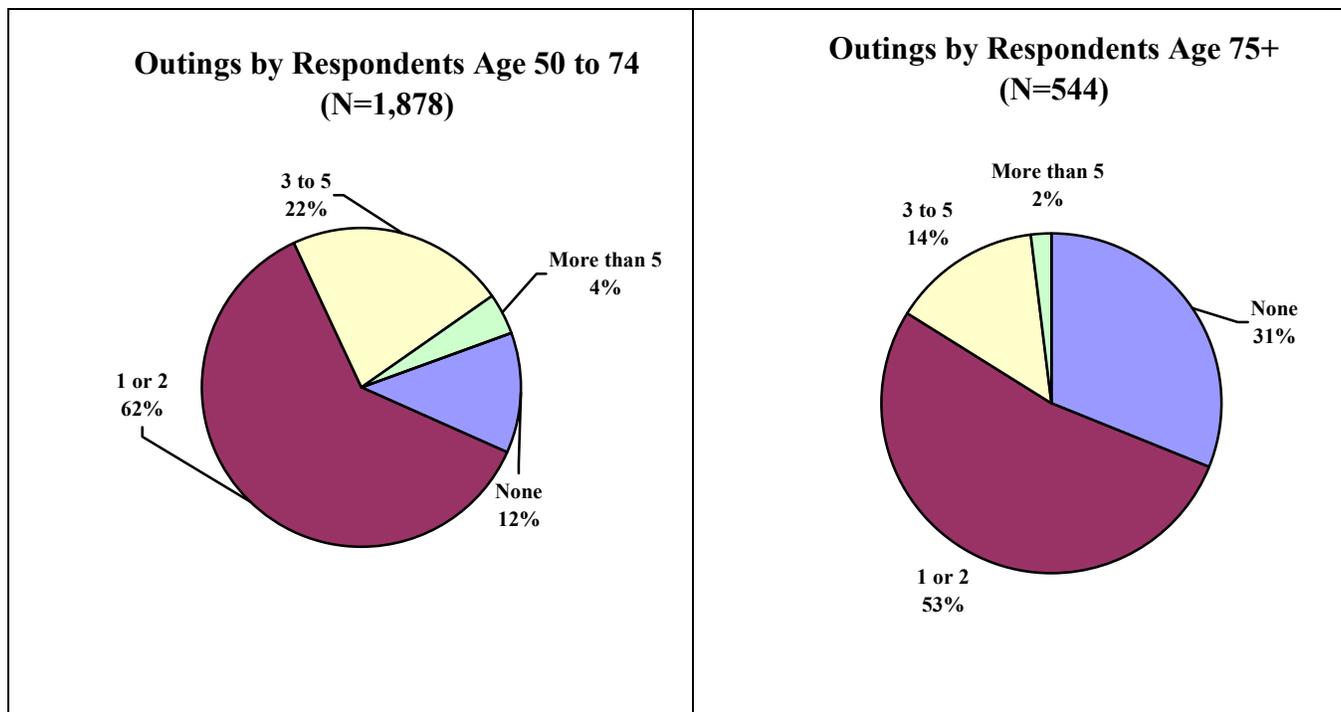
Notably, persons age 85 and older who drive or who have *excellent* HDS have greater personal mobility than their younger counterparts who do not drive or who have *poor* HDS.

Outings the Previous Day

Respondents were asked how many times they left their home the previous day to go some other place. More than four in five respondents age 50+ (82%) say they had gone out at least once the previous day; one in six respondents (16%) reports not leaving home the previous day.

Respondents Age 75+: Age has a significant influence on the number of outings on the previous day respondents report. Respondents age 75+ indicate fewer outings the previous day than those age 50 to 74 (2.5 times on the previous day, down from 3.5) (see Figure 4-1). Of the older cohort, those age 85+ are the least mobile; on average they report, going out only twice the prior day.

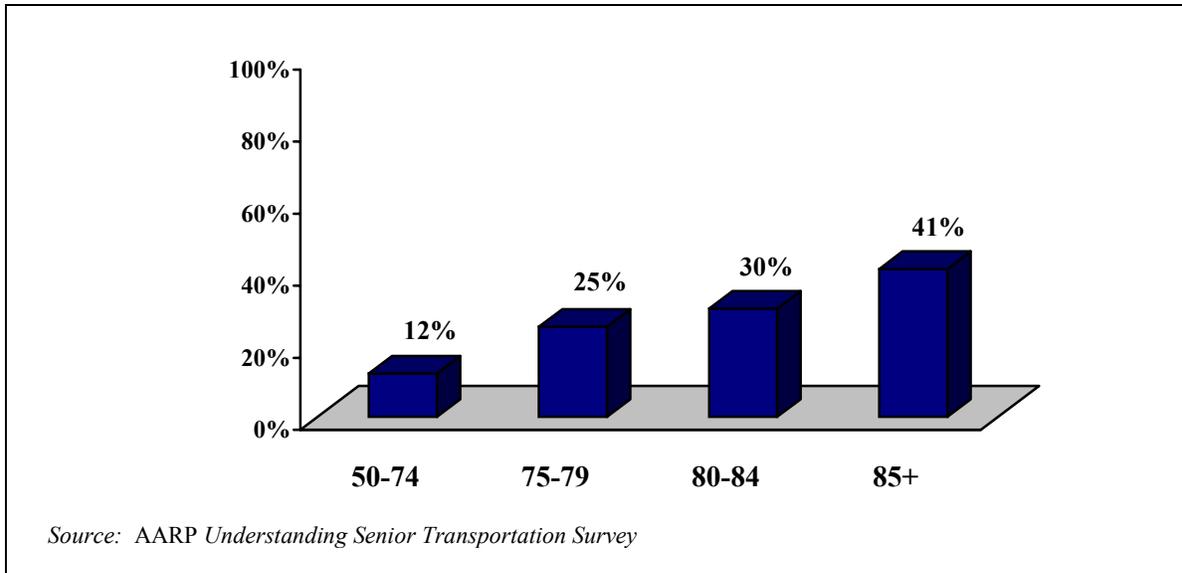
FIGURE 4-1: REPORTED NUMBER OF OUTINGS THE PREVIOUS DAY AMONG RESPONDENTS AGE 50+, BY AGE GROUP



Source: AARP Understanding Senior Transportation Survey

As age increases, the percentage of respondents reporting they did not leave home the prior day increases. Whereas one in eight respondents age 50 to 74 (12%) reports not having left home the previous day, the comparable figure among respondents age 75+ is one in three (31%) (see Figure 4-2). Whereas one in four respondents age 75 to 79 (25%) reports not having left home the previous day, the figure for respondents age 85+ is four in 10 (41%) (see Figure 4-2).

FIGURE 4-2: PERCENTAGE OF RESPONDENTS AGE 50+ WHO REPORT NOT GOING OUT THE PREVIOUS DAY, BY AGE (N=2,422)



Older respondents with *excellent* HDS and older nondrivers are significantly more likely than their counterparts to report that they had gone out the previous day (see Table 4-1). Among respondents age 75+, the percentage of respondents with *excellent* HDS who went out at least once the previous day is 85 percent; the percentage of their counterparts with *poor* HDS who went out is only 58 percent.

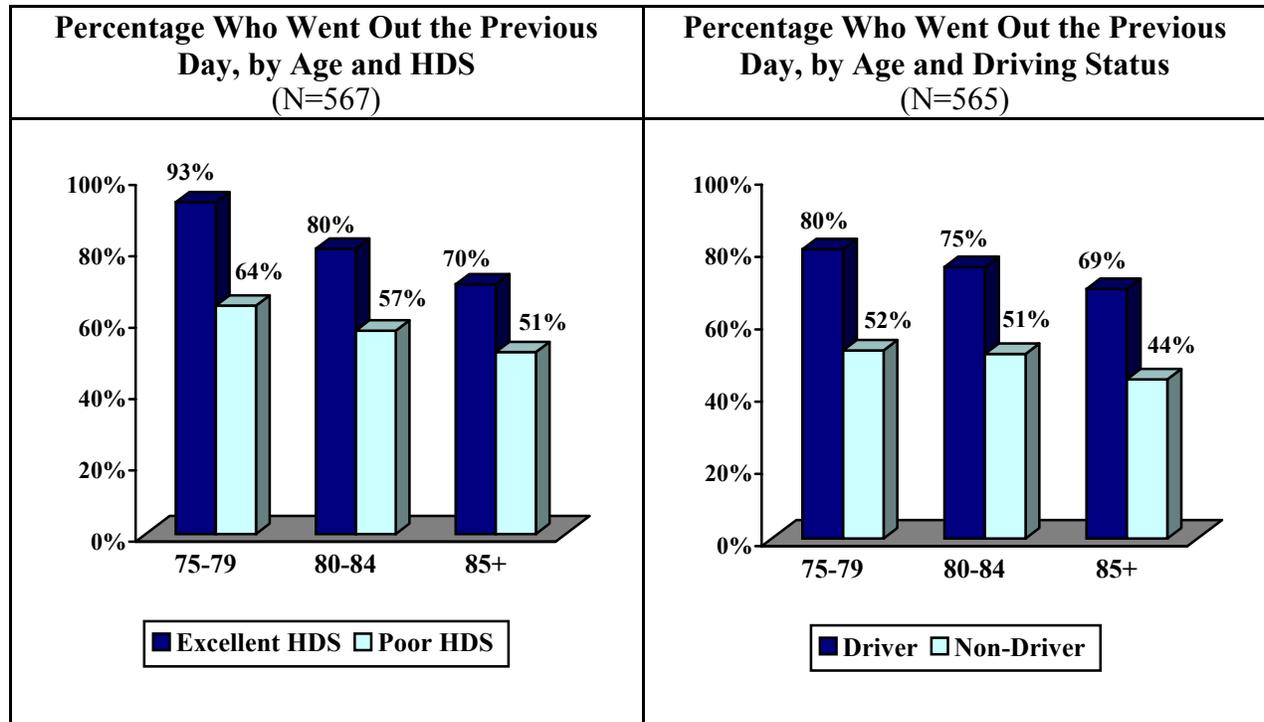
TABLE 4-1: NUMBER OF OUTINGS THE PREVIOUS DAY REPORTED BY RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS

NUMBER OF OUTINGS	Total 75+* (N=1,844)	Percentage (%) of Respondents Reporting Number of Outings by:			
		Driving Status		HDS	
		Driver (N=1,367)	Nondriver (N=457)	Poor (N=280)	Excellent (N=163)
5+	2	25	1	<1	4
3 to 5	14	17	5	7	17
1 to 2	52	56	42	50	64
None	31	24	52	42	16

*Differences in percent are significant among the subgroups
Source: AARP Understanding Senior Transportation Survey

Notably, if they have *excellent* HDS or they drive, even the oldest old (those 85+) are more likely to have gone out on the previous day than their younger counterparts age 75 to 79. Seventy percent of respondents age 85+ with *excellent* HDS went out on the previous day compared with 64 percent of respondents age 75 to 79 with *poor* HDS (see Figure 4-3).

FIGURE 4-3: PERCENTAGE OF RESPONDENTS AGE 75+ WHO WENT OUT THE PREVIOUS DAY, BY AGE, HEALTH AND DISABILITY STATUS, AND DRIVING STATUS

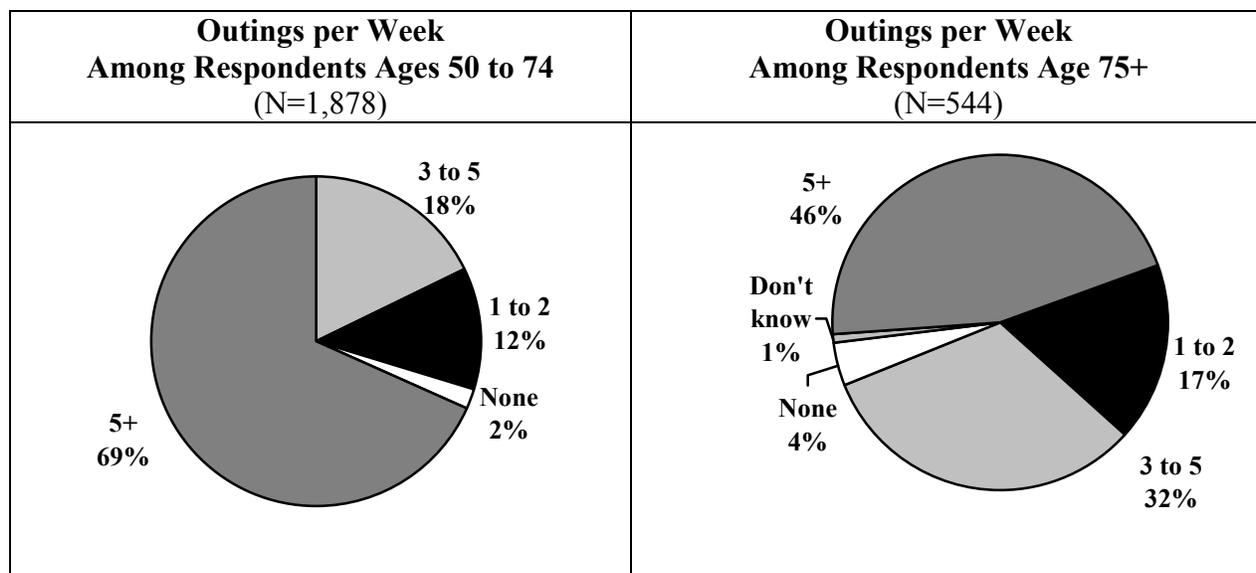


Source: AARP Understanding Senior Transportation Survey

Outings in a Typical Week

Respondents age 50+ were also asked how often they go out in a typical week. On average, respondents go out at least five times per week. About two in three respondents (69%) go out five or more times per week, and one in five (18%) gets out between three and five times (see Figure 4-4). Although a significant portion of respondents age 50+ is likely not to have gone out on the previous day (16%), very few respondents (2%) do not go out at all during a typical week. The number of times people go out during the typical week declines as people get older.

FIGURE 4-4: NUMBER OF OUTINGS IN A TYPICAL WEEK AMONG RESPONDENTS AGE 50+, BY AGE GROUP



Source: AARP *Understanding Senior Transportation Survey*

Respondents Age 75+: Almost half (45%) of respondents age 75+ go out five or more times per week compared with more than two-thirds (69%) of respondents age 50 to 74. There are significant variations among the three older age segments (see Table 4-2). Half of respondents age 75 to 79 (50%) get out five or more times compared with slightly more than one-third of those age 85+ (35%). Nearly three in 10 respondents age 85+ (29%) went out two or fewer times per week compared with about one in five respondents ages 75 to 84 (17%). Notably, the percentage of respondents who do not get out at all more than triples for those age 80 to 84 (2%) and those age 85+ (7%).

TABLE 4-2: NUMBER OF OUTINGS IN A TYPICAL WEEK AMONG RESPONDENTS AGE 75+, BY AGE, DRIVING STATUS, AND HEALTH AND DISABILITY STATUS

Number of Outings	Total 75+* (N=1,844)	Percentage (%) of Respondents Reporting Number of Outings by:						
		Age			Driving Status		HDS	
		75-79 (N=809)	80-84 (N=539)	85+ (N=496)	Driver (N=1,367)	Nondriver (N=450)	Poor HDS (N=278)	Excellent HDS (N=166)
5+	46	50	47	35	53	23	26	60
3 to 5	32	--	--	--	--	--	37	25
1 to 2	17	14	18	22	13	30	29	15
None	4	3	2	7	1	12	9	1

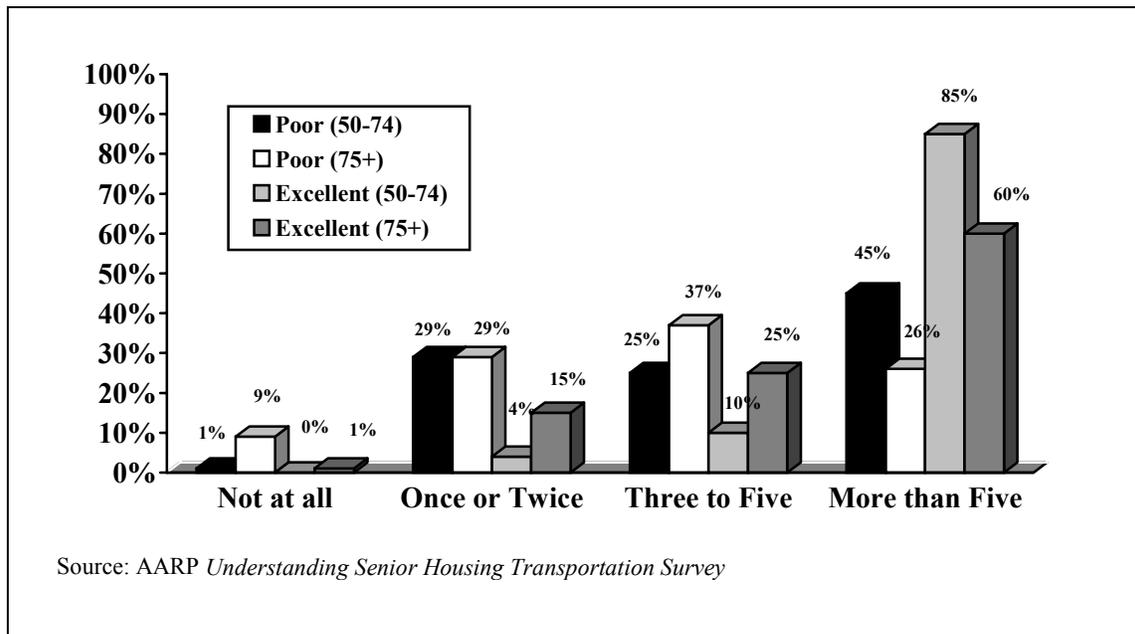
*Differences in percent are significant among the subgroups. A dash indicates no statistical significance among subgroup.

Source: AARP *Understanding Senior Transportation Survey*

The least mobile among respondents age 75+ are nondrivers and individuals with *poor* HDS. Whereas only 1 percent of drivers age 75+ do not go out during a typical week, 12 percent of nondrivers do not go out. Similarly, whereas almost all individuals age 75+ with *excellent* HDS go out at least once during a typical week, 9 percent of individuals age 75+ with *poor* HDS do not go out in a typical week (see Figure 4-5).

