

UMTRI-98-29



PB99-104028

**IMPROVEMENT OF OLDER DRIVER
SAFETY THROUGH SELF-EVALUATION:
FOCUS GROUP RESULTS**

**Jean T. Shope
David W. Eby**

July 1998

REPRODUCED BY: **NTIS**
U.S. Department of Commerce
National Technical Information Service
Springfield, Virginia 22161

UMTRI The University of Michigan
Transportation Research Institute



1. Report No. UMTRI-98-29	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Improvement of Older Drivers Safety Through Self-Evaluation: Focus Group Results		5. Report Date July 1998	
		6. Performing Organization Code	
7. Author(s) Shope, Jean T., Eby, David W.		8. Performing Organization Report No. UMTRI-98-29	
9. Performing Organization Name and Address The University of Michigan Transportation Research Institute 2901 Baxter Road Ann Arbor, MI 48109		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. PLBV00212	
12. Sponsoring Agency Name and Address General Motors Corporation 30500 Mound Road Warren, MI 48090		13. Type of Report and Period Covered Interim Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract Focus groups (16) representing older drivers, older driving couples, older former drivers, and adult children of older drivers were held in a rural as well as an urban area. The purpose of the focus groups was to learn about older drivers' changing abilities, perceived risk, plans for the future, reactions to testing, and reactions to the possibility of a driving self-evaluation instrument. Results showed that older drivers were aware of some of their declining perceptual, cognitive, and psychomotor abilities, although they did not seem fully aware of the risks involved. Few older drivers had made plans regarding their driving futures, with most assuming or hoping that they could continue to drive. All groups supported the idea of mandatory, periodic testing for license renewal after a particular age (about 70). Although somewhat skeptical, many older drivers said they would be willing to use a self-evaluation instrument and they, as well as the adult children of older drivers, thought it could be helpful for older drivers making decisions about driving.			
17. Key Words Older driver, Self-Evaluation, Self Assessment, Focus Group, Driving Ability		18. Distribution Statement Unlimited	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 80	22. Price

Reproduction of completed page authorized

PROTECTED UNDER INTERNATIONAL COPYRIGHT
ALL RIGHTS RESERVED.
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE



ACKNOWLEDGMENTS

This work was sponsored by the General Motors Corporation pursuant to an agreement between General Motors and the United States Department of Transportation. The opinions expressed here are our own and not necessarily those of the General Motors Corporation or the United States Department of Transportation.

The authors are grateful for the efforts of the marketing firm that conducted the focus groups, StarWorks* Incorporated, in particular Alexa Gordon's role in conducting and reporting the results of the focus groups. Subject recruitment and focus-group facilities were provided by Yee Minard Research, Incorporated of Southfield, Michigan and MarQuest Research, Incorporated of Midland, Michigan. In addition, the contributions of Lidia Kostyniuk and Deborah Trombley to the development of the focus group methods and content, and Lidia Kostyniuk, Lisa Molnar, Michelle Olk, and Helen Spradlin to the preparation of this report are gratefully acknowledged.

Jean T. Shope, Ph.D.
David W. Eby, Ph.D.

PROTECTED UNDER INTERNATIONAL COPYRIGHT
ALL RIGHTS RESERVED.
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE



TABLE OF CONTENTS

BACKGROUND	1
METHODS	3
RESULTS	7
Older Drivers' Perceived Abilities	7
Perceptual abilities	8
Cognitive abilities	9
Psychomotor abilities	10
Fatigue and health status	11
Emotions about and attitudes toward driving	11
Awareness of risk	12
Family's views of older drivers' abilities	14
Older Drivers' Expectations for the Future	15
Others' Concerns about Older Drivers	15
Driving Skills Enhancement	17
Knowing When to Stop Driving	17



Reasons for Stopping Driving	21
Role of the Family in Older Drivers' Decisions	23
Mandatory Tests for Older Drivers	27
Voluntary Self-Evaluation of Older Drivers	29
Validity and content	31
Acceptability and location	31
Honesty	32
Follow-through	33
CONCLUSIONS	35
APPENDIX A - MODERATOR'S GUIDES	39
APPENDIX B - FOCUS GROUP SCREENING QUESTIONS	55
APPENDIX C - DEMOGRAPHIC QUESTIONNAIRES ON FOCUS-GROUP BACKGROUNDS	63
APPENDIX D - RESPONSES TO DEMOGRAPHIC SURVEYS	69



BACKGROUND

The Social and Behavioral Division of the University of Michigan Transportation Research Institute (UMTRI) received project funding to develop and test a self-evaluation instrument for older drivers. This assessment tool would help older drivers determine for themselves whether they should consider enhancing particular driving skills, seeking further evaluation, reducing their driving, or stopping their driving.

Qualitative research was conducted to help understand and frame the issues that are the focus of this project. The purpose of the qualitative research was to help identify the scope of the issues; define concepts; and capture the special emotions and language used both by older and former drivers, and by their adult children. The qualitative research was designed to provide information regarding language and content for use in subsequent project tasks, specifically, the development of the self-evaluation instrument. In addition, the research provided an opportunity to test public reactions to potential policies, programs, and the idea of the self-evaluation instrument which is to be developed.

The goals of the research were to (1) identify and define the issues and concerns regarding driving ability surrounding older drivers' decisions to continue, reduce, or stop driving; (2) understand the attitudes, motives, and behavior of older drivers; and (3) test reactions among older drivers to potential policies, programs, and the idea of a self-evaluation instrument developed for them to use.

