REDUCTION AND CESSATION OF DRIVING AMONG OLDER DRIVERS: FOCUS GROUPS

Lidia P. Kostyniuk Jean T. Shope

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TABLE OF CONTENTS

INTRODUCTION	1
Background	1
Objectives	2
Method	
Participant Sampling	4
Description of Participants	
Drivers	
Driving Couples	
Former Drivers	
Adult Children	
Addit Official Control	'
RESULTS	С
Drivers	
Current Driving Patterns	
Changes Over the Past 10 to 20 Years	9
Long-Distance Driving and Shared Driving	1
Importance of Driving to Older Drivers	
Current and Future Perceptions of Driving Abilities 1	
Knowing When to Stop Driving	
Driving Couples	
How Driving is Shared	
Role of Navigator 1	5
Changes Over the Past 10 to 20 Years	6
Concerns with Driving 1	7
Importance of Driving 1	8
Perceived Driving Patterns in 10 to 15 Years	8
Knowing When to Stop Driving	9
Former Drivers	n
Reasons for Stopping Driving 2	
Feelings Attached to Driving	1
Concerns About Driving Prior to Stopping	1
Alternative Forms of Transportation Available	てに
Adult Children of Current/Former Drivers	ں ح
Principal Concerns About Parent's Driving	1 7
Concern for Parent's Current Driving Abilities	/ 7
Concern for Parent's Current Driving Abilities	/ ^
Perceived Risk to Self and Others While Driving	U
Will Parents Know When to Stop Driving?	1
Perceived Importance of Driving to Parents	3
How Adult Children are Impacted by Their Parent's	
Driving Cessation 3	4
Perceptions of Need for Information	5
Impact of Experience on Adult Children	ဝ

CONCLUSIONS Drivers Driving Couples Former Drivers Adult Children Summary and Next Steps	37 38 39 39
APPENDIX A - MODERATOR'S GUIDES	45
APPENDIX B - FOCUS GROUP SCREENING QUESTIONS	59
APPENDIX C - DEMOGRAPHIC QUESTIONNAIRES ON FOCUS-GROUP BACKGROUNDS	67
APPENDIX D - RESPONSES TO DEMOGRAPHIC SURVEYS	73



INTRODUCTION

Background

Mobility is recognized as an important element in the maintenance of a good quality of life. In present American society, it often means driving one's own automobile. The dispersed land-use patterns in the United States, the growth of suburbs, and the present transportation system have made Americans extremely dependent on the automobile, while also making other modes of transportation inconvenient and cumbersome. Furthermore, the automobile in American society provides not only transportation but is also important in maintaining one's independence, autonomy, and in some cases, self-esteem. As people age, driving an automobile becomes more difficult. Physical changes associated with aging and diseases take their toll on a person's ability to see, hear, process information, and react in a timely manner, all very important to safe driving.

This study is part of a multiyear research project examining the issues surrounding the reduction and cessation of driving by older individuals. A later phase of this project will involve a quantitative survey of older drivers, former drivers, and their adult children about the driving reduction and cessation process. As a preliminary step, a qualitative focus-group approach was used to develop an understanding of the issues faced by older drivers and their families, to frame the issues from their viewpoints and in their own language, to define the concepts, and to identify dimensions for the quantitative survey. The focus-group research was designed to provide information upon which later steps of this project can draw for language and content. Issues explored in the focus groups include:

- Key factors associated with the decision to continue or stop driving
- · Coping behavior that compensates for reduced capabilities
- Crucial experiences and/or events preceding the decision to stop driving
- Attitudes and emotional factors surrounding the decision to stop driving

People in different stages of their lives may have different perceptions of the driving reduction and cessation process. Older drivers, recognizing that their ability to drive an automobile is diminishing, may be struggling with the driving decision. Some older drivers may be turning to other members in their household to assume some of the driving duties. People who stopped driving may have a very different outlook now than those who still drive. Adult children of older drivers may be faced with dilemmas about their parents' independence and the risk the parent may be posing to themselves and others when they drive. To determine the commonalities and differences that may exist among these groups, focus groups were conducted with four different categories of people:

- Older drivers (driver group)
- Older couples who share driving responsibilities (driving-couples group)
- Older drivers who no longer drive (former-driver group)
- Adult children of older current and former drivers (adult-children group)

Because traffic volumes, road systems, distances between home and activity centers, and available transportation options differ between urban and rural areas, and because these factors may influence driving reduction and cessation decisions, each of the aforementioned groups was interviewed in an urban setting and a rural/small-town setting.

Objectives

The purpose of the focus groups was to:

- identify and define the issues and concerns surrounding older drivers' decisions to continue or stop their driving careers,
- understand the attitudes, motives and behavior of older drivers.

In addition to the overall objectives for the focus groups, there were additional specific objectives for each of the four types of groups. Specific objectives for the driver groups included:

- Understand current driving patterns of older drivers.
- Assess changes in driving patterns and behaviors of drivers over time.
- Determine the importance of the ability to drive among older people.
- Assess older drivers' perceived risk of driving to themselves and others.
- Identify older drivers' degree of reliance on others for assistance in driving.
- Determine plans to stop driving in the future.

Specific objectives for the driving-couples groups included:

- Understand current driving patterns, including individual and/or shared driving responsibilities.
- Assess changes in driving patterns and behaviors of driving over time.
- Determine the role of driver versus navigator.
- Determine the degree of reliance on navigator for assistance in driving.
- Determine the importance of at least one of the two having the ability to drive.
- Assess couples' degree of perceived risk of driving.
- Determine individual and collective plans to stop driving in the future.

Specific objectives for the former-driver groups included:

- Understand how the decisions to stop driving were made.
- Determine the importance of the ability to drive.
- Determine if former drivers previously or currently assist other older persons in driving.

Specific objectives for the study involving adult children of current and former drivers were:

· Determine the history of parents' driving and cessation of driving.

- Identify adult children's role in driving cessation process for parents.
- Discover perceived risks they think their parents pose/posed.
- Explore the meaning of parent's driving for parents and for adult children.
- Determine if adult children's own plans for driving when they become older drivers have been impacted by experiences with their parents.

Method

A total of 16 focus groups were conducted. Two urban and two rural/small-town focus groups were conducted for each the following four categories: drivers age 65 and older, former drivers age 65 and older who stopped driving within the past five years, couples with both partners age 65 or older who share some driving responsibilities, and adult children who are concerned about the driving abilities of their parents and/or in-laws.

The urban groups were drawn from greater Southfield, Michigan while rural/small-town groups were drawn from the greater Midland, Michigan population. Southfield is one of a string of densely populated suburbs of Detroit linked to other suburbs by major freeways. Freeway speed limits vary from 55 to 70 miles per hour. Midland is a small town in mid-Michigan surrounded by farmland and open countryside. With one exception, all major routes in town are zoned for speeds of 35 to 45 miles per hour. Midland is linked to other small towns, approximately 45 minutes away, by two-lane highways, and a freeway, with speed limits of 50 and 70 miles per hour, respectively.

The focus groups were conducted during April 1998. Focus-group participants were recruited by two professional recruitment firms, one based in Southfield and the other in Midland. Participants were paid a small honorarium for their time. The focus-group moderator followed a moderator's guide in asking questions of the groups. The moderator's guides can be found in Appendix A.

Participant Sampling

Screening procedures specific to each focus-group category were used to determine eligibility and to confirm participants' age, driving status and urban or rural/small town residency. The screening questions can be found in Appendix B.

Urban participants for all four focus-group categories were randomly selected from the recruitment firm's large database of potential focus group participants. The urban groups were conducted at a facility specifically designed for focus groups. Subjects in the former driver groups were offered transportation by taxicab to and from the focus group sessions.

Rural/small-town participants for driver and driving-couple categories were recruited from senior-citizen housing complexes and assisted-living centers in Midland, as well as from a Midland community-center membership list. Adult children of former and current drivers were recruited from a community-center membership list and by referrals from residents living in senior-citizen assisted-living centers. All focus groups for these three categories were conducted at a hotel in the rural/small-town community. Recruitment of the former drivers followed a different procedure. Participants were drawn from residents living in senior-citizen assisted-living centers, and the focus groups were conducted at two of these centers, thereby eliminating the need for participants to travel.

Description of Participants

Before each focus-group session, participants completed a short demographic questionnaire. The questionnaires for each group can be found in Appendix C. The distribution of responses is in Appendix D. A description of the participants in the focus groups is presented below.

Drivers

The two urban groups were composed of 9 and 10 participants, respectively. Each group represented a good mix of gender, ethnic backgrounds, ages, and income levels. In all, there were 11 men and 8 women. Ages ranged from 65 to 86 years and the average age was 73.2 years. The average annual household income of the participants was in the \$45,000 - \$55,000 range and income varied from the \$15,000-\$25,000 range to over \$75,000. All participants had at least a high school education, and three had college degrees. Two-thirds were married and the rest were widowed or divorced. All reported driving for more than 40 years.

The two rural/small town groups were composed of 10 respondents per group. These groups were 70 percent female. With one exception, all had annual household incomes under \$30,000. All respondents were Caucasian. The age of the participants averaged 74 years and ranged from 65 to 87 years. The educational background was diverse. About half the participants completed high school or had some college education, while several had less than a high school education. Almost 60 percent of the participants were widowed. Most reported having driven for over 40 years.

Driving Couples

The two urban groups were comprised of six couples per group. Both groups represented a good mix of ethnic backgrounds, ages, and income levels. The average age of the participants was 71.2 years and ages ranged from 65 to 84 years. The average annual household income was in the \$45,000-\$55,000 range and income varied from the \$15,000-\$25,000 category to over \$75,000. All participants had at least a high school education, four had college degrees and six had graduate degrees. In all, five of the couples were married couples. All but three of the participants reported driving over 40 years.

The two rural/small-town groups were composed of five couples per group. Nine were male/female couples and one pair consisted of two elderly sisters who lived together. All respondents were Caucasian. The average age was 74.2 years and the age range was from 65 to 87 years. The average annual household income was in the \$45,000-\$55,000 range and incomes varied from under \$15,000 to the \$65,000-\$75,000 range. All respondents had at least a high school education, seven had college degrees and three had graduate degrees. All participants, except one, reported driving over 40 years.

Former Drivers

The two urban groups were composed of four and seven participants, respectively. One participant was from a minority racial background. Between the two groups, genders were represented evenly, while 80 percent had incomes below \$30,000. The average age was 75.8 years and ages ranged from 65 to 88 years. All but two participants reported having driven for over 40 years. All had stopped driving within the past three years.

The two rural/small-town groups were composed of six and seven participants respectively. All but one participant were female due to a lack of males living in the assisted-living centers in the town. Seventy-five percent of the participants were widowed. All respondents were Caucasian. The average annual income was approximately \$25,000 and ranged from under \$15,000 to the \$65,000-\$75,000 category. As a group, the rural/small-town respondents were significantly older, both in age and the age at which they stopped driving. The average age was 83 and ages ranged from 72 to 96 years. Three-quarters of the respondents had stopped driving sometime in the past five years; two-thirds of the participants were in their 80s when they stopped.