Notably, older persons with *excellent* HDS go out more frequently in a typical week than do younger persons with *poor* HDS. While 60 percent of respondents age 75+ with *excellent* HDS go out more than five times a week, only 45% of those age 50 to 74 with *poor* HDS go out that often (see Figure 4-5).

FIGURE 4-5: NUMBER OF OUTINGS IN A TYPICAL WEEK AMONG RESPONDENTS AGE 50+, BY AGE AND HEALTH AND DISABILITY STATUS (N=2,422)



Finally, respondents age 75+ who live alone have fewer outings in the typical week than their counterparts who live with others. Two in five of those who live alone (41%) report at least five outings in a typical week compared with nearly three in five of those who live with others (57%).

5. Problems with Different Transportation Modes

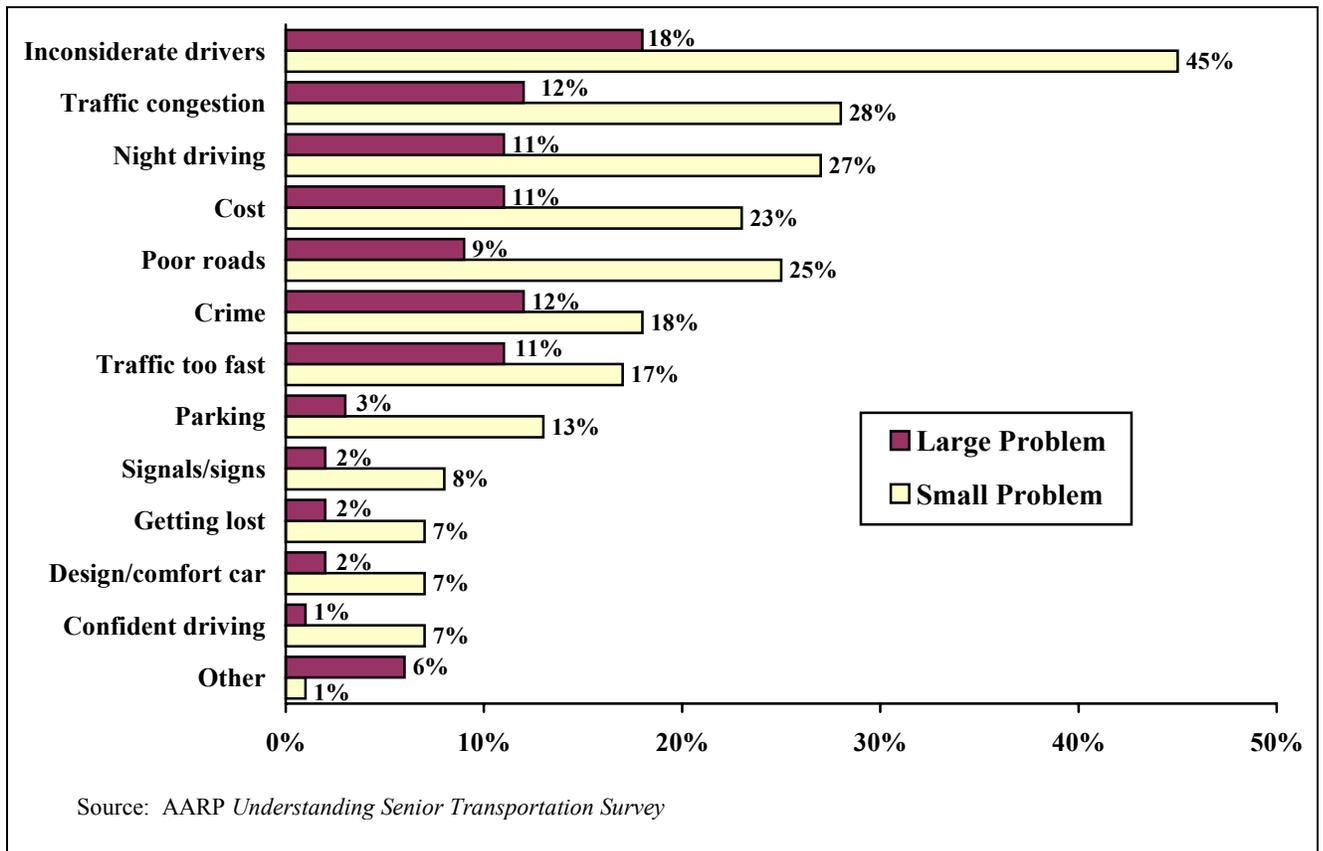
Overview

This chapter discusses respondents' perceptions of problems with different transportation modes: driving, riding, walking, public transportation, senior and community vans, and taxis. Survey respondents age 50+ were asked to rate potential problems with each different mode of transportation, regardless of whether they report using that mode or not.

Problems with Driving Cited by Licensed Drivers

Licensed drivers age 50+ were presented with 12 difficulties some people experience when driving. They were asked to rate them as a *large problem*, *small problem*, or *no problem*. Among licensed drivers age 50+ responding to this survey question, nearly two out of three (63%) report that inconsiderate drivers are at least a *small problem*, making this issue the most commonly expressed driving problem; about one out of five of these licensed drivers (18%) consider inconsiderate drivers to be a *large problem*. More than one in four respondents say traffic congestion, night driving, cost, poor roads, crime, or fast traffic are at least *small problems* when driving; each of these items is rated as a *large problem* by about one out of 10 of licensed drivers (see Figure 5-1).

FIGURE 5-1: PERCENTAGE OF LICENSED DRIVERS AGE 50+ CITING PROBLEMS WITH DRIVING
(N=2,196)



Respondents Age 75+: Driving at night is the only problem with driving that increases with age. Fewer than one in five respondents age 75 to 79 (17%) reports driving at night is a *large problem* compared with about one in four respondents age 80 to 84 (23%) or age 85+ (24%) (see Table 4-3). Less than one in 10 respondents age 50 to 74 (9%) says that night driving is a *large problem*.

TABLE 5-1: LARGE PROBLEMS WITH DRIVING CITED BY LICENSED DRIVERS AGE 50+ THAT VARY BY AGE

Problem	Total 50+* (%) (N=2,196)	Percentage of Respondents Citing as Large Problem by Age (%)			
		50-74 (N=1,739)	75-79 (N=210)	80-84 (N=138)	85+ (N=109)
Cost	11	12	6	6	5
Inconsiderate drivers	18	19	16	12	12
Night driving	11	9	17	23	24

*Differences in percent are significant among the subgroups.
Source: AARP *Understanding Senior Transportation Survey*

Two problems with driving decline with age—namely, concerns about cost and inconsiderate drivers. Whereas one in five respondents age 50 to 74 (18%) says inconsiderate drivers are a *large problem*, only about one in eight respondents age 80+ (12%) considers them as a *large problem*. Cost is considered a *large problem* by 12 percent of respondents age 50 to 74 but only by 6 percent or less of respondents age 75+.

HDS affects many of the ratings of potential driving problems. With the exception of vehicle design and comfort and fear of getting lost, more licensed drivers age 75+ with *poor* HDS say every item is a problem than do those who have *excellent* HDS. Driving at night and inconsiderate drivers are the two most critical problems for those with *poor* HDS (see Table 5-2).

TABLE 5-2: LARGE PROBLEMS WITH DRIVING CITED BY LICENSED DRIVERS AGE 75+, BY HEALTH AND DISABILITY STATUS

Problem	Total 75+* (%) (N=1,550)	Percentage of Respondents Citing as Large Problem by HDS (%)	
		Poor HDS (N=284)	Excellent HDS (N=167)
Cost	6	11	4
Congestion	11	16	3
Getting lost	2	--	--
Inconsiderate drivers	14	18	7
Fast traffic	11	21	5
Signals	3	5	1
Poor roads	7	14	3
Parking	3	7	1
Crime	10	12	5
Car design	2	--	--
Confidence	2	4	0
Night driving	20	36	10

*Differences in percent are significant between the subgroups. A dash indicates no statistical significance between subgroups.

Source: AARP *Understanding Senior Transportation Survey*

Problems with Driving Cited by Former Drivers

Former drivers age 50+ were asked to think about their decision to stop driving, and to indicate whether these same 12 situations were a problem for them. Former drivers are significantly more likely than drivers to rate six driving situations as *large problems* (see Table 5-3). The three *large problems* cited by most former drivers are fast traffic, congestion, and night driving, and they are more likely than drivers to cite them as *large problems*. Few drivers (1%) rate confidence as a *large problem*; however, about one in five former drivers (19%) rates it as one. Somewhat more drivers (12%) than former drivers (7%) perceive crime as a problem. The small number of former drivers in the sample precludes subgroup analysis.

TABLE 5-3: LARGE PROBLEMS WITH DRIVING CITED BY DRIVERS AND FORMER DRIVERS AGE 50+

Problem	Percentage of Respondents Citing as Large Problem by Driving Status (%)	
	Drivers (N=2,196)	Former Drivers (N=87)
Cost	11	10
Congestion	12	28
Getting lost	2	12
Inconsiderate drivers	18	20
Fast traffic	11	29
Signals	2	13
Poor roads	9	9
Parking	3	6
Crime	12	7
Car design	2	2
Confidence	1	19
Night driving	11	25

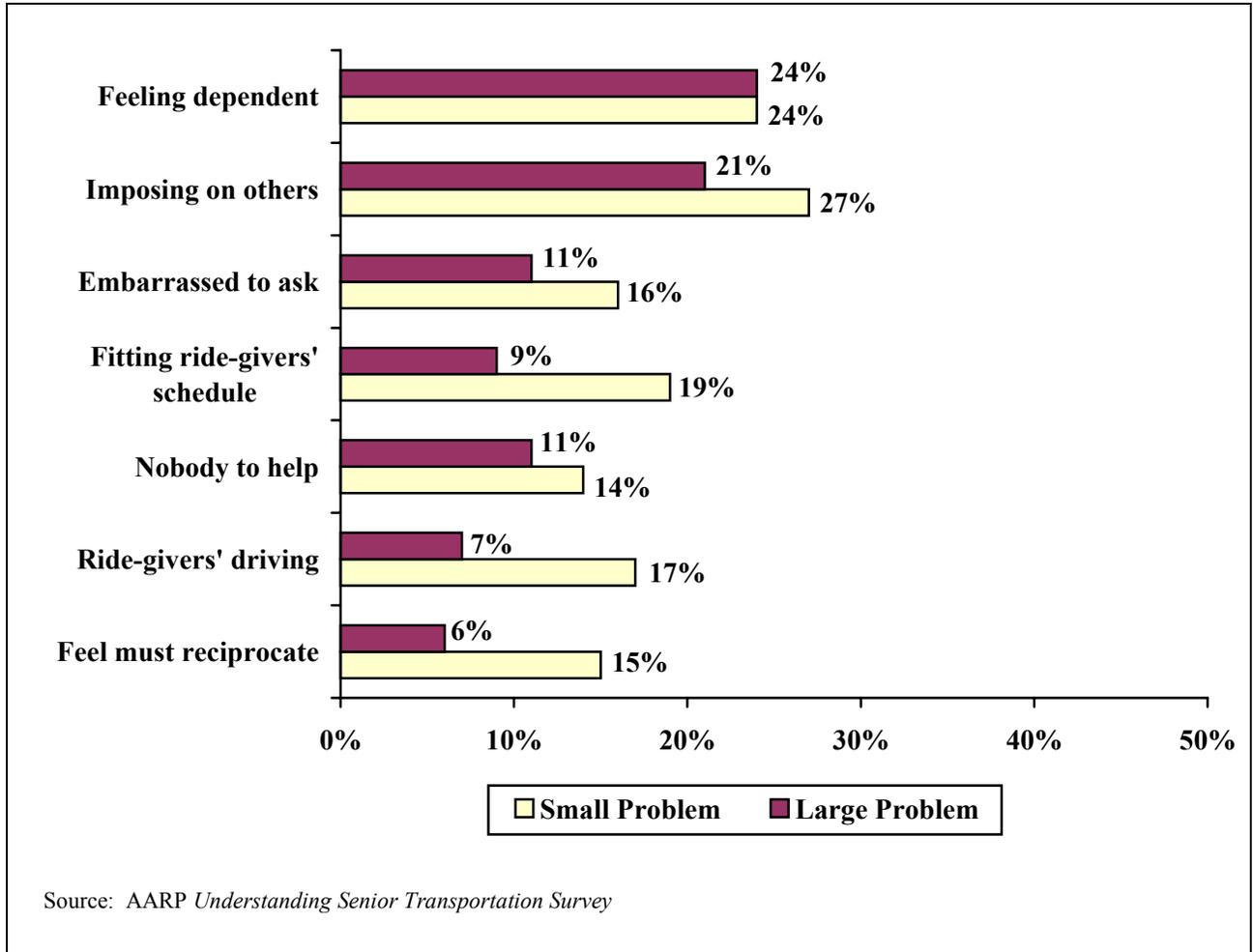
*Differences in percent are significant between the subgroups.
 Source: AARP *Understanding Senior Transportation Survey*

Problems with Ride Sharing

Respondents age 50+ were presented with seven situations that could influence their willingness or ability to ride share. Personal issues—specifically, feelings of dependency or imposing on others—were rated the primary problems associated with ride sharing. These two problems far exceed problems reported for all other issues, regardless of age. Individuals who ride share most frequently are those who express the greatest concern about dependency.

About half of all respondents age 50+ indicate that feeling dependent or imposing on others is at least a *small problem* for them (see Figure 5-2). Having to fit the ride giver’s schedule, feeling embarrassed, not knowing willing drivers, and concern about the ride giver’s driving ability are at least *small problems* for approximately one in four respondents. About one in five respondents also reports that feeling obliged or wanting to reciprocate after accepting a ride from someone is at least a *small problem* with ride sharing. Respondents who report getting a ride once a week or more (54%) are more concerned about feeling dependent than are respondents who say they never ride share (43%).

FIGURE 5-2: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH RIDE SHARING



Respondents Age 75+: None of these situations present increasing problems for older respondents. In fact, a smaller percentage of respondents age 75+ than of respondents age 50 to 74 report that finding willing drivers is a *large problem* (7% vs.13%).

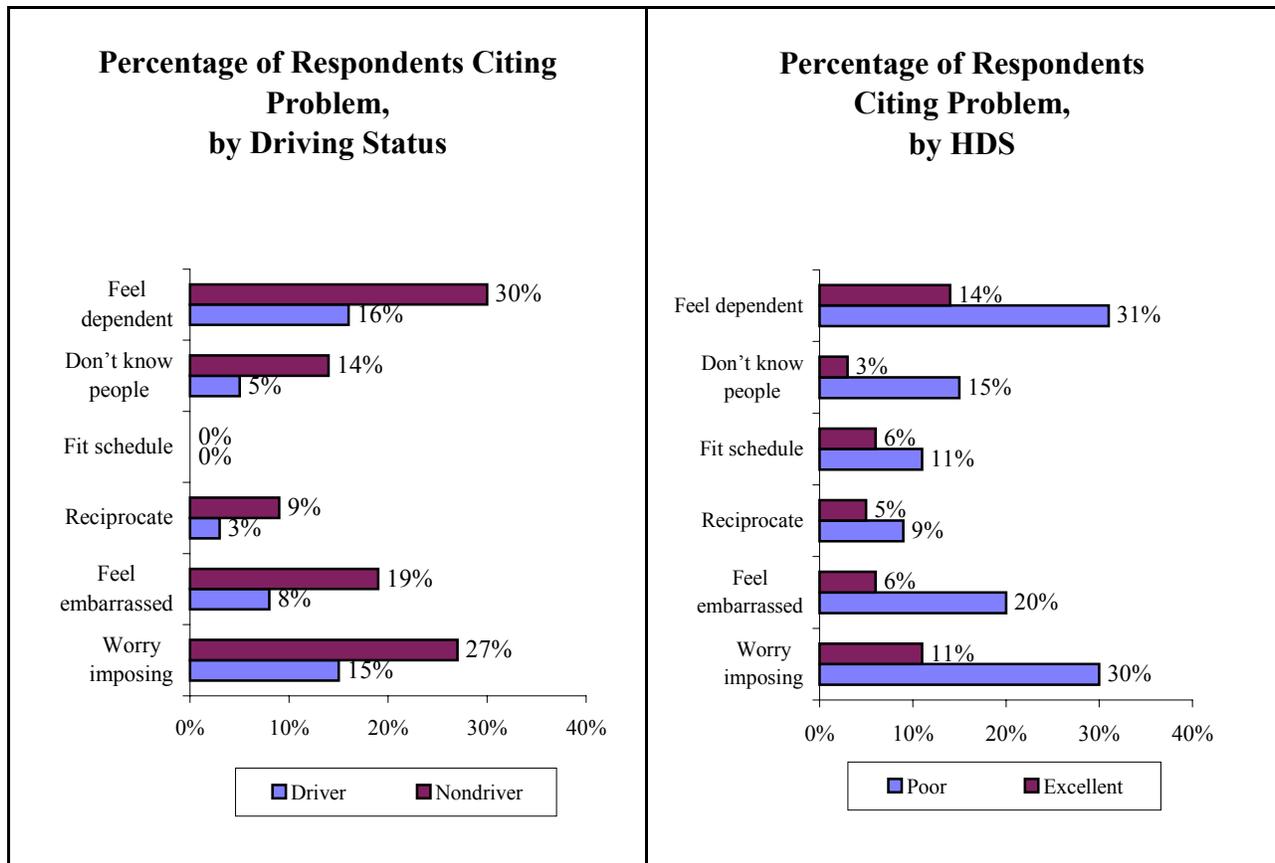
Age 75+ respondents' perceptions of six ride sharing problems—feelings of dependency, embarrassment, imposing on others, lack of willing drivers, wanting to reciprocate, and fitting the ride giver's schedule—are related to their HDS and driving status (see Table 5-4). A higher percentage of respondents age 75+ with *poor* HDS than with *excellent* HDS say these situations are *large problems* (see Figure 5-3). Similarly, a higher percentage of nondrivers than of drivers rate these situations as *large problems*.