The specific objectives of the study included (1) assessing the perceived changes in driving abilities and behaviors of drivers over time; (2) assessing the degree of perceived risk of driving to self and others; (3) determining older drivers' plans regarding driving in the future; (4) exploring older drivers' reactions to testing; and (5) exploring older drivers' reactions to the possibility of a driving self-evaluation instrument.

Issues explored in the research from the point of view of older drivers, as well as adult children of older drivers, included 1) key factors associated with the decision to continue, reduce, or stop driving; 2) coping behavior that compensates for reduced capabilities; 3) crucial experiences and/or events preceding the decision to cease driving; and 4) attitudes and emotional factors surrounding the decision to reduce or stop driving.

METHODS

In order to learn about a wide range of driving stages, older driver respondents were sought who represented age 65 years and up into the 80- and 90-year-old range. A total of 16 focus groups were conducted, including four groups for each of the following categories: solo drivers over 65 years of age, couples over 65 years of age who share driving responsibilities, former drivers who had stopped driving within the past five years, and adult children who are concerned about the driving abilities of their older parents and/or parents-in-law. In order to cover any urban or rural differences, two groups in each category were recruited from an urban area, and two groups from each category were recruited from a more rural area. Genders were mixed within groups.

A local marketing research firm, StarWorks* Incorporated, was hired to plan, conduct, and report the results of the focus groups for this project and a related project, "Reduction and Cessation of Driving Among Older Drivers," the results for which were reported in a separate document.¹ The authors worked closely with the StarWorks* Incorporated staff in making all the qualitative research decisions, including recruitment of subjects, scheduling of groups, locations of groups, and the development of the moderator's guides. Separate moderator's guides were developed for each of the four focus group categories (see Appendix A). The guides covered questions specific to this project, as well as those of the related project.

Southfield, Michigan was selected to represent the urban population, while the greater-Midland, Michigan area, represented a more rural population. Southfield is one of a string of densely populated suburbs of Detroit linked to other suburbs by major freeways where speed limits are 55-70 miles per hour. Midland is a mid-sized town surrounded by countryside. With one exception, the speed limits on all major routes in town are 35-45 miles per hour. Midland is linked to other similar-sized communities,

¹Kostyniuk, L.P., Shope J.T. (1998) *Reduction and Cessation of Driving Among Older Drivers: Focus Groups*. Report No. 98-26, Ann Arbor, MI: University of Michigan Transportation Research Institute.

approximately 45 minutes away, by two- and four-lane highways, on which the speed limits vary from 50-70 miles per hour.

Professional recruitment firms recruited the focus-group participants. Southfield-area participants were randomly selected from that area's recruitment firm's large database. Midland-area participants were drawn from senior citizen housing complexes and assisted living centers, as well as from a community center membership list. Potential participants were called by telephone and screened using scripted screeners developed by StarWorks* in collaboration with the authors (see Appendix B).

Brief, self-administered background data questionnaires were developed for each focus group's participants to complete when they arrived for their focus group (see Appendix C). The data obtained were summarized and are presented for each focus-group category (two focus groups per category) in Appendix D. Overall, 54 urban and 53 rural older current/former drivers, as well as 19 urban and 18 rural adult children, participated in the various focus groups. The ages of the older current/former drivers were well distributed, ranging from 65 to over 95 years. The ages of the adult children of older drivers were also well-distributed, ranging from adults in their 20s to those in the 60-64-year-old category.

Approximately two-thirds of the older driver/former driver participants were married, and about one-third were widowed. All participants in the rural focus groups were Caucasian, reflecting the lack of ethnic and racial diversity in greater Midland. In the urban focus groups, there were small numbers of Black/African-American participants. Among the older driver/former drivers, gender representation was fairly equal, except among the rural former drivers, where there were more women participants. The participants ranged in educational backgrounds from those who had not completed high school (only in the rural groups) to those who had completed graduate school. All household income ranges were represented, from \$5,000-15,000 (only in the rural groups) to over \$75,000 (only in the urban groups). Among the adult children of older drivers, most were married, Caucasian, and female. All the adult children of older

drivers had at least a high school degree and income ranged from the \$15,000-25,000 level to over \$75,000.

The focus groups were conducted during the month of April 1998, with each focus group ranging in size from 4 to 12 participants. Participants were paid a small honorarium for their time. The focus-group moderator followed the moderator's guides in asking questions of the groups. All groups were audiotaped and videotaped in order to facilitate accurate content analysis and report writing. Dr. Alexa Gordon of StarWorks* delivered four summary reports to the authors, one for each type of focus group. The authors used those reports, as well as the raw data, to develop this report, which synthesizes the material from the four types of groups, and focuses on and organizes the specific driving abilities, issues, and findings of relevance to this project. The results are presented by topic, detailing the comments of older drivers (combining current drivers and driving couples because all participants drove), former drivers, and adult children of older drivers.