Adult Children

The two urban groups were composed of 9 and 10 participants, respectively. Three-quarters of participants were female. The youngest participant was 24 years of age, the oldest was 63 years of age, and the average age was 45.5 years. The household incomes of the participants ranged from below \$40,000 to over \$75,000 with an average in the \$45,000-\$55,000 category. The educational background was varied. All had graduated from high school and a third had college degrees and/or some graduate education. Three of the participants were African-American and the rest were Caucasian. About half of the participants discussed more than one older relative, so in all, 29 older relatives were discussed. Of these, 19 were still driving and 10 had stopped driving in the last three years. The relationships to the participants were parents, parents-in-law, or grandparents. The ages of the older relatives ranged from 65 to 89 years and averaged 75.7 years. Of the older relatives discussed, 55 percent were male and 45 percent were female.

The two rural/small-town groups were comprised of 8 and 10 participants, respectively. In all, there were two male participants. All respondents were Caucasian. The ages of the participants ranged from 29 to 62 years and averaged 46.6 years. All but two of the participants had attended college, and over half had college degrees. The annual household income ranged from the \$15,000-\$25,000 category to over \$75,000, with over half of the participants reporting an income level over \$75,000. The participants discussed 23 older relatives, mostly parents, parents-in-law, and a few grandparents, 19 of whom were still driving and 4 who had stopped in the past three years. The ages of the older

relatives ranged from 69 to 90 years and averaged 84.0 years. Fifteen of the older relatives were female and eight were male.

RESULTS

Drivers

Current Driving Patterns

Urban respondents reported driving four or less hours per week. Rural drivers in the sample tended to drive a few more miles per week than did urban drivers; two-thirds drove between five and eight hours per week, probably due to greater distances between towns. Most participants who have retired reported driving fewer hours per week, on average than they did while working. A few, who were either still working or had gone back to work after having stopped, reported driving more hours, particularly if their work was linked to driving (e.g., limousine driver, florist or package delivery, car transporter.)

Changes Over the Past 10 to 20 Years

Many older drivers cited physical changes that affected their driving abilities. Changes in vision were cited most often, including increased difficulty seeing at dusk and at night and specific problems from glare of headlights at night and/or when it is raining at night. As a result of these physical changes, most had made significant adjustments to their driving patterns in the following ways:

- Driving more slowly overall (e.g., "letting the other guy pass," "staying at the back of the pack").
- Driving more cautiously (e.g., increasing the distance between cars, double checking before starting off from a red light, stopping at yellow lights).
- Reducing average freeway driving speed to 60 to 65 miles per hour.
- Reducing or eliminating night driving, when possible.
- Reducing or eliminating night driving in rain, when possible.
- Restricting long-distance travel to daylight hours.
- Taking more frequent breaks; splitting a long trip into more than one day with a rest overnight.
- Avoiding rush hour and streets with considerable traffic and congestion.
- Avoiding driving in ice and snow.
- Driving only on familiar and/or well-lit roads.

"I know that my reaction is slowing down. There are times when you have to have a quick reaction when driving. I have to drive with a defensive attitude". Moderator: "Defensive?" "I drive more carefully. I use more judgement to avoid or eliminate problems. I drive a little slower. I observe traffic in front of me. I use my years of experience [to counteract the fact that] my eyesight and hearing are slowing down."

"I do notice a difference with nighttime driving—the glare of lights affects me more. I have a little trouble reading signs at night. If I have to go [out at night] I use more care and judgement."

"I have an idea of a place I want to reach, but I find when I'm driving there I might drive past it or when I get there, I find I've not remembered the right direction."

Older drivers noted that they drive more defensively now; that they watch other drivers much more carefully than they used to, trying to anticipate what those around them will do. A few drivers described being even more cautious, taking surface streets instead of the freeway whenever feasible, avoiding left-hand turns, being more observant when making right hand turns, looking both ways before going through a green light, and avoiding driving in winter.

"At 83, my confidence is diminishing. I used to drive all over the U.S. and Europe. Now I'm reluctant to drive from Midland to Bay City or Saginaw [less than one hour.] I drive in the city [of Midland] every day, but even that is getting more uncomfortable because my eyesight isn't what it used to be since I have a cataract."

"I drive by instinct in dark areas [at night] since I can't see as well. When an area is not lit, I feel my way along; I almost creep."

In addition to health problems and diminished confidence levels, older drivers stated that driving conditions, particularly on freeways, are perceived as more risky today than they were 15 or 20 years ago. Problems identified most frequently were high speeds, an increase in the number of both cars and trucks on the road, discourteous drivers and,

among urban drivers, a phenomenon they called road rage, in which angry drivers drive recklessly and may take out their anger on other drivers. Particularly among the urban groups, there was a commonly held belief that older drivers as a group are the best drivers because of their extra caution and their years of driving experience.

"Older people have the background and judgement of more experience in driving."

Healthy drivers, who had recently passed age 65, continued to drive much as they always had. As a group, they said that since they have retired they can choose to avoid driving during difficult conditions (e.g., inclement weather and rush hour.) Only a couple of seniors, including one elderly widowed woman, insisted that nothing had changed in their driving over the years.

"I don't pay any attention to possible problems. I go at anytime. If there's snow, I just drive right over it."

Long-Distance Driving and Shared Driving

While some older drivers said that they have curtailed long-distance driving, those confident in their health and driving ability continue to drive to out-of-town destinations such as Florida and Arizona and to visit children and grandchildren around the country. Flying was an alternative mentioned by those with the financial means; these respondents rent a car upon reaching their destination to use for local transportation. Some regularly drive several hours back and forth between a permanent home and a summer cottage.

Those older drivers with a driving companion, particularly a spouse, indicated that the partner usually plays the role of navigator for the driver. None of the drivers felt that a navigator is essential in order to drive. The navigator role was defined by the participants as map reading; sign watching; watching for rest stops; and acting as a guide in rush hour, big cities, construction zones, and unfamiliar routes. The female in the partnership usually played the navigator role. Only a few partners shared fairly equally in the driving responsibilities. Some women stated that their husband did not let them share in the

driving on long distance trips; however, nearly all of the women who navigated for their husbands on long distance trips drove their own cars locally.

A few women no longer drive long distances alone.

"I used to drive to Virginia alone without a thought of flying but I've lost my confidence in the last four years, maybe because I have a 10-year-old car. I would drive with a companion, but not alone since I'm not confident with my old car with the speeds on highways and the trucks driving so fast."

Importance of Driving to Older Drivers

Nearly all participants reported strong emotional feelings about the importance of driving.

"Just to be behind the wheel makes you feel important. If someone takes away your car, you feel like a cripple. You lose your value of life."

"I don't think I'd live long if I couldn't drive."

Responses focused on two issues—independence and convenience. Feeling independent was linked to a strong dislike for depending on others for help. Most focus-group members did not have shopping facilities within walking distance of their homes. A few respondents in the rural focus groups had moved to senior-citizen complexes because of the close driving and/or walking proximity to shopping. The majority of drivers had made no plans or even inquiries about alternative living or transportation for the time they will have to stop driving. Male respondents, as a group, had not even considered the possibility of stopping driving.

"When I couldn't drive because of cornea transplants, it was the most miserable time for me because I couldn't get out. I felt unnecessary because I wasn't able to do what I needed to do. I had to ask someone to take me. I lost my independence. I don't like to ask people to take me to do things for me that I feel I should do myself."

"In metro Detroit, it's a necessity to get around. We need two cars—one for each of us to go to our own places. A cab is impractical. I never depend on my wife to drive me."

Well over half of the urban participants and a number of rural participants stated that they continue to have busy, active lives that require a car for each driver. With one or two exceptions, all healthy, active participants had at least one vehicle for each older driver in the household. A few of these respondents were still working. Several others have started second careers. Interestingly, all of the second careers required the individual to drive a vehicle for some form of delivery (e.g., flowers, packages, and people.)

When asked if they had other forms of transportation for the time when they could not drive, about half the respondents were aware of alternatives in the form of public, charitable, or private/personal options. Rural residents, who were more aware of driving alternatives, were open to the possibility of using public and charitable transportation provided for seniors, although some complained that they are inconvenient. The rural area does not have taxi service. Only one or two urban residents stated that they would use any form of public transportation. Urban residents seemed less familiar with transportation services designed for senior citizens. Most respondents said they would rely on relatives and/or friends although they would be reluctant to do so.

"You're not alive when you have to depend on someone else all the time. I'm not used to depending on someone else. Even when I was married, I was independent."

Current and Future Perceptions of Driving Abilities

As a group, older drivers believed that they are not a risk to others on the road; however, comments made by some participants suggested that they may not always be willing to recognize potential problems.

"I almost hit someone passing him because my mirror wasn't adjusted right."

"I don't think [I'm a risk to others except when] I stop for a yellow light and people behind me are too close to stop."

"I don't drive in winter since I feel I am not judging distance properly."

"Some of us are driving so slowly that we are creating a problem for others." Second respondent: "In a 55 to 70 mile an hour zone, I'll go 50 to 55; that's not too slow." Moderator: "How many drive 55 to 60 miles per hour on freeways (speed limits vary from 55 to 70 mile per hour zone)?" Response: 6 out of 10.

When asked what they would do differently in their driving in 10 to 15 years, drivers had mixed thoughts. Half of one urban group said that they would make no changes or compensations to their current driving habits in the 10 years. Some rural drivers said they would restrict their driving to local trips only. Many respondents from both regions believed that their physical health will be the determinant of their driving ability. A few thought they should stop driving at a certain age while others wanted to keep driving "until the end."

"I have a driver's license that expires at 90. I'll keep driving as long as I can get a license."

"In 10 years, I'll be 90; that's too old. I'll be looking for a driver [to drive me.]"

Knowing When to Stop Driving

When asked how they would know when it was time to stop driving, most drivers thought they will know. Indications cited most often included loss of confidence, health problems, a doctor's recommendation, or obvious errors in driving. Resistance to the thought of having to stop driving surfaced during this question, as it had previously. A few respondents were bold enough to say that even if they knew they should stop, they would not.

When asked if a relative, friend or professional had discussed with them the possibility of stopping driving, only a few mentioned that this discussion had occurred.

"They (family members) wouldn't dare say anything to me."

Despite the fact that most participants thought they will know when to stop, they said that their adult children or friends would also tell them. Results from focus groups with former drivers supported this belief.

Driving Couples

How Driving is Shared

With the exception of one woman who temporarily could not drive because of eye problems, all of the participants were able to drive. Two other women had chosen to stop driving, allowing their partners to be the sole driver in the household. Among the remaining couples, both individuals had remained active drivers on a regular basis. Three-quarters of the couples owned and regularly used two vehicles. Despite the fact that all are retired, most participants reported busy, active lives in which personal transportation is an important component.