TABLE 5-4: LARGE PROBLEMS WITH RIDE SHARING CITED BY RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS

Problem	Total 75+* (%) (N=1,844)	Percentage of Respondents Citing as Large Problem by (%):			
		Driving Status		HDS	
		Driver (N=1,383)	Nondriver (N=461)	Poor (N=284)	Excellent (N=167)
Worry imposing	18	15	27	30	11
Feel embarrassed	11	8	19	20	6
Reciprocate	4	3	9	9	5
Fit schedule	6	--	--	11	6
Don't know people	7	5	14	15	3
Feel dependent	19	16	30	31	14

*Differences in percent are significant between the subgroups. A dash indicates no statistical significance between subgroup. Source: AARP Understanding Senior Transportation Survey

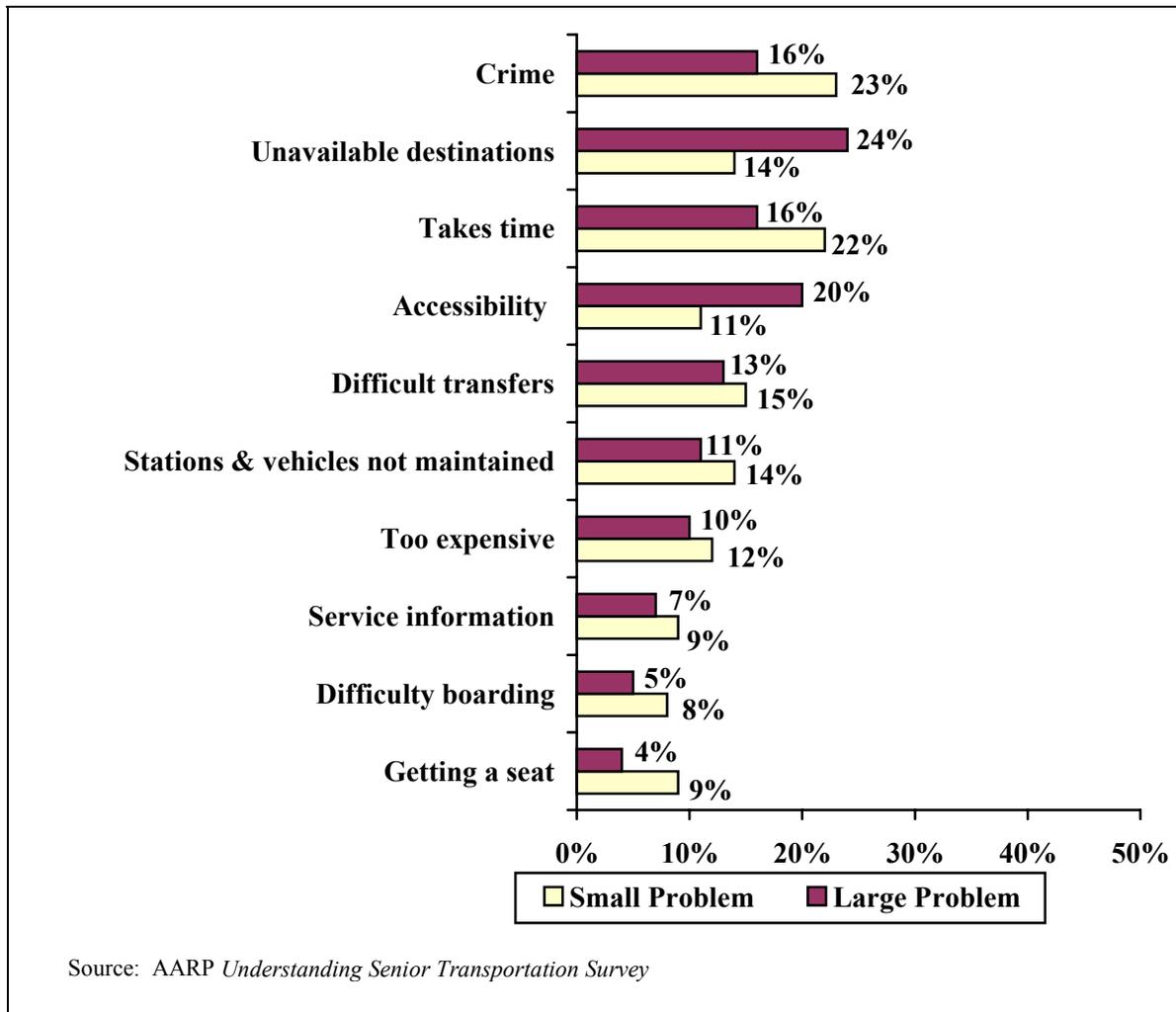
FIGURE 5-3: PERCENTAGE OF RESPONDENTS AGE 75+ CITING PROBLEMS WITH RIDE SHARING, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS



Problems with Public Transportation

Regardless of the availability of public transportation in their communities, respondents age 50+ were asked if 10 situations presented a *large problem*, *small problem*, or *no problem* for them. Slightly fewer than two in five of all respondents indicate worry about crime, the time it takes, and unavailable destinations as either *large* or *small problems* (see Figure 5-5). About three in 10 of all respondents also mention accessibility to the stop/station and transfers as at least *small problems*. Slightly fewer than one in four mentions the condition of the vehicles and station and cost as at least *small problems*. *Poor* HDS exacerbates these problems.

FIGURE 5-4: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH PUBLIC TRANSPORTATION (N=2,422)



Respondents Age 75+: Difficulty boarding presents a *large problem* with public transportation for a higher percentage of respondents age 75+ (11%) than of respondents age 50 to 74 (4%). Two problems with public transportation are cited by a lower percentage of

respondents age 75+ than of their younger counterparts: limited destinations (a problem for 21% of those age 75+ vs. 25% of those age 50 to 74) and expense (a problem for 6% of those age 75+ vs. 11% of those age 50 to 74).

Health and disability and driving status of respondents age 75+ affects how those respondents perceive the magnitude of problems with public transportation (see Table 5-5). Respondents age 75+ with *poor* HDS are nearly twice as likely to indicate they have *large problems* with all of these situations than do those with *excellent* HDS. The findings for nondrivers age 75+ are generally the same as those with *poor* HDS.

TABLE 5-5: LARGE PROBLEMS WITH PUBLIC TRANSPORTATION CITED BY RESPONDENTS AGE 75+, BY DRIVING AND HEALTH AND DISABILITY STATUS

Problem	Total 75+* (%) (N=1,844)	Percentage of Respondents 75+ Citing as Large Problem by (%):			
		Driving Status		HDS	
		Driver (N=1,383)	Nondriver (N=461)	Poor (N=284)	Excellent (N=167)
Accessibility	17	17	27	33	11
Difficulty boarding	11	7	27	30	3
Getting a seat	6	5	14	19	4
Getting information	6	5	12	14	1
Concern about crime	13	12	23	23	8
Time it takes	13	--	--	25	12
Condition of stations and vehicles	8	--	--	17	10
Cost	6	--	--	16	6
Transfers are difficult	11	15	20	30	12
Destinations are limited	21	--	--	41	16

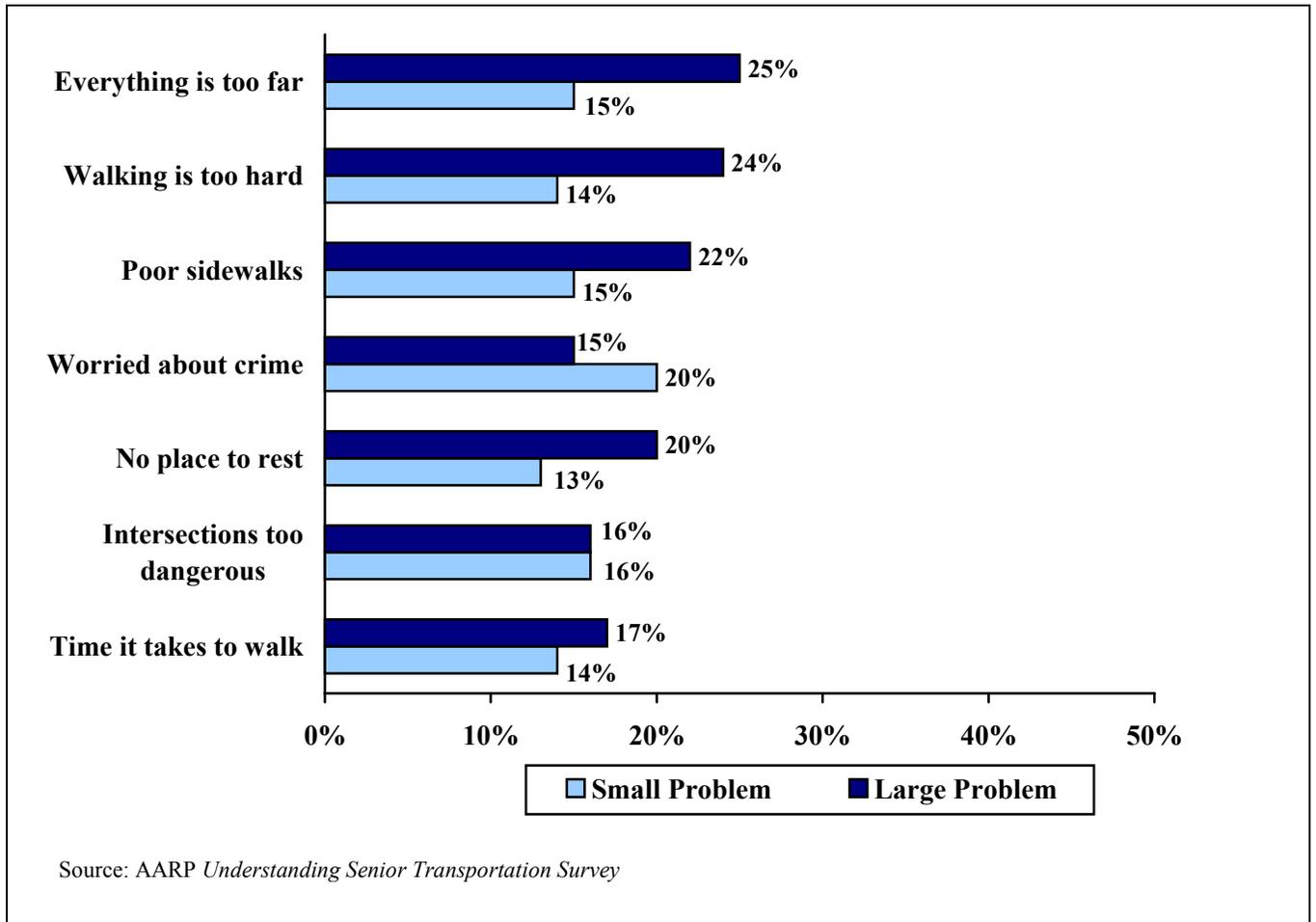
*Differences in percent are significant between the subgroups. A dash indicates no statistical significance between subgroup.
Source: AARP *Understanding Senior Transportation Survey*

Problems with Walking

Respondents age 50+ were presented with seven walking related situations and asked to indicate whether they represented a *large problem*, *small problem*, or *no problem*. About one in four respondents indicates that distance (“everything is too far”) and the physical strain of walking (“walking is too hard”) are *large problems*; approximately one in seven respondents says these are *small problems* (see Figure 5-5). Approximately one in three respondents says each of the remaining situations (“poor sidewalks,” “worried about crime,” “no place to rest,” “intersections too dangerous,” “time it takes to walk”) are at least *small problems*. Notably,

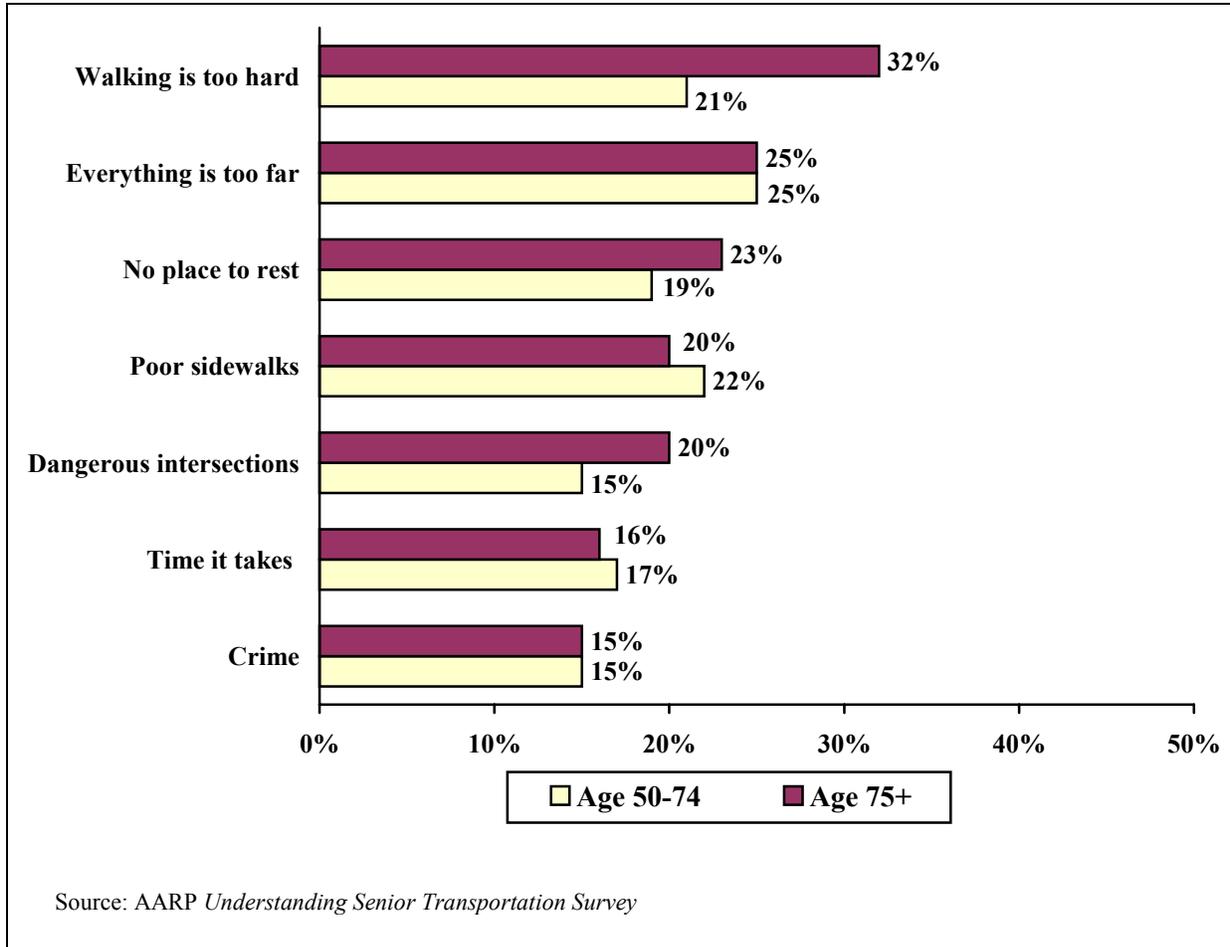
respondents age 50+ who reported walking at least once a week are less likely to mention problems of any kind than are those who walk less frequently.

FIGURE 5-5: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH WALKING (N=2,422)



Respondents Age 75+: The perception of three items (“walking is too hard,” “no place to rest,” and “dangerous intersections”) as problems with walking increases with age (see Figure 5-6). Among the oldest age segments, the percentage of respondents who say “walking is too hard” is a problem increases significantly. Nearly two in five respondents age 85+ (39%) say this is a *large problem* compared with slightly more than one in four respondents age 75 to 79 (27%). Similarly, a higher percentage of respondents age 85+ than of respondents age 50 to 74 report that “no place to rest” (25% vs. 19%) and “dangerous intersections” (23% vs. 15%) are *large problems* when walking.

FIGURE 5-6: PERCENTAGE OF RESPONDENTS AGE 50+ CITING PROBLEMS WITH WALKING AS LARGE PROBLEMS, BY AGE GROUP (N=2,422)



Among respondents age 75+, perceived problems with walking are closely linked to the respondent's HDS. Respondents age 75+ with *poor* HDS are many times more likely to cite problems as *large problems* than are their counterparts with *excellent* HDS. The greatest difference occurs in the responses for the item "walking is too hard." Among respondents age 75+ with *poor* HDS, more than two out of three (68%) report that "walking is too hard" is a *large problem*; similarly, more than half (52%) cite "no place to rest" as a *large problem* (see Table 5-6).

TABLE 5-6: LARGE PROBLEMS WITH WALKING CITED BY RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS

Problem	Total 75+* (%) (N=1,844)	Percentage of Respondents Citing Problem by (%):			
		Driving Status		HDS	
		Driver (N=1,383)	Nondriver (N=461)	Poor (N=284)	Excellent (N=167)
Walking is too hard	32	29	46	68	7
Crime	15	13	23	24	6
Time it takes	16	14	26	38	4
No place to rest	23	21	34	52	6
Poor sidewalks	20	--	--	34	9
Dangerous intersections	20	16	33	38	6
Everything is too far	25	22	35	43	9

*Differences in percent are significant between the subgroups. A dash indicates no statistical significance between subgroup.
Source: AARP *Understanding Senior Transportation Survey*

Problems with walking in the population age 75+ are correlated with driving status, as well as with HDS. Among respondents age 75+, a greater percentage of nondrivers than drivers rate six of the seven problems as *large problems*. (There is no significant difference between drivers and nondrivers on the condition of sidewalks.) “Walking is too hard” is their largest problem, with nearly half (46%) of nondrivers age 75+ saying this is a *large problem*. “No place to rest,” “dangerous intersections,” and “everything is too far” are *large problems* with walking for about one in three nondrivers age 75+; the “time it takes” and “being worried about crime” are *large problems* for about one in four nondrivers in this age group.

Problems with Taxis

Respondents age 50+ were asked what they perceive as problems with using taxis.¹¹ Cost is a key problem to some respondents. One in four respondents age 50+ (25%) indicates taxis are too expensive. About one in 10 respondents (10%) mentions that “taxis take too long to come” and “taxis are hard to get” (9%). Five percent or fewer survey participants age 50+ report other problems, such as “taxis are poorly maintained” or “drivers are unfamiliar with the area.”

Overall, only a small percentage (2%) of respondents age 50+ indicate they take taxis regularly. Generally, those who report taking a taxi are more likely to cite problems. The percentage of respondents age 50+ who indicate that “taxis are too expensive” is higher among tax users (34%) than among those who say they never use taxis (17%).

¹¹ Unlike previous questions, respondents were not read a list of problems to rate. Instead they were asked an open-ended question: “Thinking about taking a cab, please tell me what you would consider the problems for you taking a cab?”

Respondents Age 75+: For respondents age 75+, one significant variation occurs based on age: reported problems with cost. More than one in four (28%) of those age 50 to 74 indicates that cost is a problem compared with less than one in five (17%) of those age 75+.