RESULTS

Older Drivers' Perceived Abilities

In the focus groups, older drivers were asked how their driving may have changed over the past 20 years, and if they had noticed changes in themselves over the last 10 years, in terms of how easy it is to drive. Healthy drivers around 65-70 years old reported that they continued to drive much as they always have. But they did say that since they have retired, they can choose to avoid driving during difficult conditions (e.g., inclement weather, and rush hour) and do so. With increasing age, however, many older drivers acknowledged some changes in their driving abilities (perceptual, cognitive, and psychomotor). The adult children of older drivers had even more critical views of the older drivers' abilities. Older drivers also described the adjustments they had made to their changing driving abilities. They noted that they drove more defensively and that they watched other drivers much more carefully than they used to, trying to anticipate what those around them will do. A few drivers reported being even more cautious, taking surface streets instead of the freeway whenever feasible, avoiding left turns, being more observant when making right turns, looking both ways before going through a green light, and avoiding driving in winter. Very few older drivers, including one elderly widowed woman, insisted that nothing had changed in their driving over the years.

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

"I have to drive with a defensive attitude. ["Defensive?"] I drive more carefully. I use more judgment to avoid or eliminate problems. I drive a little slower. I observe traffic in front of me."

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

And from the adult child of an older driver:

"My father drives too much for his abilities. He has had accidents."

Perceptual abilities

Among the perceptual changes in abilities that affected their current driving, changes in vision were cited most often by older drivers, followed by changes in hearing. The vision changes included generally increased difficulty in depth perception, seeing at dusk and at night especially in poorly-lit areas, and specific problems from the glare of headlights at night and/or during rain at night. Several participants mentioned having had poor vision, due to cataracts, which improved following surgery. As a result of these vision changes, most older drivers had made significant adjustments to their driving patterns. The accommodations included:

Reducing or eliminating night driving, when possible.

Reducing or eliminating night driving in rain, when possible.

Restricting long distance travel to daylight hours.

Driving only on familiar and/or well-lit roads.

Driving somewhat slower to accommodate difficulty seeing distances clearly.

"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 judgment."

"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."

"I use my years of experience [to counteract the fact that] my eyesight and hearing are slowing down."

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

"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."

Declining eyesight was also mentioned as the primary change that former drivers (those who had completely stopped driving) noticed near the end of their driving careers. Former drivers also reported having taken the precautions of reducing night driving and reducing driving speed. In one group, 50 percent said they had avoided long driving trips late in their driving careers, choosing to fly instead.

"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."

Cognitive abilities

Although older drivers spoke freely about perceptual changes that they had experienced, they were less able to identify changes in cognitive ability that they had experienced (information processing, memory, way-finding, judgment, attention). The older drivers indirectly referred to many of these changes as being more easily confused. They volunteered that they had made adaptations to their driving to accommodate for becoming more easily confused. These adaptations included:

A greater need to concentrate on one's driving and the directions to be followed.
Driving more cautiously (e.g., increasing the distance between cars, double checking before starting off from red light, stopping at yellow lights)
Driving more slowly overall (e.g., "letting the other guy pass," "staying at the back of the pack")

Reducing their average highway driving speed to 60-65 in a 70 miles per hour zone.

Avoiding rush hour and streets with heavy traffic and congestion.

Avoiding driving in ice and snow.

"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."

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

"I find as I get older, I can't concentrate on a whole bunch of things at once. I have to concentrate on one thing more than I used to. At the same time, any distractions have more impact. I think that bothers me more than anything. I can drive alone fine, but have a conversation with [my wife] and I'm distracted, and find I'm then doing something I wouldn't have."

Psychomotor abilities

Other types of changes in their abilities that older drivers reported experiencing were in their psychomotor abilities; that is, their reaction times and the ability to move their bodies as needed in order to drive. Most reported needing to rely on mirrors more because they have difficulty in turning their necks, and driving somewhat slower to accommodate slower reaction time.

"I know that my reaction is slowing down. There are times when you have to have a quick reaction when driving."

Fatigue and Health Status

While some older drivers have curtailed long distance driving, those confident in their health and driving ability continued to drive to out-of-town destinations such as Florida and Arizona, and to visit children and grandchildren around the country. They admitted, however, that while they used to drive 700-800 miles per day, they no longer drive that far in one day. The participants reported having made various accommodations in driving long distances, such as taking more frequent breaks, and splitting a long trip into more than one day with a rest overnight. Some older drivers reported still regularly driving several hours back and forth between a permanent home and a summer cottage. A few women no longer drove long distances alone.

Emotions About and Attitudes Toward Driving

Several older drivers mentioned feeling more tense or apprehensive while driving. They also acknowledged changes in their confidence levels regarding driving.

“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 away].”

“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 ten-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.”

In addition to diminished confidence levels, older drivers stated that driving conditions, particularly on freeways, are 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 retaliate against other drivers. Older drivers believed that they compensate for both these changes and their own changes in driving ability 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 rather than the freeway when possible. Despite these precautions, a few older drivers reported experiencing stress when driving at night, in inclement weather, and in construction zones, particularly in unfamiliar locations.

Among the former drivers, some seem to have come to terms emotionally with no longer driving.

"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."

"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."

Awareness of Risk

As a group, older drivers commented that they believe they are not a risk to others on the road. 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 judgment of more experience in driving."

Comments made by some participants, however, suggested that older drivers may not always recognize how they contribute to potential problems on the road. Others, however, recognized the risks older drivers post to others.

"In a 55-70 mile an hour zone, I'll go 50-55; that's not too slow."

"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."

"Some of us are driving so slowly that we are creating a problem for others."

"Older people may not be in accidents, but they cause accidents because they're so cautious and careful. That's a danger."

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

When former drivers were asked about concerns they had had while still 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 experienced one or more crashes just prior to stopping driving.