Among older couples who were married, the male partner was generally the principal driver when the couple drove together. Only a few of the couples actively shared or traded off driving responsibilities. This was done on long trips. For local trips, nearly all of the wives were passengers, while on long trips most of them acted as navigators. Two women served as principal drivers on long trips while their husbands served as navigators. In one case, the husband's health was poor and his confidence in his own driving was low.

Role of Navigator

The navigator role included map and sign reading, particularly in unfamiliar places, in construction zones, heavy traffic out of town, and in inclement weather. Spouses also described a number of social roles they played to keep the driver alert and in good spirits (e.g., asking for breaks, telling stories, singing, being encouraging.) Married couples reported that the spouse began playing the navigator role on trips when the couple first married, therefore, for these couples, the role was not likely a recent response to agerelated changes in driving. Two couples began when they moved to a new town and the driver needed help with directions.

None of the couples depended on the navigator to help drive. While respondents reported they can drive alone, a few men and women indicated that they would not drive long distances alone, particularly when they were not familiar with the route. Couples reported making more long-distance trips now that they are retired. Some former long-distance driving trips were now taken by airplane for ease of travel and speed, with a car rented upon arrival at their destination. Only one couple cited physical reasons for replacing driving with flying.

"We just got back from a 3,000 mile trip. We rented a motor home and drove so we could stop and do things along the way. Now that we are retired, we have no time restrictions."

"We're flying more now on long trips because time is precious."

"We're giving more consideration to flying because longer trips are getting harder on us."

Several husbands indicated that they did not trust their wife's driving abilities. None of the reasons cited by these husbands were significant reasons for the wife to avoid driving, and all of these women drove alone. Reasons given included fewer years of driving experience (i.e., 20-odd years experience versus approximately 40 for the husband), an error made while the spouse was learning to drive many years ago, driving faster than the spouse likes, and using "a woman's sense of direction when driving."

Changes Over the Past 10 to 20 Years

Many respondents cited physical changes that affected their current driving abilities in some manner. Changes in vision were cited most often, including increased difficulty seeing at dusk and at night and specific problems from glare of headlights at night and/or when it is raining at night. As a result of these physical changes, older drivers had made adjustments to their driving patterns in the following ways:

- Driving more cautiously (e.g., increased distance between cars, double checking before starting off from a red light).
- Reducing or eliminating night driving, particularly in rain, when possible.
- Restricting long-distance travel to daylight hours. Taking more frequent breaks or splitting a long trip into more than one day with a rest overnight.
- Greater need to concentrate on driving and directions.
- Driving somewhat slower to accommodate slower reaction time and difficulty seeing distances clearly.¹
- Needing to rely on mirrors more because of difficulty turning neck.

"Lights from oncoming cars really bother me. I won't drive out of town at night."

Concerns with Driving

None of the participants had heard concerns about their driving expressed by their adult children or friends. The eldest couple, two sisters, got regular advice from their children about when not to drive (i.e., bad weather). None of the drivers felt their driving is a cause of concern for others.

"I would never allow myself to drive if I thought I was a hazard on the road."

While driving couples felt that driving is more hazardous today because of increased traffic and speed, they believed they are compensating for both the traffic conditions and changes in their own driving abilities by taking precautions and planning ahead. Examples cited included avoiding heavy-traffic periods, driving more on weekends, driving slightly slower than traffic and taking surface roads when possible. Despite these precautions, a few older drivers expressed stress when driving at night, in inclement weather, and in construction zones, particularly in unfamiliar locations.

When asked how they will know when it is time to stop driving, drivers believed they will "just know" or their spouse will tell them. Signs of needing to stop driving cited include

¹ When asked what speed they would drive in a 30 to 50 mile per hour zone, all of the women in one rural group said 35 to 40, while all of the men said 50 to 55.

slower driving, reflex and reaction time, trouble focusing the eyes, and doing dangerous things while driving.

Importance of Driving

Respondents were consistent in their belief that driving is of central importance to their lives. They identified driving as important in terms of feelings of freedom and independence, as well as a necessity for shopping. Some were aware of public transportation alternatives, although transportation in the suburbs and outlying areas was perceived as scarce or nonexistent. Even in the urban area, major stores were described as 10 miles from home.

"We couldn't exist [without driving]. There is no transportation where we live. Unless you drive you'd starve to death. It's just impossible. We'll have to move when we can no longer drive."

"I couldn't conceive of not being able to drive. I've never thought about it and yet I know logically that that's a ridiculous way to look at it since I'm very nearly that age now."

"Driving enables me to live life. Not driving would be crippling."

Perceived Driving Patterns in 10 to 15 Years

When asked about their driving patterns 10 to 15 years into the future, couples had mixed thoughts and feelings. Some said their decision to reduce or stop driving will depend on their health. Others thought they will slow down because of their reaction time and vision, or they will reduce or restrict driving to nearby locations. Finally, the oldest drivers believed they will have stopped driving in 10 to 15 years.

"Someone will have taken my license by then."

"In 10 years, at 87, it will be time to stop."

Knowing When to Stop Driving

Women were more likely to have considered the possibility of ceasing driving than were men. Women were also more likely to have considered transportation and housing options such as public and senior-citizen transportation, reliance on friends and family, or a move to another location or to assisted living. Most male participants had not even thought about the possibility. There was general agreement in one group that men find it harder to give up driving than do women.

"Thinking about not driving means having a negative outlook on life. I'll just deal with it when it happens."

"My father made every excuse to continue to drive. I'm in a similar macho period right now. How I'll make the decision whether to drive or not is something I've never really addressed. I don't even want to face it."

"I don't want to give up my license. Someone will have to take it before I give it up."

"My father continued to drive after his license was revoked and his car taken away. He drove other people's cars."

When asked what signs they will look for to help them know when it is time to stop driving, participants mentioned the following changes that could occur:

- Declining reflexes and vision.
- Feeling uncomfortable, scared or frightened when driving; not feeling as sharp when driving; not trusting their driving, or finding driving "a chore."
- Trouble focusing eyes.
- Misjudging things.
- Having a car crash.

"I think I'm already making adjustments. My reactions are slowing. My vision is getting worse."

One couple said they would tell each other and support each other through the transition period of stopping. Others said that because they will not admit aging, they will ignore indications that they should stop driving.²

"I don't think most people know when to stop. There should be tighter restrictions. How do you judge for yourself before it's too late."

Former Drivers

Reasons for Stopping Driving

All but two of the former drivers stopped driving quickly, with little or no warning or transition period. Many had multiple reasons for stopping. The two who gradually stopped driving did so primarily because of visual problems. One reduced driving over a few years while the other reduced driving over a six-month period. Reasons cited among those who stopped driving quickly, and the number of respondents who stopped primarily for this reason, are listed below:

- Had one or more minor or major accidents (7)
- Iliness (5)
- Moved (5) (Some linked the move to an assisted living center due to declining health).
- Too anxious to drive due to changes in confidence or physical condition (2)
- Eyesight declining (unrelated to other reasons) (2)
- Afraid to fail license renewal test (at age 94) (1)
- Family raised issue of stopping due to poor health (1)

"I stopped when I moved to (an assisted-living center) in Midland. I didn't want to drive in a new city. I didn't trust myself. Driving had been easier in Pittsburgh where I knew

² In one rural group, 8 out of 10 drivers in the couples group said they would ignore signs of aging and keep driving.

the town. I figured if I had an accident, I'd be blamed because of my age. I didn't want the responsibility for hurting anyone."

"I broke my ankle in two places and couldn't drive for nine months. After being off, it seemed like it was a different world on the road, but I had already been reducing my driving since I couldn't see clearly anymore. Even when I got glasses, I couldn't see well. [The first time I returned to driving] I tried to go back to driving at night in the rain on the freeway. The car in front of me spun out of control and all of the other cars were bearing down on me. It was a close call. When I got home, I parked my car and haven't driven since. I was frightened and couldn't drive again."

"I had two accidents. My insurance had gone up because of the accidents. I took the driver's test and passed it but my kids had my driving record reviewed. A psychiatrist said I shouldn't drive. My children arranged for the Secretary of State to take away my license. They said I was too old to drive. I was mad but, big deal. I got over it after I found people to drive me and that it was a lot cheaper to just pay other people [to drive me.]"

"I stopped suddenly because I was ill. When I got better, I didn't think about driving. I didn't care about driving. Some days I'd like to be able to drive again but I've lost my confidence."

Feelings Attached to Driving

Most former drivers said that driving was very important to them. It represented both psychological independence and freedom, as well as convenience of movement. Two urban participants said they made their living by driving.

"Driving was very important. It was part of my livelihood."

"I bought my own car at age 75 after my husband died so I wouldn't have to depend on my sons." "[Driving] was my life. I loved to drive. I drove back and forth between Ohio and Michigan every week. I drove in the country. I had eight kids and three jobs. I taught my kids to drive."

"I didn't realize how important it was until I had to stop driving. My husband decided to retire two years early to help me get around."

When asked to remember back to what it felt like when they stopped driving, many former drivers expressed strong emotional feelings.

"I felt like a bag of laundry—cleaned, delivered and returned. It was awful. I have to depend on others."

"You feel like nothing. It's terrible when you have to depend on others. I was depressed."

"It feels like you're sitting in a box all the time."

Discussions with four groups of former drivers suggest that there are two kinds of former drivers—those who have given it up and know they will never drive again and those who think, or at least wish, they will go back to driving some day. A surprising number of former drivers, particularly those who are younger, said they plan to begin driving again regardless of the reason they stopped initially. Others talked about the loss they felt when they stopped driving.

"There are days when I'd like to drive again. I was the driver in our family, but I had a heart problem and was very sick for a long time."

"Driving was and still is very important to me. I miss it. I don't like to depend on other people."

"I may drive again. I don't know. If I can, I will, although I'll be slow and hesitant at first." [Respondent was in near-fatal car crash caused by someone else.]

"It was very unsettling [not being able to drive.] I wanted to get a car without air bags [participant is 4'10" tall] so I can drive again. The dealer just found me a car without airbags. I hope to buy this car, and I intend to drive again."

"I'd love to be driving. I may drive in the future if my health improves. I can't now because my car isn't insured."

Given the advantage of hindsight, there were a few former drivers who realized they do not miss driving as much as they thought they would.

"Driving was not important to me. I've always preferred to be a passenger because I didn't like driving. The only real problem with quitting driving is the inconvenience."

"Even though I drove 50,000 miles per year on the job, I never liked driving."

"I never had a problem with having to stop—cars go too fast. I still own my car because I thought I would go back to driving. If you try to go back to it [after stopping], you drive defensively. You become fearful—on edge. When you give up and give in to fear, that's it."

"The decision to stop was easy."

"Driving is not important. I will only drive again if my wife becomes incapacitated. I would move to a place with less traffic and start driving again."

"I missed it at first. Now I'm glad [I don't drive.] There's too much speed [on the roads.] I would be nervous."

Concerns About Driving Prior to Stopping

When asked about concerns they had while driving, responses were mixed. Most had little or no concern about their own driving despite the fact that nearly 30 percent of the participants had one or more crashes just prior to stopping driving. Only two respondents heard concerns about their driving from others such as friends and family members.