There are no significant differences related to driving status. However, the respondent's HDS affects perceptions about cost. Nearly twice as many of those who are age 75+ with *poor* HDS (20%) say taxis are too expensive compared with those with *excellent* HDS (11%).

Problems with Senior or Community Vans

The majority of respondents age 50+ (69%) reported no problems with riding senior or community vans.¹² The small percentage (6% or less) of respondents that did cite problems mentioned “van service is unavailable” (6%), “getting information on availability or eligibility” (4%), “having to schedule ahead is not convenient” (4%), “making reservations is difficult” (3%), “vans are late for scheduled pickups” (2%), “the time it takes” (2%), “not being eligible” (2%), “fares are too high” (1%), and “need to expand the number of stops/locations” (1%). Responses related to problems with senior or community vans did not vary significantly with individuals' age, driving status, or HDS. A small percentage (4%) of respondents age 50+ report using senior or community vans.

¹² Respondents did not rate a list of potential problems. Instead, they were asked an open-ended question about problems: “Thinking about senior or community vans, please tell me what you would consider the problems for you in using a senior or community van?”

6. Mobility and Social Interaction

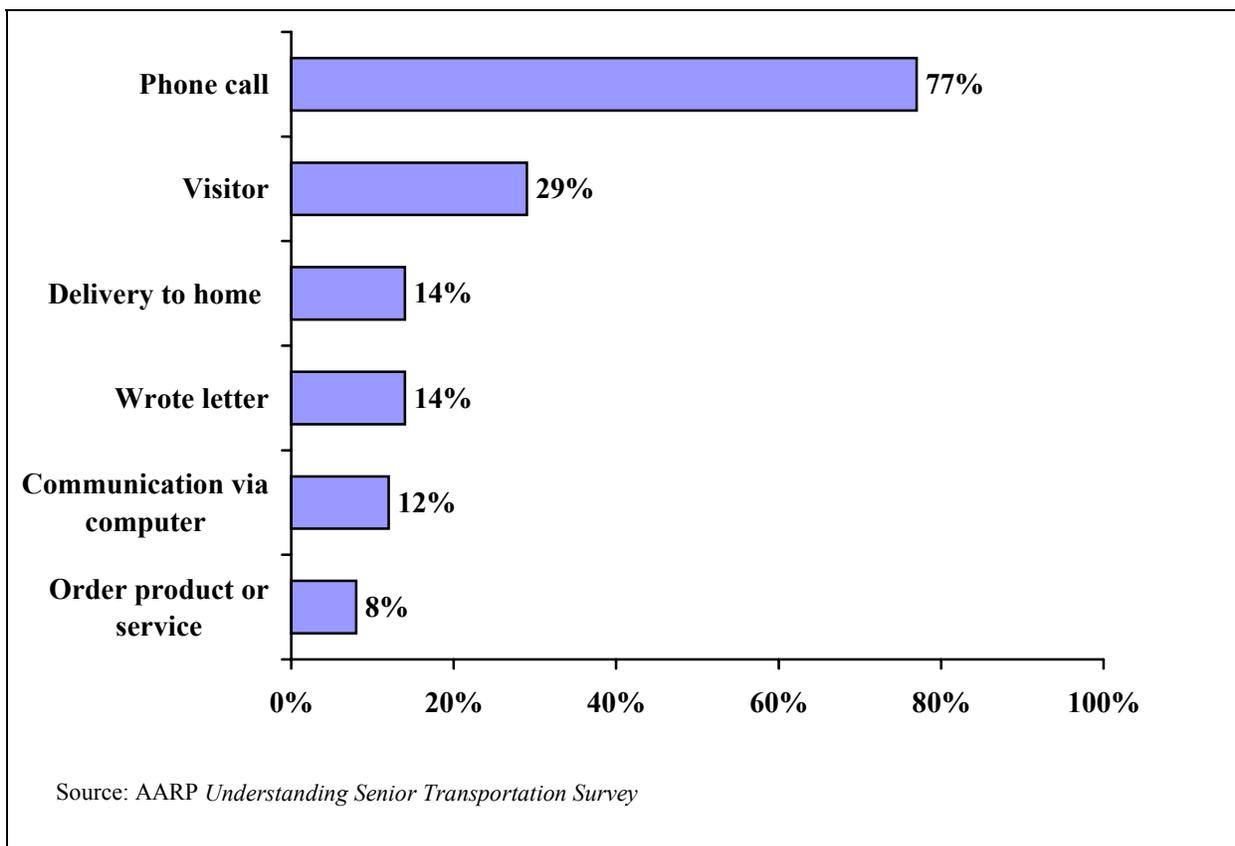
Overview

Social interactions via phone calls, visits with friends and relatives, religious services, doctor visits, grocery or other shopping, entertainment activities, etc., are important to quality of life. This chapter reports on social interaction among survey respondents and discusses the extent to which transportation limits respondents' social interactions. It also reports on how the availability of transportation, proximity of respondents to goods and services, and driving and residential options may also affect access and social opportunities.

Social Contacts with People Outside the Home

Respondents age 50+ were asked whether they had personal contact via phone calls, visitors, delivery to the home, writing a letter, communicating via computer, or ordering a product or service the previous day. Nearly seven in eight (85%) report having had at least one type of contact the previous day with someone from outside of their home (see Figure 6-1).

FIGURE 6-1: PERCENTAGE OF RESPONDENTS AGE 50+ REPORTING SOCIAL CONTACT THE PREVIOUS DAY, BY TYPE OF CONTACT (N=2,422)



About three out of four respondents age 55+ (77%) report having talked to friends or relatives on the phone the previous day. Nearly three in 10 (29%) indicate they had a visitor. Respondents age 50+ who live alone are no more likely than their counterparts in larger households to have spoken to someone on the phone or have had a visitor. About one in 10 respondents age 50+ (9%) report not having gone out nor having a visitor the previous day.

Respondents Age 75+: Overall, respondents age 75+ are not significantly different from those age 50 to 74 in terms of their social contacts. A large majority of respondents age 75+ (75%) report having spoken to someone by phone the previous day. Connecting with other people online, however, is much less common for respondents age 75+ than for respondents age 50 to 74. The percentage of respondents who use e-mail or go online to order a product or service is only 2 percent among respondents age 75+ compared with 14 percent among respondents age 50 to 74.

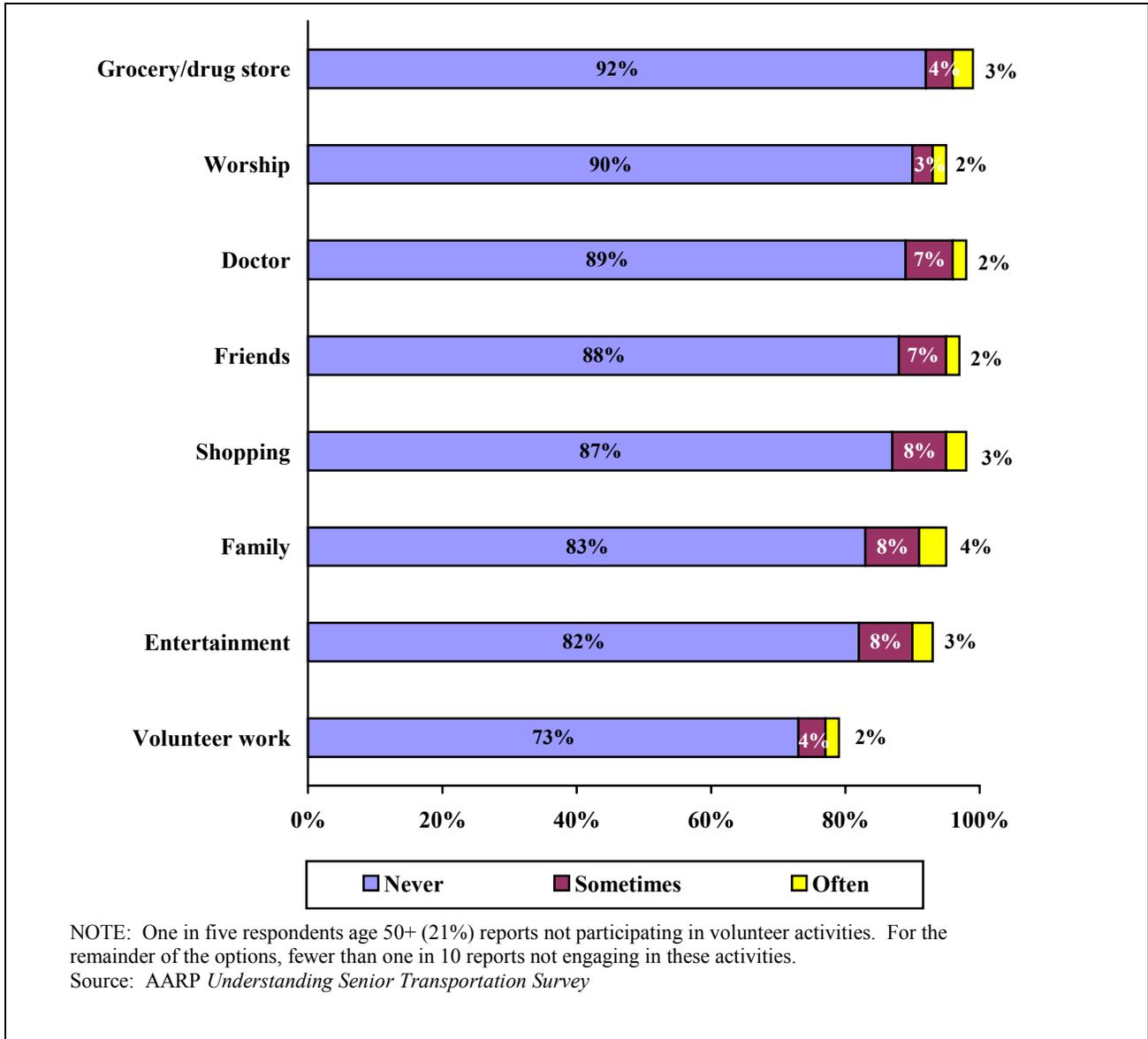
Among respondents age 75+, there are significant differences in social contacts correlated with HDS and driving status. The percentage of respondents with *poor* HDS who talked with a friend or relative on the phone (86%) is slightly higher than the percentage of respondents with *excellent* HDS who did so (78%). The percentage of nondrivers age 75+ who have visitors (45%) is substantially higher than the percentage of drivers who have visitors (29%).

Although fewer than one in 10 respondents age 50 to 74 (7%) report neither having gone out nor having a visitor the previous day, the figure doubles to about two in 10 (18%) for respondents age 75+. As HDS declines for older respondents, so does social interaction. The percentage of respondents age 75+ who indicate they neither went out nor had a visitor the previous day is about three times higher among respondents with *poor* HDS (22%) than among respondents with *excellent* HDS (8%).

Transportation and the Ability to Engage in Specific Activities

Another critical aspect of social interaction is individuals' ability to get to where they want to go for specific activities. Respondents age 50+ were asked whether transportation problems *often*, *sometimes*, or *never* interfered with their ability to go shopping, see their doctor, visit friends and relatives, and engage in other meaningful social activities, such as entertainment or volunteering. At least four in five respondents age 50+ report they *never* have a problem getting to the doctor, their place of worship, the grocery or drug store, shopping for clothes or household items, entertainment, volunteer activities, or to visit with family or friends. Fewer than one in eight respondents age 50+ (12%) says transportation problems at least *sometimes* interfere with their ability to participate in these activities.

FIGURE 6-2: PERCENTAGE OF RESPONDENTS AGE 50+ REPORTING INTERFERENCES WITH SOCIAL ACTIVITIES DUE TO TRANSPORTATION PROBLEMS, BY ACTIVITY (N=2,422)



Respondents Age 75+: Fewer than five percent of respondents age 75+ say they *often* experience problems that interfere with their ability to get to the activities explored in this survey. Although there are no significant differences based on age alone, respondents’ HDS and driving status are related to the extent to which transportation problems interfere with older respondents’ ability to maintain social connections. Even though only a low percentage of individuals age 75+ indicate that they often have problems, nondrivers and individuals with *poor* HDS have more transportation problems that interfere with their ability to engage in these activities than do their driving and healthier/less disabled counterparts (see Table 6-1).

TABLE 6-1: ACTIVITIES WITH WHICH TRANSPORTATION PROBLEMS OFTEN INTERFERE FOR RESPONDENTS AGE 75+, BY DRIVING STATUS AND HEALTH AND DISABILITY STATUS

Activity	Total 75+* (%) (N=1,844)	Percentage of Respondents Indicating Transportation Problems Often Interfere with Activity by (%):			
		Driving Status		HDS	
		Driver (N=1,383)	Nondriver (N=461)	Poor (N=284)	Excellent (N=167)
Doctor	3	2	7	8	0
Family	4	--	--	8	2
Friends	2	1	7	6	0
Worship	3	1	6	6	0
Grocery/drug store	3	2	7	6	0
Shopping	4	2	9	8	1
Entertainment	3	2	7	6	1
Volunteer work	2	--	--	--	--

* Percentages shown are statistically significant between subgroups. A dash indicates no statistical significance between subgroups.

Source: AARP *Understanding Senior Transportation Survey*

Community Design and Access to Social Activities

Having access to community goods, services, and social opportunities may also be affected by the design of the community and its components. The survey examined three of these components: availability of public transportation; proximity of respondents to goods and services; and driving and residential options

Availability of Public Transportation

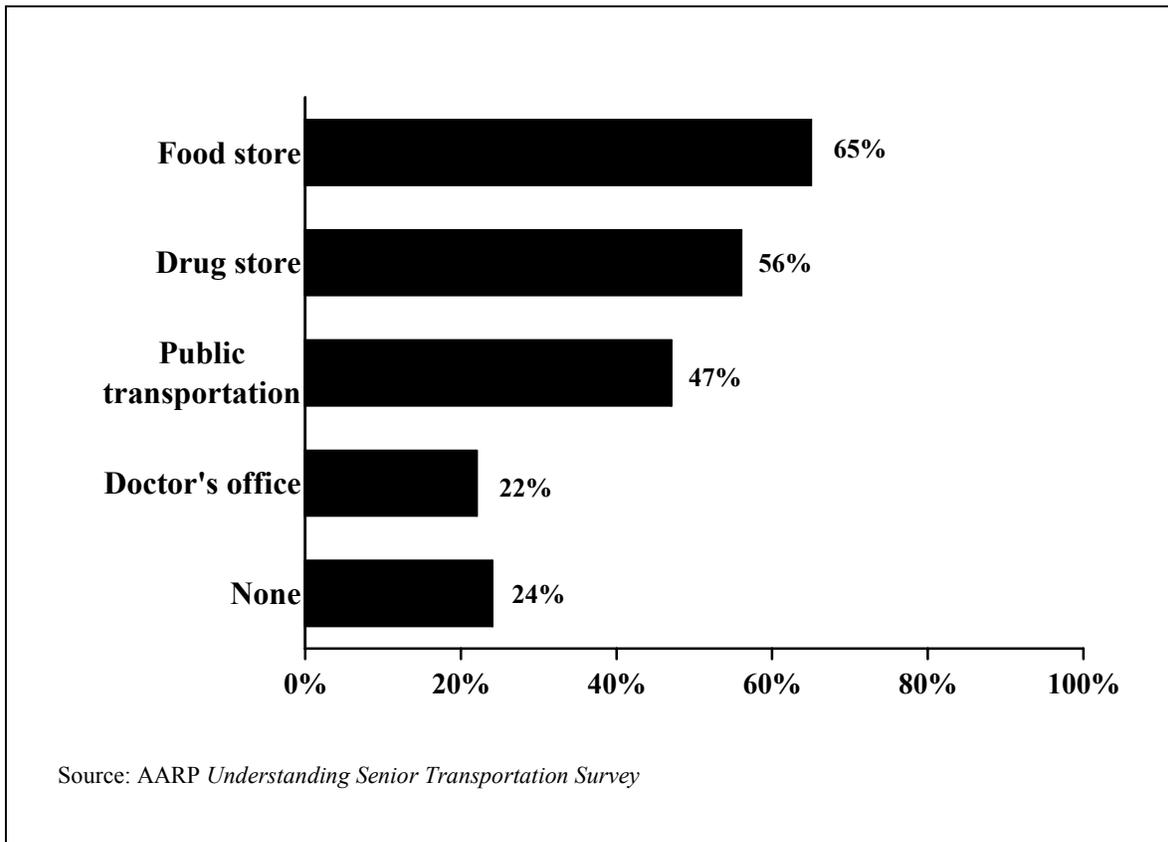
Nearly three in five (58%) indicate that public transportation is available in their community. The percentage of respondents who report that public transportation is available is substantially higher among those respondents who live in *cities* (84%) and *suburbs* (69%) than among those who reside in *small towns* (45%) or the *country* (23%). Where service is available, a majority of persons have convenient access to services. About seven in 10 (68%) of those who say public transportation is available in their community indicate they live within a half-mile of a stop.

Proximity to Goods and Services

People rely upon transportation to obtain necessary goods and services, such as food, drugs, and medical services. The authors of this survey assume that the closer respondents live to these services, the fewer transportation barriers they must overcome to meet their basic needs. The data illustrate that nearly a quarter of respondents *do not* live within a half-mile of any of these key goods and services (see Figure 6-3). The majority, however, report residing within a half-mile of a food store (65%) and a drug store (56%), while just under half (47%) say they

dwell within a half-mile of a public transportation stop. About one in five indicates living as close as a half-mile to their doctor.

FIGURE 6-3: PERCENTAGE OF RESPONDENTS AGE 50+ LIVING WITHIN A HALF MILE OF GOODS AND SERVICES (N=2,422)



Respondents Age 75+: In general, respondents age 75+ are not significantly different from respondents age 50 to 74 in terms of their proximity to a food store, drug store, public transportation, or doctor’s office. The percentage of respondents who do not reside within a half mile of *any* of these community amenities, however, decreases with age: age 50-74 (26%); age 75-79 (19%); age 80-84, (20%), and age 85+ (16%). No major variations in proximity to goods and services correlate with respondents’ HDS or driving status.

Driving and Residential Options

To explore the relationship between reliance on driving and residential options, drivers age 50+ were asked whether they would have difficulty continuing to reside in their current home if they were no longer able to drive. Half of all licensed drivers say they *strongly* (26%) or *somewhat agree* (24%) they would have difficulty continuing to reside in their current home. Next, nondrivers were asked whether they had moved since they had stopped driving. Nearly one in four nondrivers (23%) reports having moved; however, respondents who moved do not

indicate that transportation was a factor in their decision to relocate.