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

When former drivers were asked if they were concerned about others' driving, a number of participants mentioned the high speeds on freeways.

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

Family's Views of Older Drivers' Abilities

In contrast to many older drivers' views about their own driving, adult children of older drivers believe that many older drivers are at risk to both themselves and others when they are on the road. The adult children of older drivers cited poor vision, including lack of peripheral vision; slow reactions; and slow driving as the main problems. They also noted that vision and hearing problems resulted in older drivers not being aware of other drivers and the traffic conditions around their cars. Dementia was also mentioned as a limitation for some older drivers. Participants shared comments about their aging relatives and other older drivers.

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

"My uncle 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."

"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."

The adult children of older drivers described a variety of limitations that they perceived regarding their parents' driving abilities. Most respondents reported multiple problems for the same individual. A few of these limitations had already caused crashes. Limitations and concerns mentioned included the following (multiple responses total more than the number of respondents):

Visual limitations (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)

Older Drivers' Expectations for the Future

When asked what they would do differently in their driving in the next 10 to 15 years, older drivers had mixed thoughts. Half of one urban group said that they would make no changes to their current driving, or compensations for abilities that might be expected to decline. Some older drivers acknowledged that their reflexes and reaction time will be slower and their vision poorer, requiring them to reduce or restrict their driving to nearby locations. Many respondents from both regions believed that their physical health will be the determinant of their driving ability. A few thought that they should stop driving at a certain age, while others wanted to keep driving "until the end." The oldest drivers expected that they will have stopped driving in 10 to 15 years.

"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]."

"Someone will have taken my license by then."

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

Others' Concerns about Older Drivers

Very few older drivers had heard concerns expressed about their driving by their adult children or friends. Most drivers felt that their driving was not a cause of concern to

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

"They [family members] wouldn't dare say anything to me."

Only a few of the former-driver respondents had heard concerns about their driving from others, such as friends and family members.

"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 and 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."

As noted above, many of the adult children of older drivers had concerns regarding the driving abilities of their parent(s) or parent(s) in-law, and many said that they had shared these concerns with their older driver relatives. They reported that these discussions were met with varying reactions and degrees of success or failure. Only a few adult children reported comfortable conversations in which both parties discussed

the issues and concerns, and came to a solution with which all were comfortable. Only one respondent reported having a parent who was thought to be capable of monitoring his/her own driving.

Driving Skills Enhancement

A refresher course in driving rules or a defensive driving course was of considerable interest to the older drivers. Several respondents in the rural groups had taken the refresher course, "55 Alive," sponsored by the American Association of Retired Persons (AARP) through their local community center. Some drivers took the course late in their driving careers as a way to check their driving skills. An AARP facility, a local senior center, a community center, or activity center were all mentioned as appropriate places to take such a refresher course.

Knowing When to Stop Driving

Although many older drivers acknowledged reducing their driving by restricting the times, places, and conditions under which they drove, they acknowledged that ceasing to drive altogether would be a significant step. When asked how they would know when it was time to stop driving, most older drivers said they thought they would just know. Indications of the need to stop driving cited most often included loss of confidence, health problems, a doctor's recommendation, doing dangerous things while driving, or making obvious errors in driving ("dumb mistakes," wrong turns). Participants also mentioned the following changes that could occur and would indicate a need to stop driving:

Declining reflexes, reaction time, and vision.

Feeling uncomfortable, anxious, leery, scared, or frightened while driving.

Feeling irritated or tired while driving.

Not feeling as sharp while driving.

Not trusting their driving, or finding driving “a chore.”

Having trouble focusing eyes.

Misjudging things.

Having a motor vehicle crash.

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

Despite the fact that most participants thought they will know when to stop driving, they also said that their adult children or friends would tell them. Results from focus groups with former drivers and adult children of older drivers supported this belief, although such discussions did not always go well, according to the adult children of older drivers.

The majority of older drivers had made no plans or even inquiries for the time they will have to stop driving. Male respondents, as a group, had not even considered the possibility of stopping driving. There was general agreement in one group that men find it harder to give up driving than do women. 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.

“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.”

“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.”

Others said that because they will not admit aging, they will also ignore indications that they should stop driving.

"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?"

A few adult children reported that their parents had already reduced or limited their driving (e.g., no nighttime driving, asked friends to drive them, moved to an assisted living center). Several others believed that 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 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 of older drivers, however, believed that their parents would not stop driving, even if they recognized the need to stop. The need for independence and, perhaps, a resistance to change seem responsible for parental reluctance. Discussions with two groups of adult children of older drivers suggested that 75 percent of them believed that their aging relatives either will 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."

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

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 parents to stop driving, even when they knew there were potential dangers. Others felt that their relatives' driving was safe enough

for the time being.

"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."

"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 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' minds and my mind."

When adult children of older drivers were asked if going through the experience of driving reduction and cessation with a parent had influenced their thinking about their own driving, 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. Other respondents said that going through the experience has caused them to feel as if they were "already being conditioned to accept when it's time to stop driving."

Reasons for Stopping Driving

All but two of the former drivers had 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 vision problems. One reduced driving over a couple of years while the other reduced driving over a six-month period. Reasons cited among those who stopped driving quickly are listed below with the number of former driver respondents who stopped primarily for each reason.

Had one or more minor or major accidents (7)

Illness (5)

Moved, some to an assisted living center due to declining health (5)

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 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."

"The decision to stop was easy."