"I never had a ticket."

"I was a very careful driver."

Several respondents mentioned that had concerns about seeing at night and declining eyesight was mentioned as the primary change that former drivers noticed near the end of their driving career.

When asked about the precautions they had taken to overcome their driving problems, respondents mentioned reducing night driving and driving speed. None of the former drivers in the focus groups depended on others for actual driving assistance and very few used a navigator. Navigational assistance was provided only for long-distance trips to unfamiliar places. In one group, 50 percent avoided long driving trips late in their driving careers, choosing to fly instead. When asked if they were concerned about others' driving, a number of participants mentioned the high speeds on freeways.

"My sight was failing so driving was more difficult. Bright lights were bothersome. It was hard to see forms at distances of about 50 yards. Glare at night wasn't a problem for me."

"Speeds are too doggoned fast. Speeds are getting faster all the time."

"People driving with me noticed that my driving was getting worse. They said I was driving too close to other cars. Oncoming traffic bothered me, especially when it was too close to me or [others were] driving too fast. [I was afraid of] children running into the road while playing. I had no problems with night driving or rain. My son asked me

to quit but I made the decision myself, with my wife helping a little bit. I figured that if I couldn't walk, I shouldn't be driving. People's comments about my driving didn't factor into my decision, although I know I should have quit before I did. My children were happy when I quit driving."

"I had a heart condition. My doctor was concerned about the possibility of my getting excited and having a heart attack if I was in an accident."

"My family sat me down and told me to think about quitting. They offered to drive me anywhere I needed to go. They were worried about my health—thought it would affect my driving although my doctor hadn't cautioned me about driving."

"My children thought it was O.K. to drive short distances but not long trips."

"I always felt alert. I stayed out of the way of erratic drivers."

Alternative Forms of Transportation Available

Former drivers depended on family, friends, or transportation available for older persons to get around, although few found these alternatives convenient or ideal. Those who obtained rides from family and friends expressed regret at having to depend on someone else.

Urban respondents were far more likely to depend on friends and family members. One respondent, who said he had no family living nearby, payed people to drive him places. Urban respondents were not comfortable using public forms of transportation or taxis. Although all respondents in this group were offered taxi rides to and from the focus-group session, none accepted and all made their own transportation arrangements. They said they are not comfortable depending on strangers for help.

"I have a few friends in the apartment and the managers of the building will take me. I don't go as much as I used to. I can't really take the bus since its too far and I had to use a walker."

"Public transportation is terrible. Senior transportation service is available only a couple of times a week from the apartment. I have a lot of family and friends [with whom I ride]."

"There are no SMART buses in my community."

"I would take a refresher course and start driving again [if I didn't have anyone to help me]."

"My daughter lives with me and my son lives near by. I take a cab to the doctors."

In Midland, Michigan, several transportation services are available for older people. Rural participants, who do not have family or friends available to drive them, used this transportation. There was not the reluctance to use transportation services in the rural area that was found in the urban area although rural riders had mixed reactions toward these services. The major complaints were that the wait for the service is long, reservations must be made several days in advance, and the services are only available for doctors' appointments.

"It's hard getting around since you have to wait for the ride. They're not always prompt."

"It's hard to find someone to take me for shopping and groceries. The senior services are for doctor's appointments. There are no taxis or buses in town and only one limousine."

"The church used to volunteer to drive but not now. There is no driving service from the assisted-living center."

Adult Children of Current/Former Drivers

Principal Concerns About Parent's Driving

Adult-child respondents described a variety of physical concerns they have about their parents, which they believed affected their parents' driving abilities. Most respondents reported multiple problems for the same individual. A few of the respondents believed that some of these limitations had already caused crashes. Other physical problems caused limitations in driving abilities and potential problems on the road. Limitations and concerns mentioned include the following: (Multiple responses total more than the number of respondents.)

- Visual limitations (general sight, depth perception, peripheral vision, etc.) (11)
- Reaction time/reflexes (7)
- Eye/foot coordination or ability to move legs (5)
- Other physical limitations (one mention each) (5)
- Degree of alertness/confusion (4)
- Drives too slowly (no reason given) (4)
- Hearing limitations (3)

Concern for Parent's Current Driving Abilities

Nearly all of the adult children had talked with their parent(s) or in-law(s) about their concerns for their parent's driving abilities. Only one respondent thought his parent was capable of monitoring his/her own driving. Three respondents said that the burden of responsibility for raising the topic would fall solely to the adult child living closest to the parent. One or two families included everyone in the discussion, deciding among themselves how and who could best help the parent with the problem. One daughter-in-law reported that she and her husband were trying to ignore the problem by finding out as little as possible about the situation, because this difficult parent would probably come live with them when he gave up driving.

Adult children have tried a variety of tactics to approach their parents about their driving concerns, including the following:

- Asking a doctor (eye or medical doctor) to collaborate by having parent fail a physical examination.
- Broaching the subject casually, mentioning the need to start thinking about stopping (done with driver or driver's spouse).
- Waiting to raise the issue until parent has a significant problem (i.e., makes driving mistake or has crash).
- Helping to make plans for a transition—parent moves in with children or moves to assisted-living complex.
- Taking away the car; suggesting selling the car or giving it to someone else; taking away a part of the car so it is inoperable.
- Driving the parents when family is together.
- Setting parameters on when it is safe for parent to drive (e.g., only during daylight hours, only short distances from home, etc.).

"We tried getting Mom to lend her car to one of the grandchildren but she insisted on getting it back a few days later."

"Discussions have been behind her back so far. Her health problem is a new issue, and we've noticed her starting to slow down. An open conversation will probably occur when all of the family is together."

"After being ill for three months, we talked extensively about what to do about her driving. We've made plans for me to drive her out of state and for ways for her dependent son, my brother, to get local help through a local agency in (name of city.)"

"I talked mother into stopping but the doctor said it was okay, so she's continued driving."

"We asked the doctor for help. I wanted him to intercede, to tell her to stop driving, but there's nothing he can do. The Secretary of State is not helping. She's an independent woman. We tried to take the car away last year. It was like killing her; literally killing her. We need someone to step in. We're afraid for her safety and the safety of others."

"Mother wants the car just for the sense of independence. Chances are she's not going to go anywhere, or just across the street to the grocery store. She knows her limitations. She won't drive at night or in bad weather."

"My mother plans to move in with us, and she'd be happy to have me drive. She wouldn't have an issue with independence."

Central to the issue of driving cessation was loss of independence and a loss of control. For most adults, these are treasured rights that they will protect as long as they can. Adult children have tried a number of tactics to reduce or stop their parents' driving. They reported that these had met with varying reactions and degrees of success or failure. Only a few adult children reported comfortable conversations in which both sides discussed issues and concerns and came to a solution that all were comfortable with.

"My husband sat my grandfather down and gave him 10 rules for driving: where and when he can and can't drive. He respects these rules."

"My parents have talked with her about where it's safe for her to drive. She limits her driving to just four places."

Since most older drivers were very reluctant to stop driving, conversations on this topic were more likely to be emotional and heated with parents becoming defensive, telling adult children they are still children and that "parents know best."

"I'm not your child; you're my child."

"When the roles reverse, and they start asking for help, they can be more approachable."

Some parents were agreeable to significant changes in their lives while others were not. Examples of some parents' reactions when confronted by their adult children follow.

"You're taking my livelihood away. I have to go to the market. I feel dead without the car." ("We can take you.") "I want to do it myself."

"There's nothing wrong with me."

"Don't tell me. I know what I'm doing."

"She would become very assertive, tell you to 'shut up,' that she's been driving a lot longer than you have, which is not true. Since we're not her children, we don't have any say so in her decision."

"My mother says, 'So what?' if something were to happen to her but she forgets about the other person."

Adult children who reported their parents becoming defensive, assertive or obnoxious in their response to giving up driving said they did not expect this degree of negative reaction. Adult children could not always judge just how important the ability to drive, or the independence and self-control that driving provides, was to their parents.

"Their adamancy is based on fear—fear of losing their independence."

"I think it's power and control for them. When they're leaning on their kids for help, it's also power and control ('I need it now')."

Perceived Risk to Self and Others While Driving

Adult children believed that many older drivers are a risk to both the older drivers, themselves, and to others when they are on the road. They cited poor vision, including

lack of peripheral vision, slow reactions and slow driving as the principal problems they believe affect older drivers. They indicated that vision and hearing problems result in older drivers not being aware of drivers and conditions around them and that dementia is also a limitation for some older drivers.

"An older driver pulled in front of me, completely unaware of oncoming traffic."

"It's vanity. He drives a sports car in which he can't see over the wheel."

"The older he got, the crankier and more aggressive he got."

"My father totaled a car because his reactions are too slow."

"He was aware that he missed turns and this caused him some anxiety. He questioned his own ability to drive. He pulled out from a side street and was broadsided. The person who hit him didn't even have time to put on the brakes."

Will Parents Know When to Stop Driving?

A few adult children reported that their parents had reduced or limited their driving (e.g., no nighttime driving, asked friends to drive them, moved to an assisted-living center.) Several others believed their parents would be competent to know when to make the decision on their own. One respondent said her mother would be happy to give up driving and let someone else drive.

"Mother never liked driving. She is a terrible driver. She lives in a community that will take care of her needs. She is happy to have one of us drive. My sister lives nearby and can drive her."

"She'd enjoy having other people come get her. She's starved for company."

"They moved to assisted living where their needs are taken care of. They stopped [driving] shortly after they moved."

"My mother is relying on friends more now."

"Having a spouse who was still driving probably helped in her being able to stop."

Most adult children, however, believed their parents would not stop driving even if they recognized the need to stop. The need for independence and, perhaps, resistance to change seem responsible for parental reluctance. Discussions with two groups of adult children suggest that 75 percent of older drivers either do not know or will not admit when it is time to stop driving.

"She won't stop until her health gets really bad or she hits someone, since she's stubborn."

"She refused to stop driving. We had to take the car away after her last accident. She wanted to continue driving even after the accident. I'm not sure if my mother was aware of her driving and wouldn't admit it, or she simply wasn't aware of her deteriorated skills."

"I can see my mother-in-law dying before she stops. She won't make a decision on her own."

"Even though Dad is in bad health, he'll keep driving because of pressure from his younger wife."

"Dad doesn't have a grip on his situation. He has a stubborn personality. He was raised to think that driving is a gentlemanly thing to do."

"She completely denies being a bad driver. She won't listen to my comments or suggestions about driving."

"He doesn't want to be a burden on anyone. His wife expects him to take her places. Someone will have to take it away from him. It will just kill him."

"Other relatives, who are older than her, depend on her for transportation."

Perceived Importance of Driving to Parents

A number of adult children recognized the importance of driving and independence to their parents. They empathized with their parents' determination. As a result, some adult children were reluctant to press their elderly parents to stop driving, even when they knew of potential dangers.

"Dad had eye problems (macular degeneration). He drove way longer than he should have but he would have driven even longer had we not moved him into a place where he could get some help. He'd been living on his own and really needed the independence."