Respondents Age 75+: Among respondents age 75+, there are no significant differences based on age alone as to whether respondents *strongly agree* that they would have difficulty remaining in their current home if they stopped driving. HDS affects responses to this question more than age alone. Approximately the same percentages of respondents age 75+ with *poor* and *excellent* HDS, *strongly agree* with the statement; however, another three in 10 respondents with *poor* HDS (30%) report that they *somewhat agree* with it compared with one in five (21%) of those with *excellent* HDS.

7. Satisfaction with Mobility

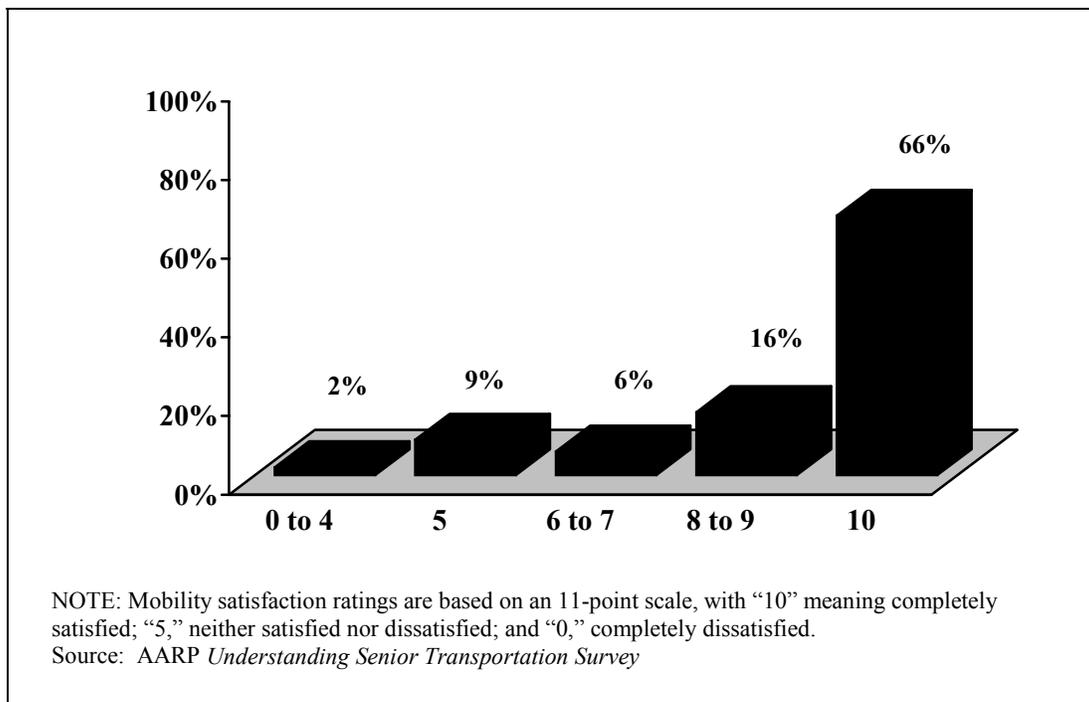
Overview

This chapter reviews the survey's findings regarding respondents' satisfaction with their mobility. A large majority of respondents age 50+ indicate they are satisfied with their mobility. However, fewer nondrivers 75+ and respondents 75+ with *poor* HDS ratings report high levels of satisfaction.

Respondents' Mobility Satisfaction Ratings

Respondents were asked to rate their satisfaction with how they get around their community when they need or want to go someplace on an 11-point scale, with "10" meaning *completely satisfied*; "5," *neither satisfied nor dissatisfied*; and "0," *completely dissatisfied*. A large majority of respondents age 50+ (88%) indicate at least some satisfaction with their mobility (see Figure 7-1). About two out of three (66%) report that they are *completely satisfied* with their mobility; and another one in four (22%) is at least *somewhat satisfied* (ratings from 6 to 9 on the scale). Another one in 10 reports being *neither satisfied nor dissatisfied* (rating of 5). Very few respondents age 50+ are at least *somewhat dissatisfied* with their mobility (ratings below 5).

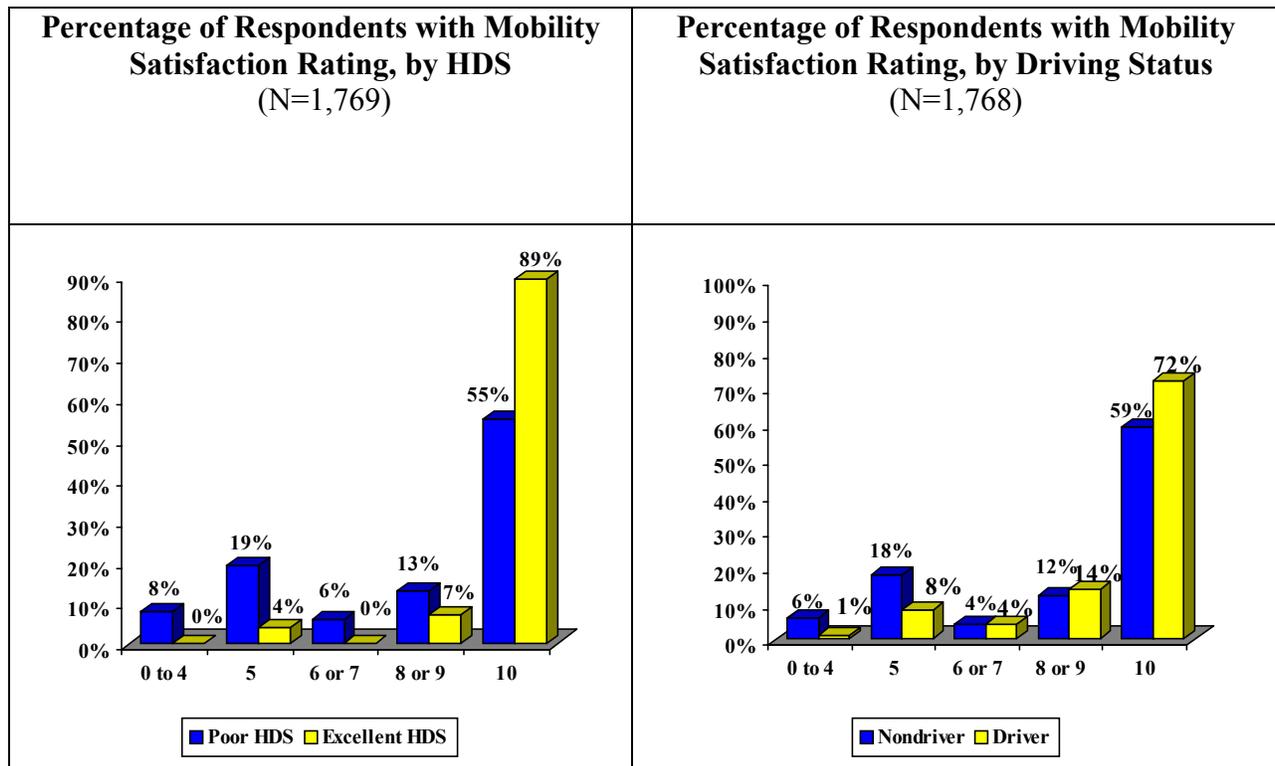
FIGURE 7-1: PERCENTAGE OF RESPONDENTS AGE 50+ BY MOBILITY SATISFACTION RATINGS (N=2,422)



Respondents Age 75+: Age alone has no significant relationship to respondents' satisfaction with their mobility. The two factors that correlate most strongly with respondents'

satisfaction with their mobility are the respondent's HDS and driving status. As a respondent's HDS declines, satisfaction with mobility sharply declines (see Figure 7-2). Nearly all respondents age 75+ with *excellent* HDS (96%) rate their satisfaction 8 or higher. In contrast, about two-thirds of those with *poor* HDS (68%) give a satisfaction score of 8 or above. Similarly, the percentage of respondents who rate their mobility satisfaction 8 or above is higher among drivers (86%) than among nondrivers (71%).

FIGURE 7-2: PERCENTAGE OF RESPONDENTS AGE 75+ WITH DIFFERENT MOBILITY SATISFACTION RATINGS, BY HEALTH AND DISABILITY STATUS AND DRIVING STATUS



NOTE: Mobility satisfaction ratings are based on an 11-point scale, with “10” meaning completely satisfied and “0” meaning completely dissatisfied.

Source: AARP *Understanding Senior Transportation Survey*

Respondents who indicated they were dissatisfied with their mobility were asked what activities they would engage in if transportation were not a problem. Because fewer than 50 respondents reported dissatisfaction, the results of this question are not reported.

8. Interviews with Proxy Respondents

Overview

This chapter summarizes the findings of proxy interviews that were conducted when an age eligible person was unable to come to the phone. The ratio of proxy interviews to full interviews suggests that one in six persons age 75+ may have been missed in this telephone survey and that those people are likely to differ from the survey population. This chapter also discusses the implications of those findings for the interpretation of the findings from this and other telephone surveys on topics for which respondents' health and disabilities are likely to affect the results.

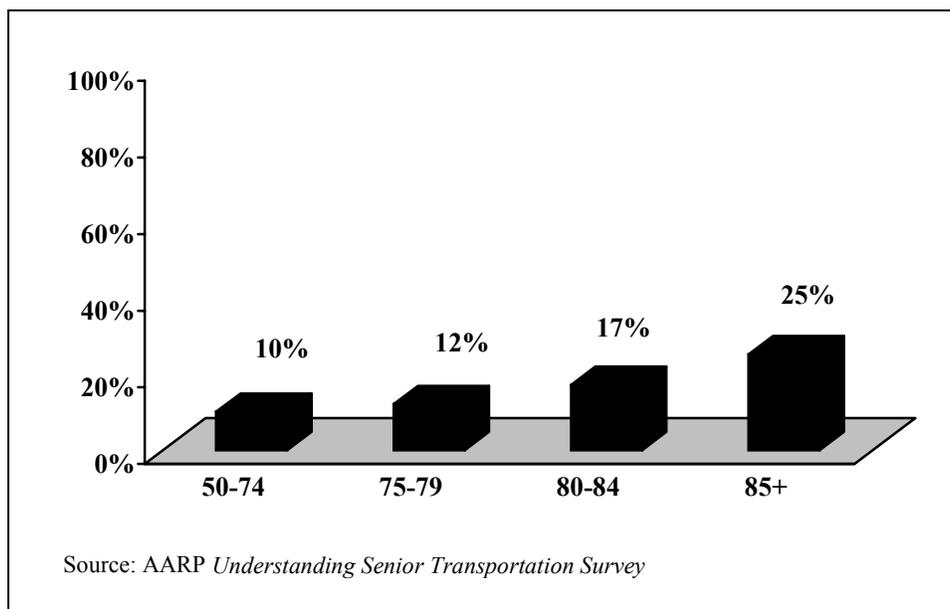
Findings from the Proxy Interviews

AARP's survey was designed to capture responses that accurately represent the characteristics of the noninstitutionalized, community-dwelling population age 50+. The investigators realized that health status and physical disabilities might affect individuals' ability to participate in a telephone survey. For that reason, when an age eligible respondent was identified within a sample household but was unable to participate in the survey, a proxy interview was conducted with someone else in the household. The purpose of the interview was to gather data to allow the investigators to gauge the extent of health-based nonresponse bias in the AARP telephone survey.

Each proxy informant was asked a series of questions about the health of the age eligible person who was unable to participate. Altogether 475 proxy interviews were, representing 16 percent of the combined respondent total (2,897).¹² The percentage of those for whom proxy interviews were conducted increased with age from 10 percent among the 50 to 74 age group to 25 percent in the 85+ age group (see Figure 8-1).

¹² Age data was available on 362 out of the 475 proxy interviews.

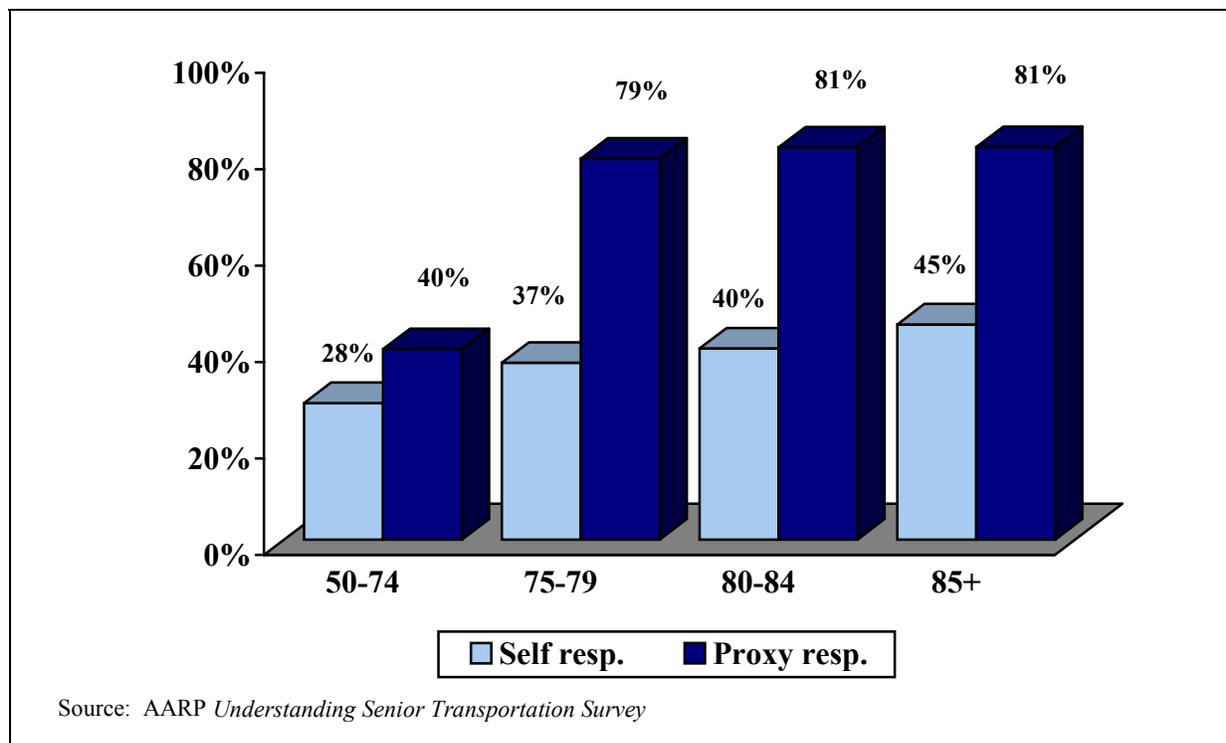
FIGURE 8-1: PERCENTAGE OF PROXY INTERVIEWS, BY AGE GROUP (N=362)



Proxy informants were asked to rate the health of the eligible respondent employing the same 5-point scale from *excellent* to *poor* used by survey respondents to rate their own health. Whereas one in five self-reporting respondents (22%) reports having either *fair* or *poor* health, the one in three proxy respondents (32%) is reported to have *fair* or *poor* health.

Proxy informants also were asked to rate the difficulty experienced by the eligible respondent with various instrumental activities of daily living including walking, climbing stairs, carrying a package, hearing, and reading. Difficulty with one or more instrumental activities is reported for the eligible respondent by about six in 10 proxy respondents (59%) compared with four in 10 self-reporting respondents (40%). The difference between the percentages for proxy respondents and self-reporting respondents is most pronounced in older age groups (see Figure 8-2). In the age 75+ age group, difficulty with one or more activities is reported by fewer than half (45%) of self-responders but for the great majority (80%) of proxy respondents.

FIGURE 8-2: PERCENTAGE OF SELF RESPONDENTS AND PROXY RESPONDENTS AGE 50+ REPORTING DIFFICULTY WITH ONE OR MORE INSTRUMENTAL ACTIVITIES OF DAILY LIVING, BY AGE GROUP (N=1,331)



Finally, proxy informants were also asked if the person in their household had difficulty speaking or talking on the phone. About 30 percent of informants report the eligible respondent has difficulty with the phone, and 15 percent indicate that the eligible respondent has a problem with speech (these items are not included in the total above).

Implications of Proxy Interview Findings

In comparison with other national studies on the disability status of older Americans that used in-home interview protocols, AARP’s telephone survey study found fewer respondents reporting physical impairments. Analysis of proxy interviews suggests that using standard telephone survey techniques, AARP’s survey missed one in six persons age 75+. The analysis further suggests that the individuals who were missed by the telephone survey are more likely to have physical impairments and to suffer from activity limitations than those in the age 75+ population who are captured by a typical telephone survey. Given the strong relationships known to exist between age, HDS, and mobility within the age 75+ population, it is important to view the survey findings reported in the previous chapters taking into consideration the 16 percent of individuals age 75+ who did not participate.

Looking beyond this report, the findings from the proxy interviews in this survey have

implications for using standard telephone surveys to conduct research on topics for which the results are likely to be affected by respondents' health and disabilities. The findings suggest that a significant proportion of the community dwelling persons age 50+ may be missed in a standard telephone survey. Furthermore, the individuals in the older population who are missed are likely to differ from the population-at-large in significant ways.

9. Summary and Policy Implications

Overview

In 1998, AARP commissioned the *Understanding Senior Transportation Survey*, a nationwide telephone survey of individuals age 50+, to better understand how older persons connect with their communities and to explore the problems of persons 50+ in relation to transportation. The information yielded by this survey is intended to assist policymakers and planners in developing transportation policies and programs that will enhance the quality of life for America's older population. This chapter summarizes the findings of the survey and discusses their implications for policymakers.

Summary

The AARP survey explored five topics related to the transportation behavior and perceptions of mid-life and older adults, taking into account respondents' personal characteristics such as health status and physical disabilities:

- Transportation mode use;
- Personal mobility (i.e., how often a person leaves home)¹³;
- Problems with different transportation modes;
- Mobility and social interaction; and
- Satisfaction with mobility.

The study particularly focuses on adults age 75+ because other research has shown that mobility (as measured by trips made and miles traveled) shrinks as individuals age. It is the first national survey to examine a representative sample of adults age 85+—the fastest growing age group in America.