Role of the Family in Older Drivers' Decisions

Nearly all of the adult children of older drivers had talked with their parent(s) or parent(s)-in-law about their concerns regarding their parents' driving abilities. Three respondents said that the burden of responsibility for raising the topic would fall solely on the adult child living closest to the parent. One or two families had included everyone in such a discussion, deciding among themselves how and who could best help the parent with the problem. One daughter-in-law, however, 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 to live with them when he gave up driving. Adult children had tried a variety of approaches to dealing with their parents about their driving concerns, including the following:

Driving parents when family is together.

Setting parameters on when and where it is safe for the parent to drive (e.g., only during daylight hours, only short distances from home, etc.).

Broaching the subject casually, mentioning the need to start thinking about stopping (may be done with driver or driver's spouse).

Helping to make plans for a transition, such as the parent moving in with the children, or moving to an assisted living complex.

Asking a doctor (eye or medical doctor) to collaborate by having parent fail a medical examination.

Waiting until the parent has a significant problem (i.e., makes a driving mistake or has a crash) to raise the issue.

Taking away the car; suggest selling the car or giving it to someone else.

Taking away a part of the car so that it is inoperable.

"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 is a loss of independence and a loss of self-control. For most adults, these are treasured rights that they will protect as long as they

can. Some adult children reported successful attempts at having their relatives reduce their driving.

"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."

Many older drivers are very reluctant to stop driving, and resistant to accepting such a change. Conversations on this topic, therefore, were likely to be emotional and heated, with parents often becoming defensive, and 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 parent's 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."

"Auntie 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 that their parents were defensive, assertive, or obnoxious in their response to discussions regarding giving up driving, said that they had not expected such a negative reaction. Adult children could not always judge how important the ability to drive, and the independence and self-control that driving provides, were to their parents.

"Their adamancy is based on fear, the 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')."

There was a general consensus among the respondents that information to help older drivers and their families make decisions, and information about available support services are currently limited or do not exist. Several respondents mentioned specifically that county agencies did not have this kind of information, nor were they equipped to provide it. Respondents made a variety of suggestions about types of information that would be helpful for both adult children and elderly drivers.

Information about alternative forms of transportation.

Statistics on older drivers' driving experience.

Indicators to look for when considering stopping/warning signs of deteriorating driving skills.

List of mediators to help a family and a driver make decisions and find options.

Information on driving skills, declining abilities, and driving decisions.

Information about the role adult children need to take with their parents' driving decisions, such as presenting the idea of not driving as an acceptable option and as a natural fact of getting older. Stopping driving should not be seen as degrading or a loss of privileges.

A media campaign that begins targeting drivers at age 50 about changes they can expect to experience in their driving abilities.

Additional 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 such information to older drivers and their adult children included senior centers, assisted living centers, adult foster care homes, Social Security and Medicaid offices. Other possibilities included automatically mailing the information with license renewals, voter registration applications, and handicapped sticker applications to all drivers over a certain age, as well as to their adult children.

Mandatory Tests for Older Drivers

Many respondents thought that closer monitoring of older drivers' performance should be done, and that older drivers' licenses should not be renewed without a road test and/or a review of one's driving record. Several groups discussed the possibility of requiring on-the-road driving tests for all older drivers as the only accurate way to test abilities. While there was individual resistance within the groups, the majority felt that a periodic road test would be a good way to test their driving abilities. In one group, three-fourths of the participants said they would like to take a road test to check their driving abilities. The 65- to 75-year-old age range was perceived by many older drivers as a good time to start requiring road tests. Many older drivers also thought that retesting every three to five years from this age forward was important. Several respondents thought that the need for testing could be tied to an individual's driving record and that testing results could be monitored by the automobile insurance industry.

"You should have to pass a rigid driving test."

"My experience is that being inside a vehicle is much different than a paper test."

"I think after a certain age, a driving test should be mandatory before you get your license renewed."

In the rural groups, several older-driver respondents had taken a test developed by Dow Chemical Company while employed there. A few of the rural participants were involved in the development of the tests. Because of Dow's development of a driving test for its own employees, Midland respondents were much more astute about both the idea and the actual experience of taking a test of one's driving abilities.

Most of the former drivers also thought that all older drivers should be required to take a mandatory road test after a certain age, and that automatic license renewals should be eliminated. Respondents thought the tests should start between ages 65 and 75, and be repeated every two years. Another suggestion made was to use restricted licenses when driving problems begin to occur. The regular simulated testing procedure required of all pilots was cited by two respondents in different groups as a good model for driving tests. Two groups were asked if they would feel comfortable taking a computer-generated simulated driving test, and most respondents in these groups said they would not.

"I felt okay [about my driving] personally, but it would probably be safer if everyone was tested."

"You shouldn't be able to get a renewal through the mail. There should be a required road test starting at age 75."

"In Toronto, seniors have to take a road and written test every year."

Suggestions from the adult children of older drivers included a variety of programs that would largely fall within the responsibility of the Secretary of State's office. Some adult children preferred that the Secretary of State's office should play the role of "bad guy" (rather than families) in revoking or limiting licenses. Their ideas included:

Elimination of automatic license renewals after age 65-75.

Review of one's driving record every two years, starting at a particular age.

Better screening before relicensing older drivers.

Limited driver's licenses for older drivers.

Volunteer or mandatory simulated driving test (mentioned in several groups).

Mandatory road testing for all older drivers starting at age 65-75.