"She had an accident four years ago and nearly lost her life. While she was in the hospital, she was talking about getting another car and she resumed driving. She's on her own."

"It's his life [we would be taking away] if we took away his keys."

"Dad still has trouble talking about it since he has stopped driving."

"My father's always been the main driver. It would be very difficult for him."

"It's particularly hard in Detroit, compared to New York or Chicago, because public transportation is not reliable or safe. Lack of public transportation forces older people to drive longer than they should."

"I encourage my parents to drive. I'm not aware of problems. They travel extensively. Quitting driving is an admission of being sick or getting older, in both my parents mind and my mind."

"He's used to driving. I can't imagine him not driving."

"They've had a motor home that they've driven with for years. It would be hard to talk with him about driving. [If it was me,] it would be hard to admit to having to give it up. I couldn't use public transportation."

How Adult Children are Impacted by Their Parent's Driving Cessation

When parents stop driving, their adult children may be adversely impacted by the changes that result. Former drivers often need more than just transportation. Living arrangements, and even relationships, may shift in the process of accommodating these changes. Respondents were asked if this in any way has influenced their position about their parents' driving.

"We've talked about what changes she would have to make. She'd have to move in with us. We've talked about whether she would be able to take Dial-a-Ride, given her health problems (i.e., parent has difficulty walking)."

"We're already transitioning to help her get places—in the winter and when she doesn't feel well. So the change wouldn't be that great."

"My mother doesn't want my grandmother to stop driving since neither of us wants her to be dependent on us."

"She makes you feel bad; like she's going to die if you don't drop everything and get her what she needs immediately."

"Mother was upset when her license wasn't renewed. She was unable to read the numbers on the eye test. When she thought she couldn't drive anymore, she called me every 10 minutes. She kept forgetting about her scheduled eye appointment."

Most respondents said there were a variety of family members or friends who would be willing and able to help their parent. The burden usually did not fall on just one person or family. The degree to which drivers were alone, without family or friends nearby, did keep some elderly people driving longer than they safely should.

"I would be happy to drive my parents. My father drives too much for his abilities. He has had accidents."

"I'm the only one who could help him, but I would do it. I'd rather have him not drive than take a risk."

"I'm a stay-at-home-mom so I could pick him up and take him places."

Perceptions of Need for Information

There was general consensus among respondents that information to help make the cessation decision, and information about available support services, was limited or did not exist. Several respondents mentioned specifically that county agencies did not have this kind of information, nor were they equipped to provide it. Respondents felt that more information should be available and that the idea of not driving should be presented as an acceptable option and a natural fact of getting older. They made a variety of suggestions about types of information that would be helpful for both adult children and older drivers:

- Information about alternative forms of transportation.
- Statistics of driving records among older drivers.
- Indications to look for when considering stopping/warning signs of deteriorating driving skills.
- List of mediators to help family and driver make the decision and find options.
- Information on driving skills.

- Information about the role adult children need to take in assessing their parentising skills.
- Media campaign that begins targets drivers at age 50 about changes they can expect to experience in their driving abilities.
- Materials that describe how physical changes occur over time and how to deal with the changes.

Suggested places to obtain this information or organizations that could mail information out to older drivers and their adult children included senior centers, assisted-living centers, adult-foster-care homes, Social Security and Medicaid offices. Information could be automatically sent with license renewals, voter registration applications, and handicapped sticker applications to all drivers over a certain age, as well as to their adult children.

Impact of Experience on Adult Children

When asked if going through the experience of driving cessation with a parent had impacted their own thinking, one group agreed that it had. Two respondents mentioned that they were already starting to think about alternative living situations and using local services and stores more than they used to. Another respondent said that going through this experience has caused her to feel that she is "already being conditioned to accept when it's time to stop driving."

CONCLUSIONS

Drivers

Older drivers in this study fell into one of two groups. The first group consisted of those older drivers who felt healthy, remained active, and essentially had not changed their driving style from the way they drove 10 or 20 years ago. The second group consisted of older drivers who were feeling the effects of aging and described driving more slowly and cautiously, avoiding particular driving situations such as night driving and driving in inclement weather. Most drivers who were retired reported driving fewer hours per week on average than they did while working. Those drivers who felt less healthy may have also restricted their driving to local or short-distance driving. By contrast, older drivers who feel healthy were, in some cases, taking more long-distance driving trips in the present than they did when they worked. Many healthy driver households had at least one vehicle for each older driver. While spouses often played the traditional role of navigator, none of the drivers reported needing to rely on a navigator for driving assistance. Navigators were used most often in unfamiliar places and difficult driving situations, such as construction zones.

Nearly all participants had strong emotional feelings about the importance of driving. Reasons cited included the importance of independence and convenience. The two are equally important reasons to drive. Healthy older drivers, in particular, described busy, active lives that required the use of a car on an almost daily basis. Other reasons for needing to drive included lack of shops within walking distance, reluctance to depend on others for transportation, and reluctance to use public or private/charitable transportation. Only a few older drivers had made adjustments in their housing situation to accommodate the eventual inability to drive. Many, including nearly all of the male participants, had not even thought about the eventual need to reduce or stop driving.

As a group, older drivers saw themselves as careful, cautious drivers who were not a risk to others on the road; however, comments made by some participants suggested that they were not always willing to recognize potential problems. When asked how they would know when it was time to stop driving, most drivers felt they would "just know." Drivers

also believed that their adult children or friends would advise them if they observe a problem. Focus groups with adult children, who think their parents or in-laws should stop driving, indicated that this subject is emotionally charged within families. None of the parties seemed well prepared to deal with the problem effectively. Advancing health problems, a reduction in confidence in driving, and an increase in driving errors were all given as reasons to reduce or stop driving.

Driving Couples

Among older driving couples, the male partner was generally the principal driver for both local and long-distance travel, although both partners were usually capable of driving. Spouses played the role of navigator; a position described as helpful for the driver, but not essential. Navigator assistance was reported as most helpful in unfamiliar locations and unusual driving circumstances (i.e., construction zones, inclement weather).

Older driving couples reported physical changes which affected their current driving abilities in some manner. Reduced visual abilities were cited most often. Reduced night driving and driving more slowly and cautiously were used to counteract visual restrictions. Driving couples thought that driving is more hazardous today because of increased traffic and speed on roads. They believed that they are compensating for both this and their own changes in driving by taking extra precautions and planning ahead (e.g., avoiding heavy traffic and driving more slowly.) None of the participants had heard concerns about their driving abilities expressed by their adult children or friends. Most older driving couples believed that they will know when it is time to stop driving or their spouse will inform them. Driving was of central importance to their lives, providing both members in driving-couple relationships with independence and a convenient way to shop and travel.

Older driving couples had mixed feelings about the idea of stopping driving. Those already in their 80s predicted that they will not be driving in 10 to 15 years. A few believed that they would deny the need to stop even when the signs are apparent. The majority felt that declining health would be the primary factor that would affect their decision. Women were more likely to have considered the possibility and options surrounding the need to stop driving than men. Most men had not even thought about the possibility.

Former Drivers

Most former drivers stopped driving quickly, with little or no warning or transition period. They stopped for multiple reasons; however, declining health or physical abilities played prominently in their reasons for stopping. The primary reason for stopping was having had one or more crashes. Illness and moving to a new city (often linked to moving to an assisted-living center) were also reasons for stopping driving.

Most former drivers said that driving was very important to them—representing freedom, independence and convenience of movement. There were two kinds of former drivers—those who had given up driving and knew they would never drive again and those who thought, or at least wished, they would drive again. Given the advantage of hindsight, a few former drivers realized they do not miss driving as much as they thought they would; driving was never something they particularly enjoyed.

Despite the fact that seven of the former drivers stopped driving after having one or more crashes, most of the drivers did not have particular concerns about their driving abilities at the time they stopped driving. Furthermore, they were not aware of concerns expressed by others. A decline in visual abilities was the principal change former drivers noted about themselves late in their driving careers. Former drivers did not rely on navigators to assist them, with the exception of a few whose spouse helped navigate in unfamiliar locations.

Former urban drivers depended on family and friends for rides. They were uncomfortable using public forms of transportation, including cabs, buses and, for those that have them available, senior transportation services. Former rural drivers also depended on family and friends for rides; however, they were comfortable when using senior transportation services, even though many of them did not find the services convenient.

Adult Children

Adult children were concerned about the effect that physical limitations may have on the driving abilities of their older parents. They believed that visual limitations, reaction time, and eye/foot coordination were the principal physical problems that older people must

attempt to compensate for while driving. As a result of these limitations, respondents said they believe that many older drivers are a risk to both themselves and others.

Nearly all of the adult children involved in the study had discussed their concerns with their parents. Some of the older relatives began making a transition in an orderly fashion when signs of deterioration set in. A conversation occurred within the family and the older driver began to limit driving to daylight hours and local trips only. In a few cases, the driver himself or herself was able to monitor changes in driving abilities and make adjustments. Other families waited until a problem occurred, such as a crash, to raise the subject of driving cessation with parents. While some families were able to resolve the issues and help the parent successfully make the transition to a more dependent lifestyle, reactions by many parents were denial or defensiveness. The need for independence and control were played out firmly in the parents' desire to continue driving, even if it was not safe. Adult children facing resistant parents sometimes took more drastic measures, such as asking a doctor to cooperate with a failed health examination or taking away the parent's ability to drive.

While many families were willing to provide assistance to their parents, a few adult children attempted to ignore the problem because of the impact that it would have on their own lives. There may be resistance to taking on the responsibility for driving the dependent parent or running errands for them. Others may be reluctant to open up their homes and have a parent or in-law move in with them.

Respondents thought that information about reduction and cessation of driving would be very helpful for both adult children and older drivers facing such decisions. They had many suggestions about the kinds of information that would be helpful and which organizations they thought could most expediently provide such information.

Finally, a few drivers reported that they were much more aware of the driving challenges they will face as older drivers now that they have experienced, and attempted to deal with, the driving-related issues of their parents.

Summary and Next Steps

The qualitative research approach of using focus groups to collect data has helped to develop an understanding of the issues faced by older drivers in the process of reduction and cessation of driving. Furthermore, the analysis of the focus-group material has provided information to formulate concepts and identify dimensions for further exploration in the subsequent quantitative portion of this research.

It is evident from the focus groups that the older participants had matured with the automobile and had become dependent on it. As they aged, most had modified their behavior to compensate for their declining ability to drive. The modifications included changes in the times of day that they drove, the roads they drove on, and the traffic and weather conditions that they avoided. The modifications also included changes in the way long-distance trips were made; first by taking more time to drive and then by taking along a younger person to drive, or by making the trip by air. Although these modifications contributed to an overall reduction in driving, they were accepted as a normal part of life. For most older drivers, the reduction in driving did not involve overt decisions but occurred because, whenever possible, they avoided driving in situations that made them feel uncomfortable. However, the decision to stop driving, or even to acknowledge that such a decision may have to be made, was usually extremely difficult. In an automobile-dependent society the physical, social, and psychological need to drive is very strong and may involve the ability to obtain the basic necessities of life, as well as the sense of independence and self-esteem that controlling one's own mobility provides.

