COMMUNITY TRANSPORTATION SURVEY

by

Audrey Straight

The Public Policy Institute, formed in 1985, is part of The Research Group of the American Association of Retired Persons. One of the missions of the Institute is to foster research and analysis on public policy issues of interest to older Americans. This paper represents part of that effort.

The views expressed herein are for information, debate and discussion, and do not necessarily represent formal policies of the Association.

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Acknowledgments

Many people contributed to the production of this survey and its analysis. The author thanks Robert Jenkens and George Gaberlavage for the original idea and their help in developing the project. In addition, the author gratefully acknowledges the willing assistance of Edward Evans and Jeremy Citro at every stage of the project. Without their help this report would not have been possible. The author thanks Bob Prisuta for his methodological expertise and helpful review. The author also appreciates the helpful review comments of Joseph Coughlin of the Massachusetts Institute of Technology and John Eberhard of the U.S. Department of Transportation, as well as Debra Alvarez, Andrea Saunders, Jane Takeuchi, and Robert Vorek at AARP.
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Foreword

Transportation is the means by which people access the goods, services, and social interactions necessary to an acceptable quality of life. As such, transportation is a critical component of the ability of people to maintain independence as they age in their communities. As America moves toward the year 2020 when nearly 20 percent of the population will be 65 or older, it is increasingly important to understand how this population maintains its connections with its communities.

This study explores some of the habits, preferences, and attitudes that persons age 75 and older have regarding their transportation. It highlights some of the barriers to mobility for persons aging in their communities.

The report concludes with suggestions for further research and implications of the findings for policy development.

Audrey Straight
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Executive Summary

Background

Whether people can maintain independence in their communities as they age depends in part on their access to the goods, services, and social contacts necessary to a good quality of life. This access relies largely on their mobility -- getting themselves to and from the crucial goods, services, and social interactions that are necessary to independent living.

A standard measure of mobility is the number of trips that people make away from their homes. The 1990 Nationwide Personal Transportation Survey showed that by the time persons reach 75 years of age, trip-making has diminished considerably. This reduction in the number of trips may indicate social isolation and an inability to maintain independence.

Mobility may be affected by numerous factors including emotional and physical health, economic well-being, and the ease or difficulty in getting around one’s community. However, little research has been done on how older persons themselves perceive their transportation options or the reduced mobility that accompanies old age.

Purpose

The purpose of this study, the Community Transportation Survey (CTS), is to provide a greater understanding of older persons’ mobility, as measured by the number of trips they make around their communities. The study presents information about the travel behavior and travel preferences of drivers and non-drivers age 75 and older. It also explores how older persons perceive the impact of some community design features on their mobility.

Methodology

The Community Transportation Survey was designed and conducted by International Communications Research (ICR) of Media, PA, in conjunction with the American Association of Retired Persons. The research consisted of a nationwide, random telephone survey. Interviewing occurred from October 9 to November 26, 1996, and 710 respondents age 75 and older participated in the survey. The data were weighted to reflect the U.S. population age 75 and older.

The weighting procedure employed by ICR accounted for the probabilities of household selection via random telephone dialing and classified the data to be nationally
representative of the population 75 years and older. Despite these weighting procedures, the mobility of the 75+ population may be overestimated in this survey (see the methodology section in this report for a discussion of this issue). The margins of error for specific survey questions will vary with the number of respondents who were asked a particular question. Thus, questions asked of the full sample, 710 persons, will have smaller margins of error than questions asked of a subsample of the survey respondents. The margin of error for a question with 710 respondents is approximately plus or minus three percentage points.

The report analyzes several facets of the mobility of older persons. Survey respondents were queried on such issues as how they travel, how often they travel, and features of the environment in which they travel. To obtain more specific information regarding potential influences on these issues, the survey also explores perceptions of comfort with various features of road design and with two alternatives to driving, walking and public transportation. In addition, the survey investigates the mobility of non-drivers and potential solutions to helping non-drivers become more mobile.

**Principal Findings**

**Drivers and Non-drivers** - Seventy-three percent of the older persons surveyed drive. Approximately 89 percent of male respondents 75 and older reported that they drive compared to 64 percent of female respondents. Also, older persons with higher incomes are much more likely to drive.

**Number of Trips** - Fifty percent of all respondents, regardless of whether or not they drive, report that they take five or fewer trips (without reference to the means by which these trips were made) per week. Males, persons 75 to 84 years of age, and older persons with incomes of $25,000 or more make a greater number of trips than females, persons age 85 or older, and older persons with more limited financial resources.

**Driving and Mobility** - The median number of trips by older drivers is three times that of older non-drivers. Regardless of age or sex, older drivers report taking more trips than older non-drivers. For example, the median number of trips made by older male drivers was seven compared to two for older male non-drivers.

**Driving Avoidance and Cessation** - Among all older drivers, 63 percent avoid driving at night and 51 percent avoid driving during rush hour. Among older persons who had ceased driving within the last three years, 61 percent had discontinued driving because of physical impairments. Other reasons offered for the discontinuation of driving include the inability to afford a car (seven percent), not having a need to drive (seven percent), being too old (six percent), and getting
rides from a spouse (six percent).