Education about reasons for stopping driving, as well as information for adult children and older drivers about how to stop driving.

"I hope that the research points out the need for mandatory vision tests and road tests that everyone should take."

"AARP has road tests available in Florida for people over 55."

"Before my Dad, at age 85, had his driving exam, he had everything examined that could go wrong, and he passed everything. I was standing behind him [at the Secretary of State's office] signaling, 'Please don't give him his license.' Since he did everything right [on the test] they gave him the license."

Voluntary Self-Evaluation of Older Drivers

When asked about interest in older drivers' performing a voluntary, self-administered, self-evaluation of driving abilities, respondents had mixed reactions. It was difficult for some respondents to comment on an abstract concept that was not yet developed, although most felt that such an evaluation would be helpful.

"I take a stress test every year, not because I need it, but because I think it will help me if there's something going wrong. [This would be in] the same category, something you'd take as a preventive measure."

Some respondents in each of the focus groups continued to focus on professionally administered driving assessments that were linked to or run by the Secretary of State's office or the automobile insurance companies. These respondents valued the official, authoritative approach, and recommended linking driving records to any self-assessments that would ever be implemented. Other respondents in each group had difficulty seeing the potential value of a self-assessment. Instead, they preferred the assessments of physicians (routine physical and eye exams), whose advice they would trust more.

"When you get your yearly medical screeners, you will know if you have a problem. These should be a warning."

The idea of a computer-simulated test was raised in one rural group. This idea met with mixed reaction. The group thought that a computer simulation was more valid than a self-administered paper-and-pencil test. Sixty percent of the group said they would take the simulated test and trust the results. Respondents who were less confident with computers were hesitant. When the self-evaluation was described as possibly a touch pad screen mounted on a kiosk stand in a shopping center, hesitant respondents were more enthusiastic. Others felt that only an actual road test would be a valid driving assessment.

"I don't think a written test would do it. It should be a simulated driving test that could test reactions, vision and sign-reading ability."

"Only a road test can accurately evaluate driving abilities." (All former-driver group members agreed with this remark.)

Other concerns expressed and positive/negative reactions to the concept of a self-evaluation instrument are summarized below under the headings validity and content, acceptability and location, honesty, and follow-through.

Validity and content

Many respondents were concerned that any self-evaluation be carefully developed, account for cognitive and language skills, as well as be accurate and valid. When asked what content the self-administered test should include, older driver respondents primarily mentioned various aspects of vision, followed by reflexes, reaction time, responses to situations, and hearing. Some wanted to be tested on driving rules, as well, and many continued to want to include an actual driving test in the examination. Former drivers suggested that the self-evaluation test include vision, hearing, alertness, intelligence, reflexes, general health, and car-handling abilities.

Acceptability and location

Many older drivers said they would be willing to take the test; for example, in one rural group, all 11 respondents said they would be willing. They had concerns, however, about other drivers' willingness to take the test.

"It would target the wrong group since those that feel confident with driving would take it, but those who don't wouldn't take it."

"Only people who are responsible will take the test. Others would throw the test away."

When the idea of a "paper-and-pencil" self-administered test was introduced, most older driver respondents liked the idea of taking it at home. Convenience was the reason far more than confidentiality. Some drivers assumed the Secretary of State's office would be the best location to take the test, because drivers must present themselves there at least every eight years. An AARP facility, a local senior center, or a community activity center were also mentioned as possible places to take the test, particularly if a road test were included. Respondents also suggested that the researchers review the driving test facilities set up in community police centers.

One group of older drivers had several suggestions for reaching seniors about driving issues, including alerting them to the availability of a self-evaluation instrument. They suggested mounting an advertising campaign for older drivers, using local media that reach this group and offering an incentive, such as reduced auto insurance, if the test were successfully passed. Several suggestions were made by adult children that may make a self-test more popular:

The source that presents the test should be credible in older drivers' eyes.

The approach/reason for giving/taking the test needs to be carefully thought through.

Media/publicity is needed to support the test if it were sent to people's homes.

Some, however, were skeptical regarding their older relative's willingness to use a self-evaluation.

"My mother wouldn't be honest so she could continue driving."

"I wouldn't take the test. My mother would be reluctant to take the test."

Honesty

Among those willing to use a self-evaluation instrument, some feared that they could not be objective and honest with themselves in answering the questions. Most felt they would be honest, but among one rural group, 40 percent said they would knowingly cheat on the test. They were concerned as well about the honesty of others. Former drivers thought people would not be honest and objective on a self-evaluation. One person suggested having someone who knows you well also complete your test for you, then comparing and discussing their results with yours.

"Most people wouldn't even take a test, let alone be honest with themselves."

"Even though you wouldn't admit your problems to others, a self-test might help you open up to yourself."

Follow-through

Concerns were raised regarding how older drivers would use the results of their self-evaluation. In one of the urban groups, 80 percent said they would ignore the test results and keep driving if they did not do well. Others stated that they were already aware of their driving abilities, and that they monitored these regularly. One rural group pointed to the fact that the AARP provides a defensive driving test of which few older drivers take advantage.

"If I only had a short distance to go and it was during the day, I'd drive [even] if I didn't do well on the test."

"I would know on my own without a checklist or a self-test."

A few respondents, however, speculated that poor test results might prompt them to have a medical check up for problems. Several former-driver respondents thought a self-test could act as a stimulus to get more information if a problem is identified. One person thought she would be more willing to accept a limitation if she identified it, rather than hearing about it from someone else.