It is important to note that a telephone survey may, by its very nature, exclude individuals living in communities who have the poorest health limited functioning. Interviews conducted with proxy informants for age eligible respondents who were unable to participate suggest that as many as one in six persons with more extensive physical limitations than those reported by the 2,422 survey respondents may have been excluded from the survey. Consequently, the survey findings presented here may under represent the proportion of the older population that experiences problems with transportation.

Influence of Health and Disability on Mobility

The survey data show that age alone is not the best indicator of transportation mode use, transportation problems, or personal mobility. HDS has its own unique impact on mobility and is

¹³ The term mobility is used in this report to refer to travel in an individual's community, not to long-distance or vacation travel. Commonly used measures of personal mobility include the numbers of trips individuals make in a given time period.

a strong predictor of mobility in the population age 75+. Specifically:

- Adults age 75+ with *excellent* HDS are more likely than their counterparts with *poor* HDS to have gone out on the previous day. More than eight in 10 respondents age 75+ with *excellent* HDS (85%) report going out at least once the previous day compared with fewer than six in 10 respondents age 75+ with *poor* HDS (58%).
- Adults age 75+ with *excellent* HDS are more likely than younger persons with *poor* HDS to go out often in a typical week. Six in ten of respondents age 75+ with *excellent* HDS (60%) report that they go out at least five times in a typical week compared with fewer than five in 10 respondents age 50 to 74 with *poor* HDS (45%).
- Adults age 75+ with *excellent* HDS are more likely than their counterparts with *poor* HDS to drive. Among persons age 75+, nearly all of those with *excellent* HDS drive compared with three out of four of those with *poor* HDS.
- Adults age 75+ with *excellent* HDS are more likely than their counterparts with *poor* HDS to have a driver in the household. The percentage of respondents age 75+ who report there are no drivers in their household is more than three times higher among respondents with *poor* HDS than among respondents with *excellent* HDS.
- Adults age 75+ with *excellent* HDS are more likely than their counterparts with *poor* HDS to walk regularly. Among respondents 75+, five in 10 with *excellent* HDS walk regularly, but less than two in 10 with *poor* HDS do so.
- Adults age 75+ with *excellent* HDS are less likely than their counterparts with *poor* HDS to be passengers in cars. Among respondents age 75+, the percentage of respondents with *excellent* HDS who indicate they ride share is three times greater than the percentage of respondents with *poor* HDS who do so.

Most notably, respondents age 85+ with *excellent* HDS similarly are more mobile than their younger counterparts with *poor* HDS. A higher percentage of respondents age 85+ with *excellent* HDS (70%) than of respondents age 75 to 79 with *poor* HDS (64%) report going out the previous day. A higher percentage of respondents age 85+ with *excellent* HDS than of respondents age 50 to 74 with *poor* HDS (45%) report going out more than five times in a typical week.

Modes of Transportation Used by Mid-Life and Older Americans

Mid-life and older adults, like most Americans, depend heavily upon the automobile to get them where they want to go.

- **Driving** is the primary mode of transportation for adults age 50+. It is the usual mode of transportation for more than four out of five adults age 50+ (86%), as well as for the majority of adults age 75 to 79 (83%) and age 80 to 84 (78%). The percentage of individuals who are licensed and drive regularly declines with age, however, and there is a substantial drop in driving among those respondents age 85+. Individuals with *poor* HDS are far less likely to be drivers than individuals with *excellent* HDS. Among individuals age 85+, for example, 82% of those with *excellent* HDS drive compared with 44% of those with *poor* HDS.

- **Ride sharing** is the second most common mode of transportation among adults age 50. More than one in 10 adults age 50+ (13%) rely on ride sharing as their usual mode of transportation. Ride sharing as a usual mode of transportation increases with age. Although it is the usual mode for only one in 10 of respondents age 50 to 74 (10%), it is the usual mode for two in 10 respondents age 75 to 79 (19%), for one in four respondents age 80 to 84 (26%), and for four in 10 respondents age 85+ (40%). Not surprisingly, more older nondrivers than older drivers report that ride sharing is their prime mode of transportation.
- **Other modes of transportation** are the usual mode of transportation for less than one in 20 adults age 50+: walking (5%), relying on public transportation (5%), taking a taxi (1%), or using a community or senior van (1%).

Most individuals age 75+ only use one transportation mode—they either drive or ride as passengers; however, one fifth of this age group both drive and walk or ride and walk.

Personal Mobility

Personal mobility is characterized by how often a person goes out (i.e., leaves home). More than four in five respondents age 50+ (82%) report having gone out at least once the previous day; however, one in six respondents (16%) reports not having left home at all the previous day.

Personal mobility among adults age 50+ significantly declines with age. Adults age 50 to 74 report going out an average of 3.5 times the previous day, while those age 75+ report going out an average of only 2.5 times the previous day. Adults age 85+, who on average report going out two times the previous day, are the least mobile of any age group. Forty-one percent of adults age 85+ report not having gone out at all the previous day.

Whether one drives and one's HDS have strong impacts on how often a person age 50+ goes out. Nondrivers age 50+ go out much less than do drivers in a typical week, and one eighth of nondrivers does not go out at all in a typical week. A person age 75+ with a *poor* HDS rating is nine times as likely as a person age 75+ with an *excellent* HDS rating not to go out at all in a typical week. Furthermore, older persons with *excellent* HDS go out more frequently in a typical week than do younger persons with *poor* HDS.

Problems Associated with Different Transportation Modes

Although the AARP survey does not establish direct causation between problems identified by respondents with various modes and reduced use of a given mode, it can be assumed that these problems are at least some barrier to use. Across all types of transportation, those problems most related to changing physical condition increase with age. The one exception is that although the frequency of ride sharing increases with age, respondents' problems with ride sharing do not increase.

Increasing age exacerbates three problems: driving at night, difficulty boarding public transportation systems, and finding walking too hard. However, a closer examination of the data

reveals that health and disability status is a stronger predictor of problems than age alone. Since more nondrivers than drivers have poor HDS ratings, nondrivers too are more adversely affected by these problems. Indeed, the data demonstrate that those with poor HDS and those who do not drive cite greater problems with all modes of transportation than their counterparts. Many of the problems experienced by those with poor HDS and by nondrivers are physical in nature, but they also disproportionately perceive more environmental problems as well.

Drivers age 50+ cite driving problems related to both the driving environment and personal physical capabilities. Two environmental situations are highly rated problems: inconsiderate drivers and traffic congestion. Concern with inconsiderate drivers declines slightly with age. Only one personal physical problem, driving at night, becomes more problematic with age. About twice the percentage of drivers over the age of 74 compared to drivers ages 50 to 74 indicate they have a *large problem* driving at night. Not surprisingly, three times as many of those drivers age 75+ with *poor* HDS ratings experience impairments when driving at night compared to those with *excellent* HDS ratings.

Emotional issues dominate problems with ride sharing. Nearly half of all respondents reported a problem with feeling dependent or worrying about imposing on others. These are issues for nearly twice as many older nondrivers as older drivers. Poor HDS status is also related to these two issues with nearly twice as many of respondents age 75+ with *poor* HDS ratings compared to those with *excellent* HDS ratings seeing these emotional issues as a problem with ride sharing.

Restricted personal physical abilities and environmental factors characterize the problems respondents have with walking. They cite problems walking because of distance, sidewalks being in poor repair, lack of places to rest, crime, and dangerous intersections. Personal physical concerns increase with age and *poor* HDS. Persons age 75+ with *poor* HDS are much more likely than those with *excellent* HDS to identify any of these problems as a *large problem*, as are nondrivers.

Although few respondents, regardless of age, regularly ride public transportation, respondents overall have clear opinions about what problems they might encounter with the system. Respondents are most concerned about crime, limited destinations, and the amount of time public transportation takes. They perceive system problems especially with accessibility, transfers between busses, poor maintenance, and cost.

Mobility and Social Interaction

Those with limited mobility report less social interaction. While most persons age 50+ have some form of in-home social contact on any given day, about one in ten respondents did not go out or have a visitor on that day.

Increasing age and declining HDS are major factors associated with reduced social interaction. More than twice as many individuals age 75+ had neither gone out nor had a visitor the previous day compared to those under the age of 75. Older nondrivers and older respondents with *poor* HDS ratings are far more likely than drivers and those with *excellent* HDS to have no

social contact on a given day. Those age 75 and older who do not drive are the most isolated. A quarter of nondrivers go out on average five or more times per week compared to more than half of those who drive. Only one percent of drivers did not go out in a typical week; however, this rises to 12 percent of nondrivers.

While a large majority of respondents age 50 and older indicate that transportation problems never interfere with shopping, getting to their doctor, visiting friends and relatives, and engaging in other meaningful social activities, those age 75 and older with *poor* HDS ratings have more serious transportation problems in getting where they want to go than their counterparts. They are many times more likely than are those with *excellent* HDS ratings to report they have to restrict these activities because of transportation problems. Similarly, two to three times as many older nondrivers have problems that restrict these activities than do those who drive.

About half of respondents indicate they would have to move if they stopped driving. However, among nondrivers who had moved (32) only one nondriver indicated that transportation influenced the decision to move.

Satisfaction with Mobility

Even though most respondents indicate satisfaction with their mobility, significant differences in satisfaction with mobility exist between those with *excellent* and *poor* HDS and between drivers and nondrivers. Fewer older nondrivers than older drivers and fewer of those age 75+ with *poor* HDS than those with *excellent* HDS report high levels of satisfaction.

Policy Implications

The overarching goal for transportation policy is to keep people mobile and thereby able to access the goods, services, work, and social opportunities of their communities. This report provides information about how older persons get around, personal characteristics of the older population, and the problems that these individuals perceive with their transportation options. This information can help policy makers tailor policy to improve and expand the mobility of older individuals.

Perhaps the most striking finding of the survey is that *poor* HDS has a negative correlation with almost every aspect of transportation explored—mode use, personal mobility, social interactions, and satisfaction with mobility. In addition, those with poor HDS perceive more and greater problems with every mode. Breaking this linkage between HDS and reduced mobility reduction is one area for policy development.

However, to develop policy that enhances mobility, policymakers need to know more about the specific consequences of HDS for mobility. More research is needed to understand how to encourage and facilitate use of transportation options by persons with *poor* HDS. For example, one question for exploration might be whether persons *with poor* HDS would travel more if various transportation options were more accommodating. The findings of the survey suggest a need to give priority to this area of transportation research.

The survey explores what older persons see as problems with their various mobility options. For driving, the primary mode of transportation for older individuals, these problems are both individual (subjective and personal, such as night driving and costs) and environmental (such as the inconsideration displayed by other drivers, poor roads, crime, and fast traffic). Policy solutions to the individual problems may be limited, but there may be a number of policy options for addressing the environmental problems. These could include support for stepped up enforcement of traffic safety laws (particularly those that target forms of aggressive driving such as tailgating and disobeying red lights), and increased public investment in road improvement.

The survey finds that ridesharing is the second most used mode and an important source of transportation for many older adults. The problems most strongly associated with ridesharing are emotional and personal, but may have, at least in part, policy solutions. For example, subsidizing costs of transportation provided by caretakers might help to reduce the perception of the rider that he or she is imposing a burden on the driver. Another policy option might be to specify that the Medical and Family Leave Act covers time away from work to drive family members for medical appointments, thereby encouraging family members to provide transportation. In addition, policy could support the expansion of more formal ridesharing opportunities such as are found in volunteer transportation programs across the country.

Public transportation is available to many, but it is used by only a small percentage of older persons. The survey finds that many older persons perceive both personal (fear of crime) and operational problems (unavailable destinations, time it takes to get places, and accessibility) that may impede use. Policy could address fear of crime through increased deployment of security mechanisms such as good lighting, emergency call boxes, and security personnel. Policy could also address operational problems by requiring transportation providers and planners to assure that public transportation serves the destinations sought by older persons, efficiently and conveniently. The finding that older persons with *poor* HDS report greater problems with all aspects of public transportation suggests that policy makers should give priority to addressing the needs of this subgroup.

While few older persons currently rely on walking as their usual mode of transportation, policy makers could seek to expand this mobility resource by addressing problems such as the distance between residential and commercial areas, and the lack of sidewalks or places to rest. Policy encouraging zoning that allows for mixed residential and commercial use could help reduce the separation between homes and goods and services for pedestrians (as well as contribute to cost-efficient public transportation). In addition, transportation planners could seek to improve the infrastructure for walking by including in their short and long term plans sidewalks and the installation at regular intervals of places to sit.

Taxis are a transportation option that can have many of the preferred attributes of the car, such as comfort and security, but older persons see cost as a large problem. Policy solutions to this problem appear limited, although policy makers could explore reducing the costs to the consumer by providing vouchers to cover some or all of the costs. Human service programs in some cities are currently taking this approach to provide transportation for clients.

As the baby boomers age, the issue of continued mobility will grow. Ensuring that transportation is part of a community's infrastructure for this ever-increasing population must be a priority for transportation policymakers and planners.

References

- Baltes, M. M., Mayr, U., Borchelt, M., Maas, I., and Wilms, H. (1993). Everyday Competence In Old And Very Old Age: An Inter-disciplinary Perspective. *Aging in Society*, 13:4, pp. 657-680.
- Coughlin, J. *Transportation and Older Persons: Perceptions and Preferences*. AARP (2001)
- Lefrancois, R., Leclerc, G., and Polin, N. (1998). Predictors of Activity Involvement Among Older Adults. *Activities, Adaptation, and Aging*, 22:4, pp. 15-29.
- U.S. Bureau of the Census. (1995). *Survey of Income and Program Participation*.
- U. S. Federal Highway Administration. (1998). *Highway Statistics 1998*.
- U. S. Federal Highway Administration. (1995). *National Personal Transportation Study*.

Appendix A: Demographic Profile of Survey Respondents

(Weighted to 1998 U.S. population)

Respondents to the AARP *Understanding Senior Transportation Survey* among 2,422 adults age 50+ have the following demographic characteristics:

- The average age of survey respondents is 65 years old; the average age of respondents' spouse is slightly lower, 61.
- More respondents are female (56%) than male (44%). With increasing age, the proportion of women rises. For respondents age 85+, the percentage of women (72%) is nearly three times as great as the percentage of men (28%).
- Nearly half of respondents (45%) are married. Another one in three (34%) is widowed. Smaller percentages are divorced (13%) or have never married (5%).
- More than half of respondents (56%) are retired, but nearly one in four respondents (23%) works full-time. Eight percent are employed part-time. Nearly one in five workers (17%) has previously retired. More than two in five (42%) have a spouse who is employed at least part-time.
- Nearly nine out of 10 respondents (89%) are White/Caucasian. Blacks/African Americans make up 8 percent of the respondents; people of Hispanic origin (who can be of any race) make up 2 percent; and Native Americans make up 1 percent.
- More survey respondents report living in a *city* (32%) than in a *town* (29%), a *suburb* (23%), or the *country* (17%). One in five of respondents age 50 to 74 (19%) reports living in the *country*, but this proportion drops to under one in 10 among respondents age 85+ (6%). Nearly three in four respondents age 85+ live in either a city (40%) or town (34%) compared with three in five respondents age 75 to 79 (city, 35%, town, 25%).
- Nearly half (47%) of respondents live with one other person, and two in five respondents (39%) live alone.
- Three in four respondents (75%) indicate they live in a *single-family home*. One in eight (12%) reports living in a *multi-unit building* such as an apartment building. Few respondents report living in a *semi-detached home* such as a townhouse, rowhouse, or duplex (7%) or *mobile home* (6%). The majority of each age group over age 50 dwell in *single-family* residences, but there is a noticeable shift among the oldest cohort (age 85+) into *multi-family* dwellings. More than three in four respondents age 50 to 74 (77%) live in *single-family detached homes*, and one in 10 in this age cohort (10%) lives in a *multi-unit building*. Among respondents age 85+, however, two out of three respondents live in a *single-family detached home*, and nearly one in four (24%) lives in a *multi-unit buildings*.
- On average, respondents indicate they have lived in their current residence approximately 19 years.
- About one in four respondents (24%) is a college graduate, including about one in 10

(9%) with postgraduate or professional degrees. Another one in four respondents (24%) has some college or vocational training beyond high school. One in three respondents (32%) is a high school graduate, and about one in five (18%) has less than a high school education.

- Two out of five respondents (40%) have annual incomes below \$30,000. More than one in four (27%) has annual incomes between \$30,000 and \$75,000. Eight percent have annual incomes over \$75,000. However, for respondents age 85+, 14 percent have an annual income \$30,000 or more. One in four respondents (25%) did not respond to the question about their income.

Appendix B: Annotated Survey Questionnaire

ICR Media, Pennsylvania 19063

October 2, 1998

1998 AARP Survey of Elderly Transportation Needs and Practices

SCREENER AND INTRODUCTION

QUOTAS:

- 1 600 age 50-74
- 2 600 age 75-79
- 3 600 age 80-84
- 4 600 age 85+

SAMPLE SOURCE:

- 1 RDD
- 2 LIST

Hello, my name is (FIRST AND LAST NAME) and I'm calling on behalf of the American Association of Retired Persons (AARP). This is not a sales call; we are conducting a survey about people's opinions regarding transportation issues. (IF NEEDED: Your individual responses are anonymous and will be held in the strictest confidence. The survey is being conducted among persons aged 50 and older.)

A. Are there any members of your household that are age (IF ALL QUOTAS OPEN: 50; IF CELLS 2 - 4 OPEN: 75; IF CELLS 3 - 4 OPEN: 80; IF CELL 4 OPEN: 85) or older?

- | | | |
|---|------------|-------------------|
| 1 | Yes | CONTINUE |
| 2 | No | THANK & TERMINATE |
| D | Don't Know | THANK & TERMINATE |
| R | Refused | THANK & TERMINATE |

B. How many people in your household, if any, are (AGE)?

- a. Age 50 to age 74
_MEAN = 1.21 /PROXY MEAN = 1.35 RECORD #
- b. Age 75 to age 79
_MEAN = 0.16 /PROXY MEAN = 0.23 RECORD #
- c. Age 80 to age 84
_MEAN = 0.11 /PROXY MEAN = 0.17 RECORD #
- d. Age 85 or older
MEAN = 0.0 /PROXY MEAN = 0.16 RECORD #
BASE = Total Respondents (2,422)/TOTAL PROXY COMPLETES (326)

(PROGRAMMER: SELECT OLDEST AGE GROUP FROM Q.B. IF OLDEST AGE GROUP CONTAINS ONLY ONE PERSON ASK Q.C. IF OLDEST AGE GROUP CONTAINS MORE THAN ONE PERSON, ASK Q.D)

C. According to the research procedure I need to talk to the person in your household that is (age 50-74/age 75-79/age 80-84/age 85 or older).