**Comfort Levels and Driving Environment** - As many as 30 percent of the older drivers surveyed report that they feel uncomfortable with specific physical design aspects of roads and/or traffic situations they encounter. Thirty-three percent of older drivers report that they avoid certain routes. Among the older drivers who say they avoid certain routes, 34 percent cite heavy traffic and 30 percent cite interstate highways as factors that cause them not to drive on certain roads.

**Trips Made by Non-drivers** - Among the non-drivers surveyed, half reported making two or fewer trips per week. Two-thirds of non-drivers say they rely on rides from family members and/or friends to get where they need to go.

**Non-drivers and Public Transportation** - Eighty-six percent of non-drivers report that they do not use public transportation. Of the non-drivers who do not use public transportation, 33 percent say that they prefer to rely on rides from family and friends. Other reasons for not using public transportation include its lack of availability, inconvenience, and individual physical problems.

**Non-drivers and Modifications of Travel Environment** - Fifty percent of non-drivers say they cannot walk to a bus stop, and 53 percent of non-drivers say they cannot walk to a grocery store. Among non-drivers who cannot walk to a bus stop, 32 percent say that a resting place along the way would make it possible to do so, and 27 percent report that a bus stop within five blocks of their home would make it possible to do so. Among non-drivers who cannot walk to a grocery store, 37 percent report that a store within five blocks of their home would make it possible to do so, and 35 percent say a resting place along the way would make it possible to do so.

**Conclusion**

The frequency with which persons age 75 and older travel around in their communities depends greatly on whether they drive or not. Drivers report taking three times the number of trips taken by non-drivers. *The data concerning non-drivers indicate that half of non-drivers take two or fewer trips per week.*

Key questions emerge from the report’s findings that require further research about how best to meet the transportation needs of persons age 75 and older as this population increases and continues to age. These questions include:

- To what degree is the reduced mobility of older persons dependent on personal health status?
• To what degree is reduced mobility dependent on external barriers, such as crime or limited community transportation resources?

• Although this study touched on issues having to do with the availability and accessibility of public transportation, we need to know more about how older persons perceive public transportation as a transportation alternative to the automobile.

• Is the level of mobility of older drivers sufficient to assure access to the goods, services, and social contacts necessary to independent living?

• Are older drivers satisfied with their level of mobility? Do they simply prefer or need less mobility? Or do they accept reduced mobility as part of “getting old”?

• Are non-drivers as immobile as these data suggest? How do they connect to their communities? Do they have sufficient access to the goods, services, and social contacts necessary to independent living?

• Do the families and friends of older persons believe that they can meet the mobility needs of older persons?

In addition, the principal findings of this study have implications for different areas of federal, state, and local policy.

• Because a majority of people are going to rely on driving themselves well into their later years, public policies need to support maximizing the capacity for safe driving through the lifespan. These policies include improvement of road design and signage, regulation of drivers on the basis of individual functional ability and driving record, and assuring automobile design that addresses the needs of an aging population.

• The fact that a quarter of the 75+ population are non-drivers means that federal, state, and local governments need to identify and support transportation options designed to meet currently unmet transportation needs. This would include undertaking research to guide the efficient targeting of limited resources. These policies should be founded on the habits, preferences and attitudes of older persons so as to increase the likelihood that older persons will use and be satisfied with their transportation choices.
Zoning laws, transportation planning, regulation of public transportation, and allocation of federal funds for transportation services all have an impact on the near-term and long-term ability of persons of all ages to connect with their communities and to maintain independence through the lifespan.
Community Transportation Survey

I. Background

Whether people can maintain independence as they age in their communities depends in part on their access to the goods, services, and social contacts necessary to a good quality of life. This access relies largely on their mobility -- getting themselves to and from the goods, services, and social contacts necessary for independent living.

Research demonstrates that the number of trips made by persons as they age decreases substantially. The 1990 Nationwide Personal Transportation Survey showed that 90 percent of persons 75 and older make one or no trips away from home on any given day, compared to 80 percent of those aged 65 to 74 and 75 percent of those 50 to 64. The number of trips in a week made by a person is a good indicator of how mobile that individual is in his or her community. Reduced trip-making may indicate increased social isolation and lack of access to the components of independent living.

Little research has been done, however, to explore the circumstances that influence the reduced mobility that accompanies aging. Trip-making -- or mobility -- may be limited by a number of factors, both internal and external to the individual. It is obvious that retirement reduces the number of weekly trips by eliminating the trip to work. But what else accounts for limited trip-making by persons 75 and older? Emotional or physical health status may increase trips to medical professionals but also restrict the ability or desire to travel. Decreases in the functional abilities needed to drive may also significantly impact mobility.

In addition, urban and transportation planners believe that the way in which a community is designed and the resources it offers may impede or facilitate mobility. More than 70 percent of the age group 75 and older lives in suburbs and small towns. Research shows that older persons wish to remain in their communities as they age. Designed to accommodate the automobile and those driving or riding in automobiles, these locales are typically unserved by public transportation. Moreover, suburbs are traditionally zoned so that housing is distant from shops and services, thereby eliminating walking as a transportation option. Little planning has been done regarding how to support the mobility of non-drivers in these communities.