"I'd want to know were I stand."

A self-evaluation is perceived by former drivers as beneficial in several possible ways:

Poor performance on a part of the test would cause the driver to seek further testing.

Poor performance would prompt the driver to begin questioning his/her driving ability.

Poor performance would prompt the driver's spouse to restrict the driver's use of the car.

The test could provide information to the driver on when to stop driving.

The test could reinforce confidence if the driver was questioning visual capabilities.

The test could provide a person who has stopped driving with a sense of his or her present driving abilities.

A few adult children appreciated the potential benefits of a self-administered driving test that measures one's abilities.

"A self-test could serve to indicate limitations."

"A test would be helpful since children can't stop their parents from driving."

CONCLUSIONS

Focus group discussions with older drivers, former drivers, and adult children of older drivers have confirmed the knowledge that driving abilities decline with age, and that decision-making about older drivers' safe mobility is not always being handled effectively by licensing agencies, families, or the older drivers themselves. There is much room for improvement, and the development and implementation of a self-evaluation instrument may provide one useful strategy that can be used by some older drivers facing decisions about their driving.

Although not all drivers over 65 years of age have experienced declining abilities, many have. Older drivers observed and acknowledged some changes in several of their abilities that are related to safe and effective driving, although they may not be aware of all the changes they may have experienced. Perceptual ability changes mentioned most often included vision changes, particularly in regard to driving at night and glare from lights, leading many older drivers to limit their night time driving, particularly in inclement weather. Increased difficulty judging distances was also mentioned frequently. Cognitive abilities were also noted to have changed, with older drivers reporting increased difficulty in way-finding and dealing with complex situations. These changes may have led many older drivers to compensate by driving more defensively, planning ahead, and concentrating harder on their driving tasks. The declining psychomotor abilities discussed in the focus groups included reaction time, reflexes, and head-turning ability. These changes may have led drivers to drive more slowly, carefully, and cautiously. Older drivers acknowledged the need to take more frequent breaks on long trips, and to avoid stressful traffic conditions, such as speeding traffic, large trucks, and congested areas, due to decreased confidence in their abilities. The compensatory strategies that older drivers reported using may have been in response to several different declining abilities that they had experienced.

Many older drivers did not seem aware of the risks their declining abilities may pose to themselves and others, in spite of reports from some of them regarding having been

involved in motor vehicle crashes. Families particularly perceived these risks and attributed them to the older drivers' declining abilities.

Some older drivers' expectations for their future driving had not included any thought about reducing or stopping driving, unless their health was a determining factor. Others realized there will come a time when they should limit their driving even more, or stop driving altogether.

Very few older drivers reported having had a relative or friend discuss concerns about their driving with them (yet the adult children of older drivers groups reported trying to have such discussions with their older relatives). In a few cases, older drivers mentioned that relatives had suggested limiting driving, but no one reported health professionals' concerns.

Older drivers were very interested in a refresher or defensive driving course. It seemed that skills enhancement would be welcomed by older drivers, given the importance of driving to them.

Considerable discussion time was spent on the issue of how to know when to stop driving, a very significant step compared to the more acceptable, self-imposed driving restrictions. Most older drivers thought they would just know when to stop driving based on their decreased confidence and abilities, or increased mistakes. Many said that their children or friends would tell them when it was time to stop driving. Some, however, acknowledged that even if they knew it was time to stop driving, they would not do so. The majority had made no plans for the time that they might have to stop driving. This was particularly true for men, who had not even considered the possibility of ever stopping driving, as at least some women had.

Almost all of the former drivers had stopped driving rather quickly, due to traffic crashes or illnesses, with little transition period or planning. Others had stopped driving when they moved for health reasons, often into a new city or a situation with more assistance.

The adult children of older drivers were very concerned about their older relative's safety, and the safety of others. Many had raised their concerns with the older driver with varying results. While some older drivers agreed with the limited driving suggested by their relatives, more were quite upset by the suggestions to limit or stop driving, because driving was extremely important to them. The adult children were not prepared to deal effectively with the driving problems of their older relatives, and had not expected such strong reactions. As a group, they were very eager for more information and help to deal with the problems of older driver safety and mobility.

A surprising number of older drivers were very supportive of the idea of periodic, mandatory testing, including road testing, for license renewal after a particular age, probably about age 70. Restricted licensing, driving record reviews, driving simulation tests, as well as education about aging and driving were also suggested.

Older drivers and the adult children of older drivers had mixed reactions to the concept of a self-evaluation instrument for assessing the driving abilities of older drivers. They wanted to be assured that the test would be valid and would contain elements testing the critical abilities of vision, reflexes, reaction time, alertness, hearing, car-handling, general health, and responses to various situations. Many older drivers said they would be willing to use a self-evaluation instrument, although they had concerns about other drivers' willingness. They liked the convenience of a test that they could take at home, and made several suggestions for enhancing the test's acceptability by older drivers. There were some concerns regarding how honest test-users might be in answering the questions, and suggestions were made to increase the accuracy of responses. The older drivers were interested in how test-users would deal with their test results, some believing that the results would be ignored by at least a few test-users. Others believed that test results might prompt people to seek further evaluation, to seriously consider their driving decisions, or even to be reassured regarding their current driving abilities. Adult children also had questions regarding the usefulness of a self-evaluation instrument, but were intrigued with the possibility of a neutral, objective way of assessing their older relative's driving abilities.