- | | | |
|---|---|--|
| 1 | Qualified Person On Phone | GO TO Q.1 |
| 2 | Qualified Person Available (Not on Phone) | ASK TO SPEAK WITH/REPEAT MAIN INTRODUCTION AND GO TO Q.1 |
| 3 | Qualified Person Unable To Come To Phone | GO TO Q.F |
| 4 | Qualified Person Not Available At This Time | SET-UP CALL BACK |
| R | Refused | TERMINATE/RQC |

D. According to research procedure I need to talk to someone in this household who is age (50-74/75-79/80-84/85 or older).

Of these who are age (50-74/75-79/80-84/85 or older), how many are (male/female)?

RR Refused

- a. Male (IF RESPONSE = Q.B RESPONSE FOR THIS AGE GROUP, SKIP ITEM b)
- b. Female

(IF ANY MALES IN Q.D, ASK Q.E FOR MALES FIRST)

E. I need to speak to the (male/female) age (50-74/75-79/80-84/85 or older).

(IF 2+: who had the most recent birthday).

- | | | |
|---|---|--|
| 1 | Qualified Person On Phone | GO TO Q.1 |
| 2 | Qualified Person Available (Not On Phone) | ASK TO SPEAK WITH/REPEAT MAIN INTRODUCTION AND GO TO Q.1 |
| 3 | Qualified Person Unable To Come To Phone | GO TO Q.F |
| 4 | Qualified Person Not Available At This Time | SET-UP CALL BACK |
| R | Refused | TERMINATE/RQE |

F. How old is this person?

_MEAN = 68 RECORD AGE

RR (DO NOT READ) Refused

BASE = Total Proxy Respondents (326)

G. Would you say this person's health in general is excellent, very good, good, fair, or poor?

<u>50+</u>	<u>75+</u>	
17%		Excellent
13		Very Good
38		Good
19		Fair
12		Poor
1		(DO NOT READ) Don't Know
1		(DO NOT READ) Refused

MEAN = 3.08

BASE = Total Proxy Respondents (326)

H. Does this person have difficulty with any of the following:

<u>50+</u>	<u>75+</u>	
81%		<u>ANY(NET)</u>
21		Seeing the words and letters in ordinary newspaper even when wearing glasses
38		Hearing what is said in a normal conversation even when using a hearing aid if one is used.
28		Lifting or carrying something as heavy as 10 pounds, like a bag full of groceries
25		Climbing a flight of stairs without resting
35		Walking a quarter mile (about three city blocks)
14		Having speech understood by others
29		Using the telephone
42		(DO NOT READ) None of These
0		(DO NOT READ) Don't Know
0		(DO NOT READ) Refused

BASE = Total Proxy Respondents (326)

(THANK AND TERMINATE. SAVE DATA. PROVIDE SEPARATE COUNTS OF THOSE WITH DATA IN Q.F/G/H, CALL THEM "PROXY COMPLETES".)

MAIN QUESTIONNAIRE

Total respondents: 50+: n=2,422; 75+: n=1,844

Response rate: 59%; Sampling Error: ±2%

1. First, I have a few questions for classification purposes only. This is not a sales call. And how would you describe the place you live now—a city, a suburban area around a city, a small town, or in the country. (REPEAT LIST IF NEEDED)

<u>50+</u>	<u>75+</u>	
32%	37%	City
23	25	Suburb
29	28	Small town
17	10	Country
*	1	(DO NOT READ) None of these
*	1	(DO NOT READ) Don't Know
0	*	(DO NOT READ) Refused

2. Which of the following home types do you live in?
(READ LIST; REPEAT IF NEEDED)

<u>50+</u>	<u>75+</u>	
75%	69%	A single-family detached home
7	6	A semi-detached home, like a townhouse, row-house, or duplex
12	18	A multi-unit building (includes all apartments, either high-rise or low-rise)
6	7	A mobile home
*	1	Other (SPECIFY) _____
*	*	(DO NOT READ) Don't Know
0	*	(DO NOT READ) Refused

- 2a. How long have you lived in your current residence? (RECORD ANSWER IN YEARS)

50+ MEAN = 19.4 YEARS 75+ MEAN = 26.3 YEARS

<u>50+</u>	<u>75+</u>	
1%	*	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

3. Do you currently live within a 1/2-mile (about six city blocks) of:

<u>50+</u>	<u>75+</u>	
65%	68%	A food store
56	60	A drug store
22	27	Your doctor's office
47	50	A public transportation stop
24	18	(DO NOT READ) None of these
*	*	(DO NOT READ) Don't Know
0	0	(DO NOT READ) Refused

4. How many times did you go out yesterday? By going out, I mean leaving your house and yard, or apartment to go some place else.

50+ MEAN = 3.3 TIMES 75+ MEAN = 2.5 TIMES

<u>50+</u>	<u>75+</u>	
16%	31%	None
32	32	Once
26	20	Twice
24	16	Three or more times
1	1	(DO NOT READ) Don't Know
0	0	(DO NOT READ) Refused

- 4a. Thinking about yesterday, did you:

<u>50+</u>	<u>75+</u>	
77%	75%	Talk to a friend or relative on the phone
29	32	Have someone come to you home to visit
14	13	Have someone come to your home to deliver a product or service
14	18	Write a letter to a friend or relative
8	5	Order a product or service by phone or mail
12	2	Use a computer to send or receive e-mail, or order a product or service
*	*	(DO NOT READ) Don't Know
2	4	(DO NOT READ) Refused

5. How often would you say you go out in a typical week?

<u>50+</u>	<u>75+</u>		50+
2%	4%	Not At All	MEAN = 5.1
13	17	1 or 2 times	MEDIAN = 6.3
21	32	3 to 5 times	
63	45	More than 5 times	75+
1	1	(DO NOT READ) Don't Know	MEAN = 3.2
*	*	(DO NOT READ) Refused	MEDIAN = 3.0

6. Do you have a driver's license?

<u>50+</u>	<u>75+</u>		
91%	84%	Yes	CONTINUE
9	16	No	SKIP TO Q.8
0	0	Don't Know	CONTINUE
0	0	Refused	CONTINUE

7. Have you driven a car or other motor vehicle in the last month?

<u>50+</u>	<u>75+</u>		
94%	89%	Yes	SKIP TO Q.9
6	11	No	CONTINUE
0	0	Don't Know	CONTINUE
0	0	Refused	CONTINUE

50+ BASE = Total Qualified Respondents Who Have A Driver's License (2,196)

75+ BASE = Total Qualified Respondents Who Have A Driver's License (1,550)

7a. Do you ever drive?

<u>50+</u>	<u>75+</u>		
47%	36%	Yes	GO TO Q.9
53	64	No	GO TO Q.9
0	0	Don't Know	GO TO Q.9
0	0	Refused	GO TO Q.9

50+ BASE = Total Qualified Respondents Who Have A Drivers License And Who Have Not Driven In The Last Month (123)

75+ BASE = Total Qualified Respondents Who Have A Drivers License And Who Have Not Driven In The Last Month (167)

8. Have you ever been a licensed driver?

<u>50+</u>	<u>75+</u>	
39%	58%	Yes
61	42	No
0	0	Don't Know
0	0	Refused

50+ BASE = Total Qualified Respondents Who Do Not Have A Driver's License (226)

75+ BASE = Total Qualified Respondents Who Do Not Have A Driver's License (294)

9. Does anyone else in your household drive? [IF NO SKIP TO 12]

<u>50+</u>	<u>75+</u>		
54%	31%	Yes	CONTINUE
46	69	No	SKIP TO Q.12
0	0	Don't Know	SKIP TO Q.12
0	*	Refused	SKIP TO Q.12

(IF Q.6 = 1, GO TO Q.10a, IF Q.6 =2,D, OR R GO TO Q.10b)

10a/b. Including yourself, how many drivers are there in your household?/How many drivers are there in your household?

Licensed drivers

<u>50+</u>	<u>75+</u>	
0%	0%	Zero
46	69	One
44	28	Two
6	2	Three
2	*	Four
*	*	Five
*	0	Six
0	0	Seven or more
0	*	Don't know
0	0	Refused

50+ Base = Licensed Drivers (2,196)

75+ Base = Licensed Drivers (1,550)

Not licensed to drive

<u>50+</u>	<u>75+</u>	
72%	80%	Zero
17	17	One
4	3	Two
4	1	Three
4	0	Four
0	0	Five
0	0	Six
0	0	Seven or more
0	0	Don't know
0	0	Refused

50+ Base = Those Not Licensed To Drive (226)

75+ Base = Those Not Licensed To Drive (294)

11. Does anyone in your household have a car or other motor vehicle?

Incomplete information available

12b. In general, when you need to get somewhere how do you usually get there?
(DO NOT READ; ACCEPT ALL)

<u>50+</u>	<u>75+</u>	
5%	5%	Walk
86	75	Drive
13	26	Get a ride
1	3	Take a taxi
5	5	Take public transportation
1	3	Take a senior or community van (e.g., dial-a-ride, <u>not transportation for persons with disabilities</u>)
*	*	Take transportation provided to people with disabilities who cannot use or get to a public transportation
1	*	Fly
1	1	97 Some other way (SPECIFY) _____
1	*	DD (DO NOT READ) Don't Know
*	*	RR (DO NOT READ) Refused

(IF Q.6 =1, CONTINUE; ELSE GO TO INSTRUCTIONS ABOVE Q.13c)

13. I'm going to read you a list of some difficulties people have when driving. Thinking about your driving, please tell me whether each of these is a large problem, a small problem, or no problem at all for you. The first/next is . . .

(ROTATE)

a. The cost of operating a car

<u>50+</u>	<u>75+</u>	
11%	6%	Large problem
23	18	Small problem
65	74	No problem
1	2	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

b. Dealing with traffic congestion

<u>50+</u>	<u>75+</u>	
12%	11%	Large problem
28	23	Small problem
60	65	No problem
*	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

c. Being worried about getting lost

<u>50+</u>	<u>75+</u>	
2%	2%	Large problem
7	7	Small problem
90	90	No problem
1	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

d. Inconsiderate drivers

<u>50+</u>	<u>75+</u>	
18%	14%	Large problem
45	34	Small problem
37	51	No problem
1	2	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

e. Traffic moves too fast

<u>50+</u>	<u>75+</u>	
11%	11%	Large problem
17	20	Small problem
72	68	No problem
*	1	(DO NOT READ) Don't Know
0	*	(DO NOT READ) Refused

f. Being able to see signals, signs and lane markings

<u>50+</u>	<u>75+</u>	
2%	3%	Large problem
8	10	Small problem
89	87	No problem
*	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

g. Poor road conditions

<u>50+</u>	<u>75+</u>	
9%	7%	Large problem
25	20	Small problem
65	72	No problem
1	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

h. Parking

<u>50+</u>	<u>75+</u>	
3%	3%	Large problem
13	11	Small problem
84	86	No problem
*	1	(DO NOT READ) Don't Know

* * (DO NOT READ) Refused

i. Crime

<u>50+</u>	<u>75+</u>	
12%	10%	Large problem
18	16	Small problem
69	72	No problem
1	2	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

j. Design and comfort of your vehicle

<u>50+</u>	<u>75+</u>	
2%	2%	Large problem
7	4	Small problem
91	93	No problem
*	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

k. Feeling confident about driving

<u>50+</u>	<u>75+</u>	
1%	2%	Large problem
7	10	Small problem
91	87	No problem
*	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

l. Driving at night

<u>50+</u>	<u>75+</u>	
11%	20%	Large problem
27	28	Small problem
61	47	No problem
1	4	(DO NOT READ) Don't Know
*	1	(DO NOT READ) Refused

50+ BASE = Total Drivers (2,108); 75+ BASE = Total Drivers (1,550)

13a/b. Is there anything else about driving that you would consider a problem?/Would you consider that a large problem or a small problem?

<u>50+</u>	<u>75+</u>	
1%	*	<u>Nasty driver/road rage</u> Large problem
*	*	Small problem
0	0	Don't Know/Refused
1	1%	<u>Medical problems/poor vision</u> Large problem

*	*	Small problem
0	*	Don't Know/Refused
		<u>Reckless/careless/uneducated drivers</u>
2	1	Large problem
*	1	Small problem
0	0	Don't Know/Refused
		<u>Speeders</u>
1	1	Large problem
0	*	Small problem
0	*	Don't Know/Refused
		<u>Poor weather conditions</u>
1	1	Large problem
1	1	Small problem
0	0	Don't Know/Refused
92		Nothing else

50+ BASE = Total Drivers (2,196); 75+ BASE = Total Drivers (1,550)
(IF Q.8=1, ASK Q. 13C; ELSE SKIP TO Q.14)

13c. Thinking about your decision to stop driving, please tell me whether each of these was a large problem, a small problem, or no problem at all for you.

(ROTATE)

a. The cost of operating a car

<u>50+</u>	<u>75+</u>	
10%	12%	Large problem
20	11	Small problem
65	71	No problem
5	5	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

b. Dealing with traffic congestion

<u>50+</u>	<u>75+</u>	
28%	15%	Large problem
16	8	Small problem
53	71	No problem
3	4	(DO NOT READ) Don't Know
1	2	(DO NOT READ) Refused

c. Being worried about getting lost

<u>50+</u>	<u>75+</u>	
12%	3%	Large problem
8	3	Small problem
79	92	No problem
1	2	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

d. Inconsiderate drivers

<u>50+</u>	<u>75+</u>	
20%	13%	Large problem
26	18	Small problem
51	64	No problem
3	4	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

e. Traffic moves too fast

<u>50+</u>	<u>75+</u>	
29%	18%	Large problem
7	12	Small problem
62	67	No problem
2	3	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

f. Being able to see signals, signs and lane markings

<u>50+</u>	<u>75+</u>	
13%	19%	Large problem
12	8	Small problem
74	71	No problem
1	2	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

g. Poor road conditions

<u>50+</u>	<u>75+</u>	
9%	8%	Large problem
7	12	Small problem
73	76	No problem
11	3	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

h. Parking

<u>50+</u>	<u>75+</u>	
6%	11%	Large problem
6	10	Small problem
81	75	No problem
7	4	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

i. Crime

<u>50+</u>	<u>75+</u>	
7%	12%	Large problem
4	7	Small problem
87	78	No problem
2	3	(DO NOT READ) Don't Know

0 1 (DO NOT READ) Refused

j. Design or comfort of your vehicle

<u>50+</u>	<u>75+</u>	
2%	4%	Large problem
1	2	Small problem
93	91	No problem
4	2	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

k. Feeling confident about driving

<u>50+</u>	<u>75+</u>	
19%	20%	Large problem
13	10	Small problem
66	68	No problem
1	2	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

l. Driving at night

<u>50+</u>	<u>75+</u>	
25%	34%	Large problem
23	11	Small problem
46	48	No problem
6	6	(DO NOT READ) Don't Know
0	1	(DO NOT READ) Refused

50+ BASE = Total Past Drivers (87)

75+ BASE = Total Past Drivers (170)

13d/e. Is there anything else about driving that you considered a problem?
Would you consider that a large problem or a small problem?

14. In the last two months, about how often did you get a ride from someone you know?

<u>50+</u>	<u>75+</u>	
2%	2%	Every day
12	19	Two or more times a week
10	15	About once a week
21	24	Once or twice a month
13	11	Less than once a month
44	27	Never
1	2	(DO NOT READ) Don't Know
0	*	(DO NOT READ) Refused

15. Thinking about getting a ride from someone you know, please tell me whether you would consider each of these a large problem, a small problem, or no problem at all for you.

(ROTATE)

- a. Worry about imposing on others

<u>50+</u>	<u>75+</u>	
21%	18%	Large problem
27	21	Small problem
52	59	No problem
1	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- b. Feel embarrassed asking for ride

<u>50+</u>	<u>75+</u>	
11%	11%	Large problem
16	14	Small problem
71	73	No problem
2	2	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- c. Having to fit the ride-givers schedule

<u>50+</u>	<u>75+</u>	
9%	6%	Large problem
19	14	Small problem
71	76	No problem
2	4	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- d. Feel obliged or want to reciprocate

<u>50+</u>	<u>75+</u>	
6%	4%	Large problem
15	14	Small problem
76	79	No problem
2	3	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- e. Don't know very many people willing to help

<u>50+</u>	<u>75+</u>	
11%	7%	Large problem
14	12	Small problem
73	79	No problem
2	2	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

f. Concern about ride-giver's driving ability

<u>50+</u>	<u>75+</u>	
7%	6%	Large problem
17	14	Small problem
74	78	No problem
2	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

g. Don't like to feel dependent on others

<u>50+</u>	<u>75+</u>	
24%	19%	Large problem
24	23	Small problem
50	55	No problem
2	2	(DO NOT READ) Don't Know
*	1	(DO NOT READ) Refused

15a/b. Is there anything else about getting a ride that you would consider a problem?/Would you consider that a large problem or a small problem?

<u>50+</u>	<u>75+</u>	
1%	0	Public transportation is inaccessible/unavailable
1	0	Don't wish to take driver out of his/her way
*		Dislike riding with strangers
1	0	Difficult to find a ride
2	0	Other
99		Nothing else

16. In the last two months, about how often have you used public transportation? By public transportation, I mean public buses, trolleys, commuter trains, subways etc., but not taxicabs.

<u>50+</u>	<u>75+</u>		
1%	1%	Every day	SKIP TO Q.17
3	3	Two or more times a week	SKIP TO Q.17
1	1	About once a week	SKIP TO Q.17
4	4	Once or twice a month	SKIP TO Q.17
4	4	Less than once a month	SKIP TO Q.17
88	87	Never	ASK Q.16a
*	*	(DO NOT READ) Don't Know	SKIP TO Q.17
0	0	(DO NOT READ) Refused	SKIP TO Q.17

(IF Q.16 = 0, ASK:)

16a. Is public transportation available in your community?

<u>50+</u>	<u>75+</u>	
51%	64%	Yes
34	33	No
2	3	Don't Know
*	*	Refused

50+ BASE = Total Qualified Respondents Who Have Never Taken Public Transportation In The Last Two Months (2,125)

75+ BASE = Total Qualified Respondents Who Have Never Taken Public Transportation In The Last Two Months (1,608)

(IF Q.16a = 2, READ FIRST VERBIAGE IN PARENS; ALL OTHERS READ SECOND VERBIAGE IN PARENS)

17. (Even though public transportation is not available to you, would you consider each of these a large problem, a small problem, or no problem at all for you?)/(Thinking about public transportation, please tell me whether you would consider each of these a large problem, a small problem, or no problem at all for you?)