This study begins an exploration of the views of older persons regarding how they travel and how they perceive features of their communities that may affect their mobility.

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1 Data from the 1990 Nationwide Personal Transportation Survey conducted for the Federal Highway Administration, U.S. Department of Transportation.
As America approaches the year 2020 when almost 20 percent of the population will be 65 or older, it is crucial that transportation policies address issues of access to those things that can make independent living possible through the lifespan. This study of the travel habits, preferences, and opinions of individuals 75 and older is intended to provide some of the information necessary to developing those policies.
II. Methodology

Working in conjunction with AARP, International Communications Research (ICR), Media, Pennsylvania, designed and conducted this study. The research entailed an interview insert in ICR’s EXCEL Omnibus Telephone Survey. Each EXCEL includes a national random sample of approximately 1,000 adults (18+), half of whom are male and half of whom are female. Each EXCEL study of 1,000 interviews includes approximately 45 interviews with those age 75 and older; the transportation survey was presented only to these older respondents.

Interviewing was conducted from October 9 to November 26, 1996. A total of 710 interviews with non-institutionalized respondents 75+ years of age was completed. The data are weighted to reflect the U.S. population 75+ years of age. That is, ICR weighted the data to yield a sample that is nationally representative of the adult population 75 years and older.

The margin of error for this sample is plus or minus three percent at the 95 percent confidence level. This means that it is 95 percent likely that the response from the target population would fall within three percentage points above or below the sample population response. Some questions were asked of fewer than 710 respondents and will have slightly higher margins of error. For example, a question with 568 respondents will have a margin of error of approximately 3.7 percent at the 95 percent confidence level.

Caveat

Despite these weighting procedures, the mobility of the 75+ population may be overestimated in this survey. One or more explanations for this overestimation are possible. The sampling frame consisted of households with telephones, but telephone coverage correlates with age and health-status, two factors also related to mobility. Non-cooperation with telephone surveys is also higher among the oldest old. The use of the omnibus survey method, with its lack of thematic structure and minimal call-back procedure, can also suppress response rate. The sample was weighted to make it representative of the 75+ population. However, the weighting factors (e.g., age, income, income, educational level, etc.) do not completely adjust for these factors.

2 The 1993-1994 Asset and Health Dynamics Study Among the Oldest Old (AHEAD), a nationally representative sample of approximately 8,000 persons age 70 and older, with about 2,500 participants 80 and older indicates that a lower percentage of persons age 85 and older drive than this survey indicates. For example, work conducted by Dr. Robert Wallace of the University of Iowa using the AHEAD study found that 85 percent of males age 75 to 79 and 60 percent of females age 75 to 79 drive. His work also indicated that 54 percent of males age 85 and older drive and 22 percent of females age 85 and older drive. To compare with our figures, refer to pages 5 and 7 in this report. In addition, the 1990 Nationwide Personal Transportation Survey shows a lower level of trip-making than do the data from this Community Transportation Survey. See the sections on drivers and trip-making in this report.

education) are themselves correlated with mobility. It is not possible to gauge the extent to which this study may overestimate mobility.
III. Characteristics of Survey Respondents

The median age of survey respondents was 78. Nearly two-thirds were women. Thirty-five percent of respondent households had incomes under $15,000, and over half had incomes under $25,000. Approximately 51 percent of female participants reported annual incomes less than $20,000, compared with 38 percent of male respondents.

When asked for their descriptions of the places they lived, respondents were almost evenly divided between “city” (25 percent), “suburban area” (26 percent), “small town” (28 percent), and “in the country” (20 percent). An equal proportion of male and female respondents (about 75 percent) reported living in the non-city areas. For reference, the raw sample data are presented in table 1, with comparisons to U.S. Census estimates of the 75+ population. Note that all analyses are based on the weighted data.

<table>
<thead>
<tr>
<th>Demographic Characteristic:</th>
<th>1996 CTS (Raw data)</th>
<th>1996 Census Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total # 75+</td>
<td>710</td>
<td>15,190,000(^4)</td>
</tr>
<tr>
<td>% 75-84</td>
<td>89</td>
<td>75</td>
</tr>
<tr>
<td>% 85+</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Male</td>
<td>38</td>
<td>37</td>
</tr>
<tr>
<td>% Female</td>
<td>62</td>
<td>63</td>
</tr>
<tr>
<td>Household Income(^5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; $15k</td>
<td>40</td>
<td>48</td>
</tr>
<tr>
<td>% $15k - $24.9k</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>% $25k - $39.9k</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>% $40k - $49.9k</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>% $50k+</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

\(^4\) According to the U.S. Census Bureau, there were approximately 15,190,000 persons age 75 and older as of July 1, 1996.

\(^5\) The distribution of household incomes for 1996 CTS respondents is based on 568 participants who answered the question among the 710 CTS participants.
IV. Findings

*Travel Behavior*

How People 75+ Travel

Whether people are mobile in their community depends in large part on whether they drive or not. Nearly three-quarters of all survey respondents said that they drive (see Figure 1).