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 advice 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 are conducting a research study for The University of Michigan Transportation Research Institute about people 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*)

2. Are you currently, or did you previously, drive a car at least one trip per week?
☐ Yes, currently driving (*go to Q. 3*)
☐ Used to drive but stopped (*go to Q. 5*)
☐ No (*go to Q. 7*)

3. Have you lived in Southfield for at least the last three years?
☐ Yes (*go to Q. 10*) ☐ No (*go to Q. 4*)

4. Have you lived in a city about the same size as Southfield or larger?
☐ Yes (*go to Q. 10*) ☐ No (*terminate*)

5. 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. 6*)

6. Do you help out the driver of your car at least one trip per week?
☐ Yes (*go to Q. 6a*) ☐ No (*terminate*)

- 6a. Have you acted as a helper for the driver for at least 6 months?
☐ Yes (*go to Q. 7*) ☐ No (*terminate*)

7. Who normally drives the car?

☐ Spouse/Partner (*go to Q. 10*) ☐ Someone else (*go 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 same household with this person?

☐ Yes (*go to Q. 10*) ☐ No (*terminate*)

10. In what type of business are/were you and any other adult members of your household employed? (*Don't read – terminate if the following:*)

☐ Market research

11. Are you: (*Read list; include range of ages in each group.*)

☐ over or under 75 ☐ over or under 80

12. What is your race or ethnic heritage? (*Do not read; want at least 2 minorities per group*)

☐ White/Caucasian ☐ Other racial/ethnic heritage ☐ Refused/don't know

13. Which of the following best described your annual household income in 1997? (*Read choices*)

☐ Under \$30,000 ☐ Over \$30,000 ☐ Refused/don't know

IF RESPONDENT QUALIFIES TO PARTICIPATE, RECORD INFORMATION BELOW AND INVITE THEM TO 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*)

6. Have you ever had a driver's license?
____ Yes (*go to Q. 7*) ____ No (*terminate*)

7. Who normally drives your car?

___ Spouse/Partner (*go to Q. 8*) ___ Someone else (*go 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 same household with this person?

___ Yes (*go to Q. 10*) ___ No (*terminate*)

10. In what type of business have you (*and your spouse/partner/etc.*) been employed?
(*Don't read – terminate if the following:*)

___ Market research

11. Are you: (*Read list; include range of ages in each group*)

___ over or under 75 ___ over or under 80

12. What is your race or ethnic heritage? (*Do not read; want at least 2 minorities per group*)

___ White/Caucasian ___ Other race/ethnic heritage ___ Refused/don't know

13. Which of the following best described your annual household income in 1997?
(*Read choices*)

___ Under \$30,000 ___ Over \$30,000 ___ Refused/don't know

IF RESPONDENT QUALIFIES, RECORD INFORMATION BELOW AND INVITE THEM TO PARTICIPATE.

Record gender: ___ Male ___ Female

Record type of driver: ___ Solo driver ___ Couple ___ 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 member 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 about driving among persons over 65 and their adult children's concern about their parent's driving. I'd like to ask you a few questions. It will only take a minute, and I assure you that no sales effort is involved.

1. Let me first ask whether you have one or more parents, or parents in-law, who are 65 years of age or older and still driving at least one trip per week?

___ Yes (*go to Q. 2*) ___ No (*go to Q. 4*)

2. Do you think your parent/parent 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 parent (or in-law) currently living in an urban/suburban area similar to Southfield?

___ Yes (*go to Q. 6*) ___ No (*terminate*)

3. (**Midland**) Is your driving parent (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 (*go to Q. 6*) ___ No (*terminate*)

4. Did you have concerns about your parent's driving?

___ Yes (*go to Q. 5*) ___ No (*terminate*)

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 (***terminate***)

6. In what type of business are you and other 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 ___ Refused/don't know

8. Which of the following categories best described 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 INFORMATION 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

1. How many years did you (have you) driven?

___ Less than 6 months

___ One to 5 years

___ 5 years to 20 years

___ 20 years to 40 years

___ More than 40 years

2. In the last 3 years how many 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 how long do you drive?

___ 2 hours or less

___ 3-10 hours

___ More than 10 hours

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

___ No

___ Yes

4b. How often do you rely on your 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?

- ☐ 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 education 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 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 |

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

___ Southfield focus group

___ Midland focus group

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

FILL OUT QUESTION 2 FOR THE TWO OLDER OR EX-DRIVERS WITH WHOM YOU'VE HAD THE MOST DISCUSSION AND CONCERN FOR THEIR DRIVING:

Relationship #1

2a. Relationship to older driver/ex-driver _____

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-driver _____

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 ☐ Female

6. How old are you?

7. What is the highest level of education 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 time	0	1	0	2	0	1
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?

	Drivers		Couples		Former Drivers	
	Southfield	Midland	Southfield	Midland	Southfield	Midland
Black/African American	3	0	1	0	1	0
Hispanic	0	0	0	0	0	0
White Caucasian	16	20	23	20	10	13
Asian	0	0	0	0	0	0
Native American	0	0	0	0	0	0
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
95 - -99	0	0	0	0	0	2
missing	2	1	1	2	0	1

9. What is your highest level of education completed?

	Drivers		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?

	Drivers		Couples		Former Drivers	
income in thousands of dollars	Southfield	Midland	Southfield	Midland	Southfield	Midland
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?

Age Group	Southfield		Midland	
	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