A synthesis of the focus-group results indicates that the driving-reduction process can be characterized as a continuous process. The self-regulation, self-limitation, or reduction of driving with age is considered to be perfectly natural and is readily accepted by aging drivers. The cessation of driving entirely, on the other hand, is usually a traumatic experience and is difficult to accept or to anticipate. Cessation usually occurs after some triggering event, such as an illness, injury, vehicle crash, or the death of a spouse and a move to a new city. Even after a long period of gradual reduction, there is usually some triggering event that leads to the complete and final cessation of driving.

From the responses of the focus group subjects, it is clear that many people have difficulties describing the details of their driving cessation process. Their descriptions often are inconsistent and contradictory. The primary reason for this may be that the driving cessation decision is very complex and brings forth many conflicting feelings, that the person may be not able to identify or express. For example, if people feel that giving up driving means giving up a measure of control over their lives and admitting that soon more assistance in daily life may be needed, then they may deny the possibility of their driving cessation. They may also wish to demonstrate that they still have some control over their lives, by stating that they are the ones who make the driving cessation decisions. Some people may not wish to admit their weaknesses and vulnerabilities to anyone else. Other reasons for the inability to describe the cessation experience adequately may be the consequence of memory problems, with people simply unable to recall the events as they occurred, or the emotions and feelings that accompanied them. Other cognitive deficits may also cause people to be incapable of describing the driving cessation process coherently. A lack of the skills necessary to identify aspects of the process and to articulate this process may also contribute. It is very likely that in each person's case there is a combination of several reasons that contributes to difficulties in perceiving the driving cessation process.

Despite the difficulties in obtaining respondents' descriptions of the cessation process, the focus-group results point to a common set of factors that enter into driving decisions and a common set of stages in the driving-cessation process. The decision regarding whether an older driver will continue to drive or will stop driving appears to be influenced by the following factors:

- Need to drive (physical, psychological, social)
- Ability to drive (physical, cognitive, psychomotor, economic)
- Confidence in driving
- Perceptions of risk
- Influence of family
- Influence of authorities (Department of Motor Vehicles, physician)

There are various influences on a person's driving decisions. The physical, psychological, and social need to drive usually influences the driving decision in the direction of continuation of driving. The recognition of the decreased abilities influences the decision in the direction of reducing or stopping driving. The driver's perception of risk, usually expressed through his/her confidence and comfort levels while driving, influences the driving decision. The family of the older driver usually exerts influence in favor of driving reduction and cessation. The Department of Motor Vehicles and physicians are somewhat more objective, or at least perceived to be so, and their recommendations about whether a person can continue to drive or should stop driving are usually given serious consideration.

The focus group results also suggested a set of stages in the driving cessation process for older drivers. These can be described as:

- Reducing or self-limiting driving
- Not thinking about stopping driving
- Acknowledging the possibility and starting to think about stopping driving sometime
 in the future
- Planning for the possibility of stopping driving sometime in the future
- Stopping driving
- Hoping to drive again
- Accepting not driving

The progression through these stages appeared to be sequential in many cases. However, there were cases following some catastrophic event, a driver moved from the stage of not thinking about stopping driving to stopping driving and hoping (or not hoping) to drive again.

In the next steps of the investigation of the reduction and cessation of driving among older drivers, the concepts identified here will be explored in a survey of a representative sample of older drivers and former drivers, and their adult children. The survey will be developed

so that hypotheses about the continuous nature of the reduction process, the factors influencing the cessation decision, and the stages of cessation can be tested.

APPENDIX A - MODERATOR'S GUIDES

- A-1 Older drivers
- **A-2 Driving Couples**
- **A-3 Former Drivers**
- A-4 Adult Children of Older Drivers and Former Drivers

The series of focus groups covered questions for this research and for a related research project concerned with the development of a self-assessment tool by which older drivers can assess their ability to drive. Only those questions concerned with the present research are discussed in this report. However, the entire script of the moderator's guides, including questions specific to the second project are included in this appendix.

A-1 Moderator's Guide – Older Drivers

Introductions

Lead-in: "Roles/rules in focus groups."

Research project for UMTRI to understand how people drive. We'll be talking about how people over 65 make decisions about driving. We're doing groups with different types of drivers; you are all current drivers. Responses are confidential; aren't going to impact driving record/license in any way.

- 1. Let's start out by talking about when and for what reasons you drive your car.
- About how much time would you say you drive per week?
- About how many different times per week do you drive?
- Do you ever go on longer trips; 2-3-4 days of driving (e.g., winter trip south, visit family?)
- 2. As you think back to the past, how has your driving changed over time? Are you doing anything differently now compared to 20 years ago?
- Do you make fewer trips now than 20 years ago?
- Do you make shorter/longer trips now?
- Do you drive more/less/about the same?
- Driving situations avoided (busy roads, nighttime, snow, rain, rush hour, locations)
- Do you ever feel anxious or stressed about driving?
- Have you noticed any changes in yourself over the last 10 years, in terms of how easy it is to drive? (remembering, seeing, speed, multiple activities at once)
- Do any of these things cause you concern about your driving?
- 3. Do you ever share the driving with someone or take turns sometimes you drive, sometimes they drive?
- Who do you share with -- when/what circumstances?
- Do you take turns driving or does one of you drive, say, only on the highway and the other only in the city?
- Do you ever help each other navigate?

- What does the other person do to help out? (reads map, watches for signs)
- 4. How important is being able to drive to you?
- If you had to stop driving today, how would you feel?
- What would change if you couldn't drive anymore?
- 5. Are some driving situations more risky than others?
- certain times of day/rush hour/congestion/traffic
- higher speed limits
- "younger" drivers
- 6. Have you ever been concerned that your driving might be a risk for others?
- passengers in your car
- other people
- 7. Now I'd like you to imagine the future. What do you think will be different about your driving in 10 (15) years?
- 8. Do you think you'll be doing anything differently? IF YES: What will change?
- use help from someone
- use cabs/buses
- no night driving
- avoid certain situations
- stop driving
- 9. Have your children, spouse, friends, or others ever expressed concern to you about your driving? What have they said?
- 10. Is stopping driving or the possibility of stopping driving someday something you've thought about or are thinking about?
- Do you think most seniors stop driving at the right time?
- Do you know someone who stopped driving too late or too early?
- Why do you think they did this?

- How will you know when it's time to stop driving?
- 11. Have you looked for information or asked anyone's advice about when is a good time to stop?
- What would be a good place to get this kind of information?
- What or who else would help you make a good decision about continuing to drive?
- 12. Would it be helpful if you had a way to check your own driving abilities? There's been talk about creating a self-test that people could take to monitor their own driving abilities.
- Who would it be most helpful for? (What about for people over 65?)
- Would you consider using it? When/why?
- What information should the test tell you about your driving ability? What kinds of abilities should the test review?
- 13. What if the test was administered by someone else (AAA, Secretary of State's office, senior-citizen center)? Would it be easier for people to take the test then? (What about for people over 65?) Where would be the ideal place to take the test?

Do you have any other comments or suggestions you'd like to make? Thank you. Sign for and distribute honorarium.

A-2 Moderator's Guide – Driving Couples

Introductions

Lead-in: "Roles/rules in focus groups."

Research project for UMTRI to understand how people drive. We'll be talking about how people over 65 make decisions about driving. We're doing groups with different types of drivers. This is a group of people who share the driving tasks. Responses are confidential; aren't going to impact driving record/license in any way.

- 1. Let's start by talking about how you handle driving.
- Who does the driving is there one main driver or do you share?
- How do you share the driving? (type of trip, length of time, driving conditions -weather, traffic, time of day)
- 2. Looking back over the past 20 years, how has your driving changed? (e.g., time of day, conditions, situations avoided, use your passenger to help drive). What do you do differently now?
- 3. (When one does all/most of the driving; to the co-pilot):

Since your partner/spouse is doing the driving, do you help him/her out in driving or navigating — do you act as a "co-pilot"?

- Why did you first start helping out with the driving or navigating?
- What do you do to help? (map, landmarks, traffic)
- 4. (**To the driver**): Are you relying on your copilot more now than you did, say, 5 or 10 years ago?
- Do you ever drive alone without your copilot? When? (type trip, length, conditions)
- What if your copilot had to go out of town or was sick and couldn't accompany you....Would you drive alone? When? (type of trip, length, driving conditions, time of day)

- When your copilot is not available have you ever used or considered using some other type of transportation? (cab, bus, plane)
- Are there other forms of transportation available?
- How convenient are they for getting you where you need to go?
- 5. (**To the driver**): How important is it to you that you're still driving?
- What does driving mean to you? What role does driving play in your life?
- Does driving give you a particular sense about yourself?
- Have you ever thought about the possibility of not being able to drive?
- How would you feel if you couldn't drive?
- How would you get around?
- 6. (To the copilot): How important is it that your partner/friend is still driving?
- How would you feel if your partner couldn't drive?
- Have you ever thought about this possibility?
- How would you get around? (cab, bus, plane, someone else would drive)
- Would these forms of transportation take care of all your trip needs?
- Are there places you wouldn't be able to go if neither of you could drive anymore?
- 7. Does driving seem more risky or dangerous to you now than, say, 20 years ago?
- Do you think there are more risks, more things to watch out for, when you're driving alone, without your copilot? (more things to watch out for when you're driving with your copilot?)
- Have you noticed any changes in your driving ability? (e.g., vision, ability to turn and look behind you, ability to concentrate)
- Do you ever feel anxious or stressed now when you are driving?
- Have you ever been concerned that your driving might be a problem (risky) for others, your copilot, other cars?
- 8. Have your children, spouse, friends, or others ever expressed concern to you about your driving? What have they said and how do you feel about what they've said to you?

- 9. Now I'd like you to imagine the future. What do you think will be different about your driving in: 2 years, 5 years, 10 (15) years?
- 10. Do you think you'll be doing anything differently? IF YES: What will change?
- use copilot
- use cabs/buses
- no night driving
- stop driving
- 11. Do you think most people stop driving at the right time?
- Is stopping driving or the possibility of stopping driving someday something you've thought about or are thinking about?
- Have you made any plans to stop driving in the future?
- How will you know when it's time to stop driving?
- Have you looked for information or asked anyone's advice about when is a good time to stop?
- What kind of organization would you expect to get information from?
- 12. Would it be helpful for people to have a way to check on their own driving abilities?
- Who would it be most helpful for? (What about for people over 65?)
- Would you consider taking a test like this in order to help you monitor your ability to drive? When/why?
- What information would you want the test to tell you about your driving ability?

- 13. What if someone else administered the test? (AAA, Secretary of State, senior-citizen center)
- Would that be easier for people to take the test then? (What about for people over 65?)
- What kind of organization would you expect to administer the test?

Do you have any other comments or suggestions you'd like to make? Thank you. Sign for and distribute honorarium.