![Figure 1: Current Driver Status of 75+](image)

<table>
<thead>
<tr>
<th>Currently drive</th>
<th>Don't drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>73%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Base = 710

There is a difference between men and women regarding the likelihood of being a driver. Nearly nine-tenths of men 75+ reported being drivers compared to two-thirds of women (see Figure 2a). Respondents with lower incomes were also less likely than all respondents to drive (see Figure 2b).
Although one might expect people in this cohort also to take rides with others, drivers said that they drive themselves for almost all the trips\(^6\) they make. When asked

\(^6\) The survey asked all respondents, regardless of whether or not they currently drive, how many times they run errands or take other trips out of the house during a typical week. No specific mode of transportation was mentioned preceding this question. Therefore, “trips” as used in this survey refer to instances in which the respondent went out of his or her home and does not refer to the specific mode of transportation used. (See Survey at Appendix A.)
about their usual means of transportation, most non-drivers reported getting rides with friends or family.

**Driving and Mobility**

**How Many Trips Do People 75+ Make?**

The number of trips people make serves as a measure of mobility because people living independently make trips to access goods, services, and social activities.

A respondent’s level of mobility was most strongly related to whether or not he or she drives. Drivers 75+ reported making a median of six trips per week, three times as many trips per week as non-drivers. *Non-driving men and women both make a median of only two trips per week* (see Figure 3).

In addition, the relationship of driver status to the median number of trips made held within subgroups of the sample. For example, older male drivers report making seven trips per week compared to male non-drivers, who report making two trips per week. The same trend occurs within the subgroup of older female respondents as well. Female drivers 75+ report making five trips per week compared to female non-drivers 75+, who report making two trips per week.

![Figure 3: Median Number of Weekly Trips by Driver Status and Gender](image-url)

Base = 710
Finally, the number of trips made by drivers appears to be related to gender. Male drivers as a group are the most likely to make trips, typically making seven trips per week compared to female drivers who make five trips.

When viewed as a single group—drivers and non-drivers—half of all respondents said they make five trips or fewer per week. The median number of weekly trips made by all respondents varied markedly depending on gender and income.

- Men make almost twice as many trips in a week as women: seven vs. four (see Figure 4a).

- Those with household incomes over $25,000 make seven trips per week compared to those with incomes below $15,000, who make four trips per week (see Figure 4b).

Figure 4a: Median Number of Weekly Trips by Gender
Where a person 75+ lives is also correlated with mobility. In this survey, men and women who live in rural areas reported making fewer trips than their counterparts in cities, suburbs, and small towns. Men and women in rural areas reported making five trips and two trips per week, respectively. This contrasts with the seven trips for men and four for women in non-rural areas.

**Limits on Mobility of Drivers**

**Driving Avoidance / Cessation**

As people age, they may adapt to physical changes by limiting or ceasing driving. Seventy-eight percent of current drivers reported that they avoid driving in at least one of the following situations: driving at night, during rush hour, or in the rain. Nearly two-thirds (63 percent) of drivers 75+ who still drive said they avoid traveling at night. Women (72 percent) were much more likely not to drive at night than men (53 percent). About one-third of drivers avoid driving in the rain, and over half of the drivers said they avoid driving during rush hour (see Figure 5).

Approximately 60 percent of non-driving respondents said that they were a licensed driver previously and had ceased driving. Three-quarters of these former drivers were women. The survey asked those non-drivers who reported that they had been
licensed drivers why they stopped driving. Sixty-one percent of older non-drivers who had previously been licensed drivers said they had stopped driving because of various physical impairments, including poor vision. Other reasons given include feeling “too old to be on the road,” having no need to drive, and having a spouse who did most of the driving (see Figure 6).

**Figure 5: Avoidance of Driving During Specific Times/Weather Conditions (% of Drivers 75+)

<table>
<thead>
<tr>
<th>Condition</th>
<th>% of Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driving at night</td>
<td>63%</td>
</tr>
<tr>
<td>Driving in rush hour</td>
<td>51%</td>
</tr>
<tr>
<td>Driving in rain</td>
<td>34%</td>
</tr>
</tbody>
</table>

Base = 534

**Figure 6: Reasons for Discontinued Driving (Non-drivers who previously had a license)

- License expired: 3%
- No car: 4%
- Too old: 6%
- Spouse drives: 6%
- No need: 7%
- Can't afford car: 7%
- Blind/Poor vision: 15%
- Physically unable: 46%

Base = 106
Income

The income level of respondents was also related to whether one drove. Drivers had higher incomes than non-drivers. Specifically, 61 percent of non-drivers compared to 42 percent of drivers reported an annual income of $20,000 or less. Thirty-one percent of non-driver respondents reported an annual income of less than $10,000 compared to 15 percent of drivers.

How People Feel About Where They Drive

Comfort Levels And Driving Environment

One possible influence on the mobility of drivers is how comfortable drivers are with the physical design of roads and traffic that they encounter on a regular basis. In this survey, respondents were asked how comfortable they feel about certain features of road design and traffic management such as interstate highways, other four-lane roads with cars traveling at speeds over 35 mph, left-hand turns, busy intersections without traffic signals, etc. (Only respondents with actual experience regarding specific features were asked about their comfort level with those features.)