(ROTATE ITEMS b-k;)
(ITEM a DELETED 10/2/98)

b. Accessibility (getting to the stop or station—too far, no sidewalks, highways to cross)

<u>50+</u>	<u>75+</u>	
20%	17%	Large problem
11	11	Small problem
59	59	No problem
10	12	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

c. Difficulty boarding

<u>50+</u>	<u>75+</u>	
5%	11%	Large problem
8	10	Small problem
78	70	No problem
8	9	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

d. Being able to get a seat

<u>50+</u>	<u>75+</u>	
4%	6%	Large problem
9	7	Small problem
72	67	No problem

16	19	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

e. Getting information about fares, routes, and schedules

<u>50+</u>	<u>75+</u>	
7%	6%	Large problem
9	8	Small problem
73	70	No problem
11	15	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

f. Being worried about crime

<u>50+</u>	<u>75+</u>	
16%	13%	Large problem
23	20	Small problem
55	57	No problem
6	10	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

g. The time it takes to use public transportation (schedules and the like)

<u>50+</u>	<u>75+</u>	
16%	13%	Large problem
22	14	Small problem
47	55	No problem
14	18	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

h. Public transportation stations and vehicles are poorly maintained

<u>50+</u>	<u>75+</u>	
11%	8%	Large problem
14	9	Small problem
55	55	No problem
20	28	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

i. Public transportation is too expensive

<u>50+</u>	<u>75+</u>	
10%	6%	Large problem
12	9	Small problem
56	60	No problem
22	24	(DO NOT READ) Don't Know
*	1	(DO NOT READ) Refused

j. Transfers between routes are difficult		
<u>50+</u>	<u>75+</u>	
13%	11%	Large problem
15	9	Small problem
48	52	No problem
25	28	(DO NOT READ) Don't Know
*	1	(DO NOT READ) Refused

k. Public transportation doesn't go where I need to go		
<u>50+</u>	<u>75+</u>	
24%	21%	Large problem
14	10	Small problem
44	49	No problem
17	20	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

17a. Is there anything else about using public transportation that you would consider a problem for you?

<u>50+</u>	<u>75+</u>	
3%		Unavailability/not enough public transportation
3		Other
92		Nothing else

18. In the last two months, about how often have you walked to go some place? I mean leaving your home and traveling to your destination on foot.

<u>50+</u>	<u>75+</u>	
11%	11%	Every day
13	11	Two or more times a week
6	5	About once a week
8	6	Once or twice a month
6	6	Less than once a month
56	60	Never
1	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

19. Thinking about walking, please tell me whether you would consider each of these a large problem, a small problem, or no problem at all for you.

(ROTATE)

- a. Walking is too hard, I'm not able to go far enough.

<u>50+</u>	<u>75+</u>	
24%	32%	Large problem
14	17	Small problem
62	49	No problem
1	2	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- b. Being worried about crime

<u>50+</u>	<u>75+</u>	
15%	15%	Large problem
20	19	Small problem
63	63	No problem
2	3	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- c. The time it takes to walk

<u>50+</u>	<u>75+</u>	
17%	16%	Large problem
14	13	Small problem
67	66	No problem
2	5	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- d. No place to rest

<u>50+</u>	<u>75+</u>	
20%	23%	Large problem
13	13	Small problem
65	59	No problem
2	5	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

- e. No sidewalks or sidewalks are in poor condition

<u>50+</u>	<u>75+</u>	
22%	20%	Large problem
15	14	Small problem
62	62	No problem
2	3	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

f. Crossing intersections is too dangerous

<u>50+</u>	<u>75+</u>	
16%	20%	Large problem
16	16	Small problem
66	61	No problem
1	3	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

g. Everything is too far away

<u>50+</u>	<u>75+</u>	
25%	25%	Large problem
15	12	Small problem
58	60	No problem
2	3	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

19a/b. Is there anything else about walking that you would consider a problem?/Would you consider that a large problem or a small problem?

<u>50+</u>	<u>75+</u>	
2%		Concerned about loose animals (dogs/bears)
1		Don't do it often/too lazy
1		Poorly lighted areas
1		Weather conditions
1		Rugged terrain/hills
2		Other
95		Nothing else

20. In the last two months, about how often have you taken a taxicab?

<u>50+</u>	<u>75+</u>	
0%	*	Every day
1	1%	Two or more times a week
1	1	About once a week
1	1	Once or twice a month
4	5	Less than once a month
94	92	Never
*	*	(DO NOT READ) Don't Know
0	0	(DO NOT READ) Refused

21/21a. Thinking about taking a cab, please tell me what you would consider the problems for you in taking a cab./Is there anything else about taxis that you would consider a problem?

(DO NOT READ LIST; ENTER ALL THAT APPLY)

<u>50+</u>	<u>75+</u>		
9%	8%	It's hard to get a taxi	
10	8	Taxis take too long to come after you call	
4	2	Being worried about crime	
3	1	Drivers are not helpful	
25	17	Taxis are too expensive	
5	3	Taxis are poorly maintained	
2	1	Drivers are unfamiliar with the area	
4	2	Difficulty communicating with drivers	
2	1	Getting information about fares	
1	0	Other	
49	56	None	SKIP TO Q.22
6	11	Don't Know	SKIP TO Q.22
*	*	Refused	SKIP TO Q.22

22. In the last two months, about how often have you taken a senior or community van? By this I mean a van or bus provided to accommodate special transportation needs.

<u>50+</u>	<u>75+</u>	
1%	2%	Two or more days a week
1	2	About once a week
2	4	Once or twice a month
3	3	Less than once a month
94	89	Never
*	*	(DO NOT READ) Don't Know
0	*	(DO NOT READ) Refused

23/23a. Thinking about senior or community vans, please tell me what you would consider the problems for you in using a senior or community van?/Is there anything else about senior or community vans that you would consider problem?

(DO NOT READ LIST.) (ENTER ALL THAT APPLY.)

<u>50+</u>	<u>75+</u>	
4%	3%	Getting information about availability or eligibility
3	2	Making reservations is difficult
2	3	Vans are late for scheduled pick-ups
1	1	Fares are too high
*	*	Operators are not helpful
0	0	It's embarrassing to use special transportation
4	3	Having to schedule ahead is not convenient

2	2	The time it takes to use	
*	1	Vehicles are poorly maintained	
2	1	Not being eligible	
6	5	There is no van in my community	
1	0	Need to expand the number of stops/locations	
1	0	Other	
67	70	None	SKIP TO Q.24
15	14	Don't Know	SKIP TO Q.24
*	*	Refused	SKIP TO Q.24

24. Overall, how satisfied are you with how you get around in your community when you want or need to go someplace? Using a scale from 0 to 10, where 0 means completely dissatisfied, 5 means neither satisfied or dissatisfied, and 10 means completely satisfied, how satisfied are you with how you get around in your community?

<u>50+</u>	<u>75+</u>		
66%	66%	10	Completely Satisfied
7	5	09	
9	8	08	
5	3	07	
2	1	06	
9	10	05	Neither Satisfied or Dissatisfied
*	*	04	
1	*	03	
1	*	02	
*	*	01	
1	1	00	Completely Dissatisfied
1	3	DD	(DO NOT READ) Don't Know
*	1	RR	(DO NOT READ) Refused

(IF Q.7 = 1, ASK Q.24a)

24a. Please tell me if you agree or disagree with the following statement: If I were no longer able to drive, it would be difficult for me to continue to reside in my current home. Would you say you strongly agree, somewhat agree, somewhat disagree, strongly disagree?

<u>50+</u>	<u>75+</u>	
26%	25%	Strongly Agree
24	22	Somewhat Agree
18	20	Somewhat Disagree
29	25	Strongly Disagree
3	8	(DO NOT READ) Don't Know
1	1	(DO NOT READ) Refused

50+ BASE = Total Who Have Driven In The Last Month (2,073)

75+ BASE = Total Who Have Driven In The Last Month (1,383)

(IF Q.8 =1 or Q.7a =2, D, R, ASK Q.24b, ELSE SKIP TO Q.25)

24b. Have you moved since you stopped driving?

<u>50+</u>	<u>75+</u>		
23%	20%	Yes	CONTINUE
74	80	No	SKIP TO Q.25
3	0	Don't Know	SKIP TO Q.25
0	0	Refused	SKIP TO Q.25

50+ BASE = Total Drivers Who Haven't Driven In The Past Month/Past Drivers (152)

75+ BASE = Total Drivers Who Haven't Driven In The Past Month/Past Drivers (278)

24c. Did transportation problems influence your decision to move?

<u>50+</u>	<u>75+</u>	
3%	6%	Yes
97	94	No
0	0	Don't Know
0	0	Refused

50+ BASE = Total Past Drivers/Drivers Who Haven't Driven In The Past Month Who Have Moved Since They Have Stopped Driving (35)

75+ BASE = Total Past Drivers/Drivers Who Haven't Driven In The Past Month Who Have Moved Since They Have Stopped Driving (57)

25. Next I am going to ask about some different places you might go. For every destination, please tell me how often transportation problems interfere with your ability to go to each kind of place. If you don't ever go to a place mentioned, just tell me you don't go there. Would you say that transportation problems often, sometimes, or never interfere with going to:

(ROTATE)

a. Your doctor

<u>50+</u>	<u>75+</u>	
2%	3%	Often
7	6	Sometimes
89	90	Never
2	1	You don't go there
*	*	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

b. Visit your family

<u>50+</u>	<u>75+</u>	
4%	4%	Often
8	8	Sometimes
83	79	Never
4	8	You don't go there
*	*	(DO NOT READ) Don't Know
*	1	(DO NOT READ) Refused

c. Visit friends

<u>50+</u>	<u>75+</u>	
2%	2%	Often
7	7	Sometimes
88	85	Never
3	6	You don't go there
*	*	(DO NOT READ) Don't Know
0	*	(DO NOT READ) Refused

d. Your place of worship

<u>50+</u>	<u>75+</u>	
2%	3%	Often
3	4	Sometimes
89	88	Never
6	6	You don't go there
*	*	(DO NOT READ) Don't Know
0	0	(DO NOT READ) Refused

e. The grocery or drug store

<u>50+</u>	<u>75+</u>	
3%	3%	Often
4	5	Sometimes
92	89	Never
1	3	You don't go there
*	*	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

f. Shopping for clothes or household items

<u>50+</u>	<u>75+</u>	
3%	4%	Often
8	7	Sometimes
87	84	Never
2	4	You don't go there
*	*	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

g. Entertainment such as the movies, a sports event, or going out to eat

<u>50+</u>	<u>75+</u>	
3%	3%	Often
8	7	Sometimes
82	78	Never
7	11	You don't go there
*	*	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

h. Volunteer activities

<u>50+</u>	<u>75+</u>	
2%	2%	Often
4	4	Sometimes
73	65	Never
21	27	You don't go there
*	1	(DO NOT READ) Don't Know
*	*	(DO NOT READ) Refused

(IF Q.24 = 0,1,2,3, OR 4 ASK Q.26; ELSE SKIP TO Q.27)

26. If you could go wherever you wanted and transportation was not a problem, what would you do as part of your weekly routine that you aren't doing now?
(RECORD VERBATIM)

<u>50+</u>	<u>75+</u>	
17%	10%	Visit family/friends more
2	6	Travel for pleasure
11	5	Shop more
26	20	More recreational activities
13	13	More exercise/physical activity
38	29	Other
7	26	No answer
5	7	Don't know
0	4	Refused

50+ Base = Respondents Dissatisfied With Mobility (49)

75+ Base = Respondents Dissatisfied With Mobility (44)

27. These next few questions are about your health. Would you say your health in general is excellent, very good, good, fair, or poor?

<u>50+</u>	<u>75+</u>	
23%	16%	Excellent
29	30	Very Good
26	30	Good
17	18	Fair
6	6	Poor
1	*	(DO NOT READ) Don't Know
*	1	(DO NOT READ) Refused

28. Do you use any of the following aids to get around?
How about . . .(READ LIST. ENTER ALL)

<u>50+</u>	<u>75+</u>	
11%	23%	A cane, crutch, or walker
*	1	An electric scooter
2	4	A wheelchair
88	76	(DO NOT READ) None of these
0	0	(DO NOT READ) Don't Know
0	0	(DO NOT READ) Refused

29. Do you have difficulty with any of the following:
(READ LIST. ENTER ALL.)

<u>50+</u>	<u>75+</u>	
14%	17%	Seeing the words and letters in an ordinary newspaper even when wearing glasses
14	22	Hearing what is said in a normal conversation even when using a hearing aid if you use one
21	28	Lifting or carrying something as heavy as 10 pounds, like a bag full of groceries (IF Q.28 = ANY OF 1-3, DO NOT ASK CODES 4 OR 5)
17	15	Climbing a flight of stairs without resting
16	16	Walking a quarter mile (about three city blocks)
55	43	(DO NOT READ) None of these
0	*	(DO NOT READ) Don't Know
8	5	(DO NOT READ) Refused

These last few questions are just to help us classify our results. Your individual responses are anonymous and will be held in the strictest confidence.

30. What is your current employment status? Are you . . . ?

<u>50+</u>	<u>75+</u>	
23%	1%	Employed full-time
8	3	Employed part-time
56	88	Retired (not working)
5	7	Homemaker
3	1	Unemployed (looking for work)
3	*	Disability
2	*	Something else (SPECIFY)
0	*	(DO NOT READ) Don't know
*	*	(DO NOT READ) Refused

(IF Q.30 DOES NOT EQUAL 3, ASK)

31. Have you ever retired?

<u>50+</u>	<u>75+</u>	
17%	5%	Yes
83	7	No
0	0	Don't know
0	*	Refused

50+ BASE = Total Who Are Not Currently Retired (745)

75+ BASE = Total Who Are Not Currently Retired (1,844)

32. What is the highest grade of school you completed, is it...

<u>50+</u>	<u>75+</u>	
5%	8%	Grade school
14	12	Some high school
32	32	High school graduate
5	6	Technical or vocational school
19	20	Some college
15	13	College graduate (4 years)
9	8	Post-graduate studies
*	1	Refused/No answer

33. What is your age?

<u>50+</u>	<u>75+</u>	
0	0	<u>50+MEAN = 65 YEARS</u> <u>75+ MEAN = 81 YEARS</u>
		RR (DO NOT READ) Refused

34. What is your marital status? Are you...

<u>50+</u>	<u>75+</u>		
45%	32%	Now married	GO TO 35
34	60	Widowed	GO TO 36
13	4	Divorced	GO TO 36
2	*	Separated	GO TO 36
6	4	Never married	GO TO 36
*	*	Refused/no answer	GO TO 36

(IF NOW MARRIED, Q.34=1, ASK Q.35a & b; ELSE GO TO Q.36)

35a. Is your spouse. . . .

<u>50+</u>	<u>75+</u>	
36%	2%	Employed full-time
7	3	Employed part-time
40	75	Retired (not working)
16	18	Homemaker
1	1	Unemployed (looking for work)
*	*	Disability
*	1	Something else (SPECIFY) _____
0	0	Don't Know
0	0	Refused

50+ BASE = Total Who Are Married (1,095)

75+ BASE = Total Who Are Married (584)

35b. And what is the age of your spouse?

<u>50+</u>	<u>75+</u>	
		50+ MEAN = 62 YEARS 75+ MEAN = 78 YEARS
0%	0%	DD (DO NOT READ) Don't know
0	0	RR (DO NOT READ) Refused

50+ BASE = Total Who Are Married (1,095)

75+ BASE = Total Who Are Married (584)

36. Are you of Spanish or Hispanic origin?

<u>50+</u>	<u>75+</u>	
2%	2%	Yes
96	97	No, not Spanish/Hispanic
1	*	Don't know
*	1	Refused

37. What race do you consider yourself? Is it . . .

<u>50+</u>	<u>75+</u>	
89%	93%	White
8	4	Black/African American
1	*	American Indian
0	0	Eskimo
0	0	Aleut
*	*	Asian or Pacific Islander
1	1	(DO NOT READ) Other
*	*	(DO NOT READ) Don't know
2	2	(DO NOT READ) Refused

38. Which of the following best describes your living situation? Do you. . . .

<u>50+</u>	<u>75+</u>	
40%	60%	Live alone
37	30	Live with your spouse
6	1	Live with your spouse and dependent children
14	7	Live with adult children or other family members
3	1	Or, live with nonrelated person or persons
1	2	Refused/No answer

(P.N.: IF Q.38=1 OR 2, GEN IN 1 for Code 1 OR 2 FOR CODE 2 AND GO TO Q.39)
(IF Q.38=3,4, OR 5, ASK Q.39)

39. How many people live in your household?

<u>50+</u>	<u>75+</u>	
0	*	50+_MEAN = 2 75+ MEAN = 1.6 RR (DO NOT READ) Refused

39a. Do you (IF Q.34 =1: or your spouse) belong to A-A-R-P or “aarp” – the American Association of Retired Persons, or N-R-T-A – the National Retired Teachers Association?

<u>50+</u>	<u>75+</u>	
49%	56%	Yes, AARP
1	1	Yes, NRTA
3	5	Yes, both
46	37	No
1	*	Don't Know
*	1	Refused

40. Just for statistical purposes, stop me when I get to the category that includes your household's total income in 1997, before taxes. This includes wages, Social Security, pensions, and interest or dividends on savings and investments..
Was it . . .?

<u>50+</u>	<u>75+</u>	
11%	13%	Less than \$10,000
16	22	Between \$10 and \$20,000
14	14	Between \$20 and \$30,000
11	8	Between \$30 and \$40,000
8	4	Between \$40 and \$50,000
8	3	Between \$50 and \$75,000
4	2	Between \$75 and \$100,000
5	1	More than \$100,000
25	33	Refused/No answer

41. What is your 5-digit zip code?

RECORD SEX (DO NOT ASK)

<u>50+</u>	<u>75+</u>	
44%	36%	Male
56	64	Female

THESE ARE ALL THE QUESTIONS I HAVE. THANK YOU FOR YOUR TIME.
HAVE A GOOD DAY/EVENING.



601 E Street, NW
Washington, D.C. 20049
<http://research.aarp.org/ppi>