A-3 Moderator's Guide - Former Drivers

Introductions

Lead-in: "Roles/rules in focus groups."

Research project for UMTRI to understand how people drive. We'll be talking about how people over 65 make decisions about driving. We're doing groups with different types of drivers. All of you are former drivers. Responses are confidential.

- 1. I'd like you to think back to the time you stopped driving. What happened at that time? Did you stop gradually over time or all of a sudden? If over time, what changed over time? What did you do differently as you reduced your driving? (e.g., avoid some situations, some times of day)
- 2. Let's talk about some of the reasons you decided to stop driving. Why did you stop?
- Did driving seem more risky to you just before you stopped than 20 years ago?
- Did you ever feel anxious or stressed about driving?
- Were you ever concerned that your driving might be a problem (risky) for others,
 your passenger, other people?
- Did you notice any changes in your driving ability that concerned you? (e.g., vision, ability to turn to see behind, ability to concentrate)
- 3. How did you know when it was time to stop driving?
- Did you plan ahead, decrease slowly?
- Did you look for information or ask anyone's advise about when it was a good time to stop?
- Would information like this be helpful?
- Where would be the best place to get this type of information?
- 4. Did you ever rely on your passenger to help you with driving or navigating? What did your passenger do? (map reading, looking for streets, watching out for traffic)

- 5. Now that you've stopped driving, do you ever play this helping role for others?
- who under what circumstances what do you do? (read maps, look for streets)
- 6. How important was driving to you? (self-esteem, independence)
- How did you feel when you thought about stopping driving?
- What went through your head?
- Now that you haven't driven for a while, do you still feel the same about how important it was to be able to drive?
- 7. Would it be helpful for people to have a way to check on their own driving abilities?
- Who would it be most helpful for? (What about for people over 65?)
- Would you have taken the test to help you monitor your driving ability? When/why?
- Would you have taken the test to help you decide when to stop driving?
- What information would you have wanted the test to tell you about your driving ability?
- 8. What if the test was administered by someone else? (Secretary of State's office)
- Would it have been easier for people to take the test then? (What about for people over 65?)
- Where would be the best place for people to take the test?
- What else would have helped you make a good decision about when to stop driving?
- 9. Now that you've stopped driving, how do you get around get to appointments, go shopping, etc. by bus, cab, plane someone else drives?
- Do these types of transportation take care of all your trip needs?
- Is there anyplace you can't go now that you used to go when you drove?

Do you have any other comments or suggestions you'd like to make?

Thank you. Sign for and distribute honorarium.

A-4 Moderator's Guide -- Adult Children of Older Drivers and Former Drivers

Introductions

Lead-in: "Roles/rules in focus groups."

Research project for UMTRI to understand how people drive. We'll be talking about how people over 65 make decisions about driving. We're doing groups with different types of drivers.. Responses are confidential All of you have at least one parent, parent-in-law, or other relative, age 65 or over, who is a driver or former driver. Please indicate how many and which relatives you will be talking about and whether they are drivers or former drivers.

- 1. Each of you has at least one parent, stepparent or parent-in-law who is still driving or stopped in the past 3 years. What concerns do you/did you have about their driving?
- 2. Have you told your parents about your concerns? What's been their reaction?
- 3. Do you/did you think your parent(s) is at increased risk while driving?
- risk to other people, risk to others in their car, risk to themselves
- are they ever anxious or stressed about driving?
- 4. How important is being able to drive to your parent(s)?
- What role does driving play in their lifestyle?
- How important is it to you that your parent(s) continue to drive?
- 5. Is stopping driving something your parent(s) has (have) thought about?
- 6. (If stopped) Does the fact that they've stopped significantly impact you or others? How?
- 7. Will (Did) your parent know when it is(was) time to stop driving? Do you think most older drivers stop driving at the right time? Do you think most older drivers stop driving at the right time?

- 8. Has your parent done any planning for this possibility?
- Will/did you play a role in helping them make the decision?
- What was involved with the decision?
- 9. Have you looked for information or did you ask anyone's advice about how to handle the situation?
- What type of information would be most helpful for you? (e.g., how to deal with the situation, how to express your concerns, how to get the parents to consider options)
- Where would you expect to find information like this?
- Would media about where to find information be helpful?
- 10. There has been talk about creating a way for people to check on their own driving ability.
- Would this be (have been) helpful for your parent to self-test his/her own driving abilities?
- Do you think they would use it?
- Do you think the results would/would have influence their decision to stop?
- When would be the best time/age for them to take a self-test?
- What would you want the test to check about their driving ability?
- 11. Where would you expect them to be able to take a test? (privacy of own home, AAA, Secretary of State, senior-citizen center)
- Would your parents be more likely to take a test if it was administered there?
- Would they be more likely to make their decision to stop driving if the test were administered by someplace like the ____ (AAA, Secretary of State's office) than if it was self-administered?
- 12. Now that you're experiencing the difficulties that seniors have with driving and the decision to stop driving, do you think this experience will impact your own decision to

continue or stop driving once you reach their age? How has your thinking changed about driving now that you are going through this experience with your parents?

Do you have any other comments or suggestions you'd like to make?

Thank you. Sign for and distribute honorarium.

APPENDIX B - FOCUS GROUP SCREENING QUESTIONS

- **B-1** Southfield Older Drivers, Driving Couples, Former Drivers
- **B-2** Midland Older Drivers, Driving Couples, Former Drivers
- B-3 Southfield and Midland Adult Children

B-1 Focus Group Screener, Southfield Older Drivers, Driving Couples, Former Drivers

Hello. My name is	from Yee Minard Research in Southfield. We
	or The University of Michigan Transportation Research
·	driving. May I ask you a few questions? It will only take
a minute, and we're not selling an	
a minute, and we to not coming an	,g.
1. Since our study is about older d	lrivers, let me first confirm that you are 65 years of age
older Yes (go to Q. 2)	No <i>(terminate)</i>
2. Are you currently, or did you pr	eviously, drive a car at least one trip per week?
Yes, currently driving <i>(go to C</i>	Q. 3)
Used to drive but stopped (gc	o to Q. 5)
No <i>(go to Q. 7)</i>	
Have you lived in Southfield for	r at least the last three years?
Yes (go to Q. 10)	No <i>(go to Q. 4)</i>
4. Have you lived in a city about the	he same size as Southfield or larger?
Yes (go to Q. 10)	No <i>(terminate)</i>
5. How many years has it been si	nce you stopped driving?
3 years or less <i>(go to Q. 10)</i>	More than 3 years <i>(go to Q. 6)</i>
6. Do you help out the driver of yo	our car at least one trip per week?
Yes <i>(go to Q. 6a)</i>	No <i>(terminate)</i>
6a. Have you acted as a helper fo	or the driver for at least 6 months?
Yes <i>(go to Q. 7)</i>	No <i>(terminate)</i>
7. Who normally drives the car?	
Spouse/Partner (go to Q. 10)	Someone else (ao to Q. 8)

8. Is this person 65 years	of age or older?			
Yes (go to Q. 9)		No (terminate)		
9. Do you live in the sam	e household with th	is person?		
Yes (go to Q. 10)		No (terminate)		
10. In what type of busine	ss are/were you and	I any other adult	members of your house	ehold
employed? (Don't read -	- terminate if the f	ollowing:)		
Market research				
11. Are you: (Read list;	include range of a	ages in each gr	oup.)	
over or under 75	over o	r under 80		
12. What is your race or e	ethnic heritage? <i>(D</i>	o not read; wa	nt at least 2 minorities	s per
group)				
White/Caucasian _	Other racial/eth	nic heritage	Refused/don't know	
13. Which of the following	ı best described you	ır annual househ	nold income in 1997? (F	Read
choices)				
Under \$30,000	_ Over \$30,000 _	Refused/dor	n't know	
IF RESPONDENT QUAL	IFIES TO PARTIC	IPATE, RECOR	D INFORMATION BEI	LOW
AND INVITE THEM TO F	PARTICIPATE			
Record gender.	Male	Female		
Record type of driver:	Solo driver	Couple	Non-driver	

B-2 Midland Focus Group Screener - Older Drivers, Driving Couples, Former Drivers Hello. My name is from MarQuest Research in Midland. We are conducting a research study for The University of Michigan Transportation Research Institute about persons over 65 and driving. May I ask you a few questions? It will only take a minute, and we're not selling anything. 1. Since our study is about older drivers, let me first confirm that you are 65 years of age or older. ___ Yes (go to Q. 2) ___ No (terminate) Would you say you lived in a rural area for at least 3 of the last 5 years you were driving? (Probe to ensure community had less than 40,000 and person drove at least 20 minutes each for basic services, e.g., grocery store, doctor.) ___ Yes (go to Q. 2) ___ No (terminate) 2. Are you currently, or did you previously, drive a car at least one trip per week? ____ Yes, currently driving (go to Q. 10) ___ Used to drive but stopped (go to Q. 3) ___ No *(go to Q. 6)* 3. How many years has it been since you stopped driving? ____ 3 years or less (go to Q.10) ____ More than 3 years (go to Q. 4) 4. Do you help out the driver of your car at least one trip per week? ___ Yes (go to Q. 5) ___ No (terminate) 5. Have you acted as a helper for the driver for at least 6 months? ___ Yes (go to Q. 6) No *(terminate)*

No (terminate)

6. Have you ever had a driver's license?

___ Yes (go to Q. 7)

7. Who normally drives your	car?		
Spouse/Partner (go to G	<i>). 8)</i> Somed	one else <i>(go to G</i>	Q. 8)
8. Is this person 65 years of	age or older?		
Yes <i>(go to Q. 9)</i>	with the state of	No <i>(terminate)</i>	
9. Do you live in the same ho	ousehold with th	is person?	
Yes <i>(go to Q. 10)</i>		No <i>(terminate)</i>	
10. In what type of business I	nave you <i>(and y</i>	our spouse/par	<i>tner/etc.)</i> been employed?
(Don't read – terminate if t	the following:)		
Market research			
11. Are you: (Read list; inc	lude range of a	ges in each gro	oup)
over or under 75		over or under 80	
12. What is your race or ethn	ic heritage? (D	o not read; wan	t at least 2 minorities per
group)			
White/Caucasian	_ Other race/eth	nic heritage	_ Refused/don't know
40 1441 1 (11 (11 1 1			
13. Which of the following be	est described yo	ur annuai nousei	nola income in 1997?
(Read choices)	O	00.000	Define adda with the ann
Under \$30,000	Over \$	30,000	Refused/don't know
IF RESPONDENT QUALIFIE	S DECODO IN	EODMATION RI	ELOW AND INVITE THEM
TO PARTICIPATE.	.3, necond in	I ONINATION DE	LOW AND INVITE THEM
TO TAILIION ATL.			
Record gender	Male	Female	
Record type of driver:			Non-driver

B-3 Focus Group Screener for Adult Children of Parents Over 65 Who Currently or Previously Drove a Car (Southfield and Midland)