Up to a third of the respondents with actual experience regarding specific design features reported that they feel uncomfortable with at least one specific physical design aspect of roads and/or traffic situations they encounter. Of the 59 percent of drivers who encounter busy streets without signals, nearly a third report being uncomfortable. Of the 61 percent of drivers who encounter four-lane roads with cars traveling at high speeds, a sixth report being uncomfortable. On the other hand, of the 91 percent of drivers who encounter two-lane, low-speed residential streets, only one-tenth say they are uncomfortable. Similarly, relatively few respondents expressed discomfort with left-hand turns or intersections without traffic signals.

Another way to explore the influence of road design and traffic management on mobility is to ask drivers whether they avoid any roads or routes and, if so, why? One in three older drivers said they avoid certain roads or routes (see Figure 7). The most frequently cited reasons for avoiding a route include heavy traffic (34 percent) and because the route is an interstate or high-speed highway (30 percent) (see Figure 8).
Among older drivers, sufficient access to the places they need to go may depend on whether they can get there on routes and by means with which they are comfortable.
For example, a driver who is uncomfortable with highway or high-speed driving may forego making trips to suburban shopping centers that are separated from residential neighborhoods by highways. In this survey, one in five older drivers reported that they could not get to a grocery store by driving on low-speed residential streets.

**Drivers’ Expectations For Non-Driving**

If they cannot drive in the future, a majority of drivers (60 percent) expect that they will get rides from family members or friends. Other means of transportation mentioned were public transportation, taxis, senior vans, and walking. One in ten (11 percent) respondents said that they did not know how they will get where they need to go if they cannot drive.

**Mobility of Non-Drivers**

**Trips Made By Non-Drivers**

The mobility of non-drivers is very limited; the median number of trips per week for non-drivers is two. When asked how they get where they need to go, two-thirds of non-drivers reported getting rides from family and friends. The next most frequently used means was public transportation (14 percent). Other means noted were senior vans, walking, and taxis (see Figure 9).

**Figure 9: Usual Means of Transportation for Non-drivers**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get a ride</td>
<td>67%</td>
</tr>
<tr>
<td>Public trans.</td>
<td>14%</td>
</tr>
<tr>
<td>Senior van</td>
<td>9%</td>
</tr>
<tr>
<td>Walking</td>
<td>5%</td>
</tr>
<tr>
<td>Taxi</td>
<td>4%</td>
</tr>
</tbody>
</table>

Base = 176
Eighty-seven percent of non-drivers said that their method of transport was convenient. For example, 87 percent of those who said they get rides from family or friends said that they find this means of transportation convenient.

Community Design Features and Access to Shopping and Public Transportation

To explore opportunities for enhancing mobility, the survey asked non-drivers whether certain elements of community design might improve their ability to access shopping and public transportation. The features tested included: 1) more pedestrian-friendly access to buses and shopping, 2) the availability of public transportation, and 3) the availability of residential housing near commercial areas.

About half of non-drivers (49 percent) said that they could not walk to a bus stop if they needed to. Just over half (55 percent) of those who said that they could not walk to a bus stop also said that none of the suggested options would make it possible. However, nearly half of those who said they could not walk to a bus stop responded positively to one or more suggested design features that could make walking to a bus stop possible. The suggestions included: a resting place along the way, a bus stop within five blocks of home, walking routes that are not along busy streets, and better sidewalks (see Figure 10).

![Figure 10: What Would Make It Possible to Walk to a Bus Stop?](chart)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of these</td>
<td>55%</td>
</tr>
<tr>
<td>Better sidewalks</td>
<td>24%</td>
</tr>
<tr>
<td>Routes not on busy streets</td>
<td>26%</td>
</tr>
<tr>
<td>Bus stop within 5 blocks of home</td>
<td>27%</td>
</tr>
<tr>
<td>Resting place along way</td>
<td>32%</td>
</tr>
</tbody>
</table>

Base = 87
In addition, over half of non-drivers (53 percent) said that they could not walk to a grocery store. Of these, half said walking would be easier if a specific design feature were in place -- a grocery store within five blocks, better sidewalks, a resting place along the way, or walking routes that were not along busy streets. Nearly all of those who said that none of these would help said that there was nothing that would help (see Figure 11). In this survey, these respondents were not asked for further explanation.

![Figure 11: What Would Make It Possible to Walk to a Grocery Store?](image)

**Attitudes Toward Strategies to Enhance Mobility**

The survey explored attitudes to some strategies that could enhance mobility. One such strategy would be to use public transportation. Eighty-six percent of non-drivers said they did not use public transportation. When asked why not, a third of these said that they prefer to rely on family and friends, and about a third said that public transportation was not available. Other reasons for non-use included the inconvenience of public transit and personal physical problems.

Another strategy to enhance mobility would be to move to a home where one could walk to shopping. When asked whether they would consider moving if their community had houses or apartments available near shopping, most non-drivers said they
Finally, non-drivers were asked if there were any improvements that could be made in their community that would help them get around more easily. Most respondents said there were none. Those who did offer suggestions most often mentioned more frequent buses and trains and making more transit available, taking better care of streets, and senior transportation services.
V. Conclusions

In most areas of the U.S., mobility for any age group is largely dependent on the ability to drive. For those aged 75 and older, the difference in the level of mobility between those who drive and those who do not is clear. The non-drivers in this survey reported making only about two trips per week compared to the six trips per week made by drivers. This is the case even though about two-thirds of the non-drivers say they get rides from family and friends. This brings into question how those currently driving will maintain their existing level of mobility as they move into their later years and have to further limit or cease driving.

This study did not explore the topic in detail, but the data suggest that there are modifications to community and traditional transportation options that would enhance the opportunities for some people to maintain a higher level of mobility in their communities as they age. For instance, communities could be designed or modified so that residents can reach shopping and community activities on residential streets. The walking routes that pedestrians use to get to public transportation could provide for resting along the way, and sidewalks could be provided and maintained. Further research is needed to assess the influence, if any, of community design and transportation planning on the mobility of older persons.

In addition, more information is needed to determine what is most likely to meet the transportation needs of people over the age of 75 as they age in their communities. Arising from this report are questions such as:

- To what degree is the reduced mobility of older persons dependent on personal health status?

- To what degree is reduced mobility dependent on external barriers, such as crime or limited community transportation resources?

- Although this study touched on issues having to do with the availability and accessibility of public transportation, we need to know more about how older persons perceive public transportation as a transportation alternative to the automobile.

- Are older drivers satisfied with their level of mobility? Do they simply prefer or need less mobility? Or do they accept reduced mobility as part of “getting old”?
• Are non-drivers as immobile as these data suggest? How do they connect to their communities? Do they have sufficient access to the goods, services, and social contacts necessary for independent living?

• Do the families and friends of older persons believe that they can meet the mobility needs of older persons?

With this additional research, policies can be tailored that foster the level of mobility needed to maintain independence through the lifespan.

**Implications for Policy Development**

The principal findings of this study have implications for different areas of federal, state, and local policy.

• Because a majority of people are going to rely on driving themselves well into their later years, public policies need to support maximizing the capacity for safe driving through the lifespan. These policies include improvement of road design and signage, regulation of drivers on the basis of individual functional ability and driving record, and assuring automobile design that addresses the needs of an aging population.

• The fact that a quarter of the 75+ population are non-drivers means that federal, state, and local governments need to identify and support transportation options designed to meet currently unmet transportation needs. This would include undertaking research to guide the efficient targeting of limited resources. These policies should be founded on the habits, preferences and attitudes of older persons so as to increase the likelihood that older persons will use and be satisfied with their transportation choices.

Zoning laws, transportation planning, regulation of public transportation, and allocation of federal funds for transportation services all have an impact on the near-term and long-term ability of persons of all ages to connect with their communities and to maintain independence through the lifespan.
Appendix A—Survey Questionnaire

This questionnaire is the property of: International Communications Research, Media, Pennsylvania 19063, EXCEL Job #L841, October 9, 1996.

AARP COMMUNITY TRANSPORTATION SURVEY

(ASK OF RESPONDENTS AGE 75 +)

The sample frequency responses reported in this appendix may not add up to 100% due to rounding or to the nature of the response to a specific question.

These next few questions deal with cars and transportation.

AC-1. Do you currently drive? (INTERVIEWER NOTE: RESPONDENT CANNOT BE PASSENGER) (n=710)

<table>
<thead>
<tr>
<th>1 Yes</th>
<th>CONTINUE</th>
<th>73%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 No</td>
<td>ASK Q.AC-2 THEN SKIP TO Q.AC-10</td>
<td>27%</td>
</tr>
<tr>
<td>D Don't Know</td>
<td>ASK Q.AC-2 THEN SKIP TO QAC-10</td>
<td></td>
</tr>
<tr>
<td>R Refused</td>
<td>ASK Q.AC-2 THEN SKIP TO QAC-10</td>
<td></td>
</tr>
</tbody>
</table>

AC-2. During a typical week, how many times do you run errands or take other trips out of the house? (INTERVIEWER: PROBE IF NECESSARY: About how many times?) (n=710)

__________ # trips per week
NN Less often than once a week
DD Don't Know
RR Refused

AC-3. Of these trips, how many times did you, yourself, drive? (n=534)

__________ # trips (MUST BE < / = TO Q. AC-2 RESPONSE)
NN Less often than once a week
DD Don't Know
RR Refused

21
AC-4. Thinking about the places you drive to the most, do you ever drive on or encounter... (ITEM)? (READ LIST) (n=534)

1 Yes
2 No
D Don't Know
R Refused

Yes

a. Interstate (high speed) highways 49%
b. Other four-lane roads with cars traveling at high speeds (over 35/#mph) 61%
c. Two-lane, low speed residential streets 91%
d. Traffic circles 28%
e. Yield signs 83%
f. Left hand turns 91%
g. On ramps and off ramps 64%
h. Heavy traffic 68%
i. Narrow roads 58%
j. Crossing or entering busy streets without traffic signals 59%

(ASK Q.AC-5 FOR EACH YES IN Q.AC-4)