Am I speaking to an adult n	nember of the household? Hello. My name is
from Yee	Minard Research in Southfield (MarQuest Research in
Midland). We are conducting	a research study for The University of Michigan
Transportation Research Institute	e about driving among persons over 65 and their adult
children's concern about their par	rent's driving. I'd like to ask you a few questions. It will
only take a minute, and I assure y	you that no sales effort is involved.
1. Let me first ask whether you ha	ave one or more parents, or parents in-law, who are 65
years of age or older and still driv	ing at least one trip per week?
Yes <i>(go to Q. 2)</i>	No <i>(go to Q. 4)</i>
2. Do you think your parent/paren	t in-law should stop driving, restrict their driving or begin
to consider stopping?	
Yes (go to Q. 3)	No (terminate)
3. (Southfield) Is your driving par	ent (or in-law) currently living in an urban/suburban area
similar to Southfield?	
Yes (go to Q. 6)	No <i>(terminate)</i>
3. (Midland) Is your driving parent	t (or in-law) currently living in a rural area (i.e. population
less than 40,000/city smaller than	Midland; at least a 20 minute drive to services such as
the doctor and grocery store?)	
Yes <i>(go to Q. 6)</i>	No <i>(terminate)</i>
4. Did you have concerns about y	our parent's driving?
Yes <i>(go to Q. 5)</i>	No <i>(terminate)</i>

5. How many years has it been since your parent/	parent in-law stopped driving?
Less than 3 years (go to Q. 6) More	than 3 years <i>(terminate)</i>
6. In what type of business are you and othe	r adult members of your household
employed?	
(Don't read – terminate if the following:)	Market research
·	
7. What is your race or ethnic heritage? (Do not	read; want at least 2 minorities per
group.)	
White/Caucasian	
Other ethnic or racial group Refus	sed/don't know
8. Which of the following categories best describ	ed your annual household income in
1997?	
(Read list)	
Less than \$40,000	
\$40,001-\$80,000	
More than \$80,000	
Refused/don't know	
IF RESPONDENT QUALIFIES, RECORD INFORM	MATION BELOW AND INVITE THEM
TO PARTICIPATE.	
Record gender: Male	_ Female
Record: Parent still driving	_ Parent stopped driving

APPENDIX C - DEMOGRAPHIC QUESTIONNAIRES ON FOCUS-GROUP BACKGROUNDS

- C-1 Questionnaire for Older Drivers, Driving Couples, Former Drivers
- C-2 Questionnaire for Adult Children of Older and Former Drivers

C-1 Questionnaire for Older Drivers, Driving Couples, Former Drivers

Southfield focus group	Midland focus group
How many years did you (have)	ve you) driven?
Less than 6 months	
One to 5 years	
5 years to 20 years	
20 years to 40 years	
More than 40 years	
•	times per week would you say you drive your car?
1-2	
3-5	
6-7 More than 7	
3. In an average week, about ho	ow long do you drive?
2 hours or less	
3-10 hours	
More than 10 hours	
4a. Do you ever rely on your pas	ssenger to help you with driving or navigating?
No	
Yes	
4b. How often do you rely on yo	ur passenger to help with driving or navigating?
Not very often	Most of the time
Occasionally	Every time I drive

5. What is your marital status?	
Married	
Divorced	
Widowed	
Single, never married	
Separated	
6. What is your race or ethnic heritage	e?
Black/African American	
Hispanic/Chicago/Latino	
White/Caucasian	
Oriental/Asian	
Native American/Indian	
Mixed race	
Refused/don't know	
7. Are you Male	Female
8. How old are you?	
9. What is the highest level of educati	on you have completed?
Less than high school	College degree
High school diploma or equivalent	Some graduate education
Some college	Graduate degree or higher
10. Which category best describes yo	ur annual household income for 1997?
Less than \$5,000	\$45,000 to less than \$55,000
\$5,000 to less than \$15,000	\$55,000 to less than \$65,000
\$15,000 to less than \$25,000	\$65,000 to less than \$75,000
\$25,000 to less than \$35,000	\$75,000 or more
\$35,000 to less than \$45,000	Refused/don't know

C-2 Questionnaire for Adult Children of Older and Former Drivers

Southfield focus group	Midland focus group
	laws have you been involved in discussions or to stop driving or their actual stopping driving?
	TWO OLDER OR EX-DRIVERS WITH WHOM ON AND CONCERN FOR THEIR DRIVING:
Relationship #1	
2a. Relationship to older driver/ex-driv	er
Current age of older driver/ex-driver	
Are they still driving?	Yes No
Are they deceased?	Yes
Relationship #2	
2b. Relationship to older driver/ex-driv	er
Current age of older driver/ex-driver	
Are they still driving?	Yes No
Are they deceased?	Yes
3. What is your marital status?	
Married	Single, never married
Divorced	Separated
Widowed	
4. What is your race or ethnic heritage	??
Black/African American	Oriental/Asian
Hispanic/Chicago/Latino	Native American/Indian
White/Caucasian	Mixed race

5. Are you Male F	emaie
6. How old are you?	
7. What is the highest level of education	on you have completed?
Less than high school	College degree
High school diploma or equivalent	Some graduate education
Some college	Graduate degree or higher
8. Which category best describes your	annual household income for 1997?
Less than \$5,000	\$45,000 to less than \$55,000
\$5,000 to less than \$15,000	\$55,000 to less than \$65,000
\$15,000 to less than \$25,000	\$65,000 to less than \$75,000
\$25,000 to less than \$35,000	\$75,000 or more
\$35,000 to less than \$45,000	Refused/don't know

APPENDIX D - RESPONSES TO DEMOGRAPHIC SURVEYS

- D-1 Responses of Older Driver, Driving Couples, And Former Driver Groups
- D-2 Responses of Adult Children of Older Drivers Groups

D-1 Responses of Older Driver, Driving Couples, And Former Driver Groups

Number of Participants

Location	Older Driver Group	Couples Group	Former Driver	
			Group	
Southfield	19	24	11	
Midland	20	20	13	

1. How many years did you drive?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
< 6 months	0	0	0	0	0	0
1 - 5 years	0	0	0	0	0	0
5 - 20 years	0	0	0	0	0	2
20 - years	0	2	3	0	2	0
40+ years	19	18	21	1	9	11
missing	0	0	0	19	0	0

2. In the past 3 years how many times per week did you drive your car?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
1 - 2	0	1	0	0	2	2
3 - 5	1	5	2	5	0	1
6 -7	6	7	7	4	0	1
7+	12	7	15	11	0	1
missing	0	0	0	0	9	8

3. In an average week, about how many hours did you drive?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
2 or less	3	4	4	7	2	3
3 - 10	6	16	12	10	0	2
10+	10	0	8	3	0	0
missing	0	0	0	0	9	8

4a. Did you ever rely on your passenger to help you with driving or navigating?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
no	1	9	14	14	0	2
yes	18	11	10	6	2	4
missing	0	0	0	0	9	7

4b. If yes, how often did you rely on your passenger to help with driving or navigating?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
not very often	2	4	1	2	0	1
occasionally	0	4	9	1	0	0
most of the	0	1	0	2	0	1
time						
every time	0	0	0	1	0	0
missing	16	2	0	0	2	2

5. What is your marital status?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
married	12	7	20	15	9	3
divorced	1	1	1	1	1	0
widowed	6	11	3	3	1	9
missing	0	1	0	1	0	1

6. What is your race or ethnic heritage?

	Drive	ers	Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
Black/African	3	0	1	0	1	0
American						
Hispanic	0	0	0	0	0	0
White	16	20	23	20	10	13
Caucasian			!			
Asian	0	0	0	0	0	0
Native	0	0	0	0	0	0
American						
Mixed Race	0	0	0	0	0	0
missing	0	0	0	0	0	0

7. Sex

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
male	11	6	12	9	5	1
female	8	14	12	11	6	12

8. How old are you?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
65 - 69	6	7	9	3	2	0
70 - 74	4	3	9	7	4	1
75 - 79	4	6	3	5	0	2
80 - 84	1	2	2	1	3	4
85 - 89	2	1	0	2	2	3
90 - 94	0	0	0	0	0	0
9599	0	0	0	0	0	2
missing	2	1	1	2	0	1

9. What is your highest level of education completed?

	Drive	ers	Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
less than high school	0	3	0	0	0	3
high school or equivalent	8	6	7	5	7	2
some college	8	4	8	4	2	6
college degree	3	4	4	6	1	1
some graduate school	0	1	0	3	1	0
graduate school	0	1	5	0	0	0
missing	0	0	0	2	0	1

10. Which category best describes your annual household income for 1997?

	Drive	ers	Coup	oles	Former I	Drivers
income in						
thousands of	Southfield	Midland	Southfield	Midland	Southfield	Midland
dollars						
5 - 15	0	7	0	1	0	3
15 - 25	4	3	1	1	5	2
25 - 35	3	5	4	2	3	0
35 - 45	5	0	5	3	1	1
45 - 55	1	1	5	0	0	0
55 - 65	1	0	2	4	0	0
65 - 75	1	1	1	4	0	1
over 75	1	0	2	0	0	0
missing	3	3	4	5	2	6

D-2 Responses of Adult Children of Older Drivers Groups

	Southfield	Midland
No. of participants	19	18

1. How many older relatives and in-laws have you been involved with in discussions and interactions regarding their need to stop driving or their actual stopping driving?

No. of relatives	Southfield	Midland
1	9	13
2	10	5

2a. Relationship of older driver/former driver to you?

	Southfield	Midland
father	11	4
mother	11	10
father-in-law	4	2
mother-in-law	1	2
grandfather	1	2
grandmother	1	3

2.b Age of relative and driving status?

	Sout	hfield	Midland		
Age Group	driving	not driving	driving	not driving	
65 - 69	4	0	0	1	
70 - 74	6	2	4	0	
75 - 79	5	4	3	0	
80 - 84	1	0	5	1	
85 - 89	3	2	5	2	
90 - 95	0	0	1	0	
missing	0	2	1	0	

3. What is your marital status?

	Southfield	Midland
married	15	18
divorced	4	0

4. What is your race or ethnic heritage?

	Southfield	Midland
Black/African American	3	0
White/Caucasian	16	18

5. Your sex?

	Southfield	Midland
male	6	2
female	13	16

6. Your age?

	Southfield	Midland
20 - 29	2	1
30 - 34	1	2
35 - 39	3	3
40 - 44	2	3
45 - 49	3	1.
50 - 54	3	2
55 - 59	4	3
60 - 64	1	3

7. What is the highest level of education you have completed?

	Southfield	Midland
less than high school	0	0
high school or equivalent	7	2
some college	6	6
college degree	2	4
some graduate school	3	3
graduate degree or higher	1	3

8. Which category best describes your annual household income for 1997?

Income in thousands of dollars	Southfield	Midland
less than 5	0	0
5 - 15	0	0
15 - 25	3	1
25 - 35	1	0
35 - 45	2	1
45 - 55	. 5	1
55 - 65	3	2
65 - 75	2	0
over 75	1	10
missing	2	3