AC-5. Now, I'd like you to think about all the places you drive to. On a scale from 1 through 5, where 1 is very uncomfortable and 5 is very comfortable, tell me what number best represents how comfortable you feel whenever you encounter (ITEM)? Of course, you may also use any number in between. (n=534)

5 Very comfortable
4
3
2
1 Very uncomfortable
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

a. Interstate (high speed) highways (n=271)
b. Other four-lane roads with cars traveling at high speeds (over 35/#mph) (n=325)
c. Two-lane, low-speed residential streets (n=485)
d. Traffic circles (n=151)
e. Yield signs (n=444)
f. Left hand turns (n=490)
g. On ramps and off ramps (n=338)
h. Heavy traffic (n=362)
L. Narrow roads  (n=316)
j. Crossing or entering busy streets without traffic signals  (n=325)

Responses

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 3%</td>
<td>5%</td>
<td>24%</td>
<td>25%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>b. 9%</td>
<td>7%</td>
<td>22%</td>
<td>24%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>c. 7%</td>
<td>4%</td>
<td>13%</td>
<td>21%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>d. 8%</td>
<td>2%</td>
<td>23%</td>
<td>14%</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>e. 6%</td>
<td>5%</td>
<td>13%</td>
<td>21%</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>f. 5%</td>
<td>6%</td>
<td>14%</td>
<td>23%</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>g. 5%</td>
<td>5%</td>
<td>23%</td>
<td>20%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>h. 13%</td>
<td>10%</td>
<td>26%</td>
<td>20%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>i. 7%</td>
<td>12%</td>
<td>22%</td>
<td>19%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>j. 11%</td>
<td>19%</td>
<td>22%</td>
<td>21%</td>
<td>27%</td>
<td></td>
</tr>
</tbody>
</table>

AhC-6. Are there any roads or routes you avoid driving on?  (n=534)

1  Yes CONTINUE  33%
2  No GO TO Q.AC-7  66%
D  Don't Know GO TO Q.AC-7  1%
R  Refused GO TO Q.AC-7  0%

AC-6a. Why do you avoid driving on this road/route?  
(DO NOT READ LIST. ENTER ALL THAT APPLY.)  
(n=186)

1  It's an interstate/high speed highway  30%
2  It's another four-lane road with high speeds (over 35/# mph)  9%
3  It has traffic circles  2%
4  It has yield signs  1%
5  It has left hand turns  2%
6  It has on and off ramps  3%
7  It's a narrow road  3%
8  Heavy traffic  34%
0  Other (SPECIFY) ______________________  40%
D  Don't know  1%
R  Refused
AC-7. Do you ever avoid driving (ITEM a-c)?  (n=534)

1. Yes
2. No
D. Don't know
R. Refused

Yes

a. At night 63%
b. During rush hour traffic 51%
c. In the rain 34%

AC-8. Depending on where you live, you may have one or several choices of route(s) to get to the grocery store. Can you get there by driving on low-speed, residential streets, rather than on four-lane roads or highways?  (n=534)

1. Yes 80%
2. No 19%
D. Don't know 1%
R. Refused 0%

AC-9. If for some reason you cannot drive yourself in the future, how do you think you will usually get to where you need to go?  (n=534)

(Do not read. Enter one response.)

1. Walk 4%
2. Get a ride from family member or friend 60%
3. Take public transportation 10%
4. Take a taxi 7%
5. Take a senior van 7%
0. Use some other way to get where you are going (specify) 11%
D. Don't know 11%
R. Refused 0%

NON-DRIVERS
(If Q.AC-1 = 2, D or R continue; else skip to demographic Q.AC-20)

AC-10. Have you ever been a licensed driver?  (n=176)

1. Yes CONTINUE 57%
2. No GO TO Q.AC-13 43%
D. Don't know GO TO Q.AC-13
R. Refused GO TO Q.AC-13
AC-11. When did you stop driving?

(INTERVIEWER PROMPT: Approximately how many years ago did you stop driving?)

(n=106)

<table>
<thead>
<tr>
<th># Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN &lt; than a year ago</td>
</tr>
<tr>
<td>DD Don't know</td>
</tr>
<tr>
<td>RR Refused</td>
</tr>
</tbody>
</table>

AC-12. Why did you stop driving?  (n=106)

(Do not read list. Enter one response.)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically unable</td>
<td>46%</td>
</tr>
<tr>
<td>License expired</td>
<td>3%</td>
</tr>
<tr>
<td>Did not pass renewal exam</td>
<td>1%</td>
</tr>
<tr>
<td>No need to drive</td>
<td>7%</td>
</tr>
<tr>
<td>No car</td>
<td>4%</td>
</tr>
<tr>
<td>Could not afford to keep car</td>
<td>7%</td>
</tr>
<tr>
<td>Legally blind</td>
<td>15%</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>16%</td>
</tr>
<tr>
<td>Don't know</td>
<td>2%</td>
</tr>
<tr>
<td>Refused</td>
<td>0%</td>
</tr>
</tbody>
</table>

AC-13. When you need to get somewhere, how do you usually get there?

(Do not read. Enter one response.)  (n=176)

<table>
<thead>
<tr>
<th>Method</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk (Walking)</td>
<td>5%</td>
</tr>
<tr>
<td>Get a ride from family member or friend (Riding with family or friend)</td>
<td>67%</td>
</tr>
<tr>
<td>Take public transportation (Taking public transportation)</td>
<td>14%</td>
</tr>
<tr>
<td>Take a taxi (Taking a taxi)</td>
<td>4%</td>
</tr>
<tr>
<td>Take a senior van (Taking a senior van)</td>
<td>9%</td>
</tr>
<tr>
<td>Use other way to get where you are going (specify)</td>
<td>0%</td>
</tr>
<tr>
<td>Don't know</td>
<td>1%</td>
</tr>
<tr>
<td>Refused</td>
<td>0%</td>
</tr>
</tbody>
</table>

(IF Q.AC-13 = 3, skip to instruction above Q.AC-13b. If Q.AC-13 = anything other than 3, ask Q.AC-13a.)

AC-13a. Why do you not use public transportation?

(Record verbatim)
(IF Q.AC-13 = 2, ASK Q.AC-13a, ELSE SKIP TO Q.AC-14)

AC-13b. If for some reason you could not get rides from family/friends in the future, how do you think you would usually get to where you need to go?

(DO NOT READ LIST. ENTER ALL THAT APPLY.) (n=113)

1. Walk 3%
2. Take public transportation 8%
3. Take a taxi 29%
4. Take a senior van 13%
0. Use some other way to get where you are going (SPECIFY) 24%

____________________________
D. Don't know 18%
R. Refused 4%

(IF Q.AC-13 = D OR R, SKIP TO Q.AC-16)

AC-14. Do you find (RESPONSE FROM Q. 13 AS SHOWN IN PARENS IN Q. 13) convenient? (n=174)

1. Yes SKIP TO Q.AC-16 87%
2. No SKIP TO Q.AC-15 10%
3. Sometimes (not always) SKIP TO Q.AC-15 0%
D. Don't know SKIP TO Q.AC-16 2%
R. Refused SKIP TO Q.AC-16 0%

AC-15. Why is (RESPONSE FROM Q.AC- 13 AS SHOWN IN PARENS IN Q. 13) sometimes, or not always convenient?
(RECORD ON VBA - Q.AC-15.)

AC-16. If you needed to, could you walk to a bus stop? (n=176)

1. Yes SKIP TO Q. AC-17 49%
2. No CONTINUE 50%
D. Don't know SKIP TO Q. AC-17 1%
R. Refused SKIP TO Q. AC-17 1%

AC-16a. Would any of the following make it possible for you to walk to a bus stop? (n=87)

1. Yes SKIP TO Q. AC-17 45%
2. No ASK Q. 16b. 55%
D Don't know SKIP TO Q. AC-17
R Refused SKIP TO Q. AC-17

a. A bus stop within five blocks of your home 27%
b. Better sidewalks 24%
c. A resting place along the way 32%
d. Routes that are not along busy streets 26%

AC-16b. Is there anything that would make it possible for you to walk to a bus stop? (RECORD ON VBA - Q.AC-16b)

AC-17. If you needed to, could you walk to a grocery store? (n=176)

1 Yes SKIP TO Q. AC-18 46%
2 No CONTINUE 53%
D Don't know SKIP TO Q. AC-18 1%
R Refused SKIP TO Q. AC-18 0%

AC-17a. Would any of the following make it easier for you to walk to a grocery store? (n=95)

1 Yes ASK Q. AC-18
2 No ASK Q. AC-17b.
D Don't know ASK Q. AC-18
R Refused ASK Q. AC-18

a. A grocery store within five blocks of your home 37%
b. Better sidewalks 23%
c. A resting place along the way 35%
d. Routes that are not along busy streets 24%

AC-17b. Is there anything that would make it possible for you to walk to a grocery store? (RECORD ON VBA Q.AC-17b)

AC-18. If your community had houses or apartments available near shopping, would you consider moving? (n=176)

1 Yes ASK Q. AC-18a. 10%
2 No SKIP TO Q. AC-19 87%
D Don't know SKIP TO Q. AC-19 3%
R Refused SKIP TO Q. AC-19 0%

AC-18a. Would you prefer a house or an apartment? (n=18)
1 House 45%
2 Apartment 55%
D Don't know 0%
R Refused 0%

AC-19. Are there any improvements that could be made in your community that would help you get around your community more easily? (RECORD VERBATIM ON VBA Q. 19) (n=176)

1 Yes 18%
2 No 74%
D Don't know 8%

DEMOGRAPHICS

AC-20. How would you describe the place you live now? (n=710)
(READ LIST) (ENTER ONE RESPONSE)

1 A city 25%
2 A suburban area 26%
3 A small town 28%
4 In the country 20%
D Don't know 0%
R Refused 0%

AC-21. Including yourself, how many people in your household drive? (n=710)

_____________________________ # Drivers in household
NN No drivers in household (ONLY VALID IF Q. AC-1 = 2, D OR R)
DD Don't know
RR Refused

(Note: Must have zipcodes included in data)

AC-22. Are you, or is anyone else in your household a member of AARP, The American Association of Retired Persons? (n=710)

1 Yes 60%
2 No 39%
D Don't know 0%
R Refused 0%