

THE ROLE OF THREE FACTORS IN COMMUNITY MOBILITY FOR RURAL  
OLDER ADULTS

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The Role of Three Factors in Community Mobility for Rural Older Adults

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## ABSTRACT

This paper will identify mobility options leading to quality of life for older adults who live in rural communities. This paper will create an assessment plan to determine the current status and needs for transportation and mobility of older adults in a rural community related to walkability, drivability, and public transportation. A sampling data collection plan for conducting the assessment will be developed based on review of existing community assessments. This paper will develop a plan for how the data will be analyzed and presented. Results of this case study will be used for future improvements in community livability as it relates to older adults and their mobility options and preferences.

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## CHAPTER 1. INTRODUCTION

Research has shown that the quality of life for an aging population is closely tied to preserving mobility (Miller, Harris, & Ferguson, 2007). In 2005, the top three challenges for meeting the needs of older adults in a community setting were: housing, financial issues, and healthcare. In 2010 the top three were: financial/funding issues, transportation/mobility, and housing (Aging, 2011). Transportation and mobility quickly became the number-two challenge for meeting the community needs of an aging population. It is expected that this trend will continue and that mobility of the aging population will become an increasingly important issue as the U.S. population continues to age (Israel, 2012).

Aging consumers seek communities that will best meet their current and future needs (Pollock, 2000). The benefits that a community has to offer aging adults are referred to as its “livability”. According to Pollak (2000) this focus on the “livability” of a community is recognizing that certain physical characteristics play a major role in facilitating personal independence and quality of life.

Community activity, according to Shergold, Parkhurst, and Mussellwhite (2011) is a key contributor to quality of life for many older people. In order to be involved in the community, it is essential that transportation options exist because mobility is central to such activity. In addition to community activity, mobility is also necessary for daily living (Shergold, et al.). Whether going to work, shopping, physician visits, visiting friends, or engaging in recreation, mobility is the common denominator (Shergold et al.).

According to Kochera and Straight (2011), the livability of a community depends in part on multiple mobility options that allow residents of all ages and abilities to

connect with their community. The lack of mobility options has the potential to negatively impact the quality of life for rural aging adults (Kochera & Straight). According to a study completed by Israel, Mjelde, Dudensing, Cherrington, Jin, & Chen, (2012) livability challenges include limited access to health and personal services and the distance between the home and center of city.

Israel et al. (2012) found that many aging adults are leaving the urban areas and retiring in rural, less populated communities. Israel et al. stated that demographers project aging Americans will be a growing cohort in rural regions with a 30% growth rate expected for those aged 55-75 living in rural towns through 2020. This researcher concluded that this rural growth rate will put an even greater focus on the livability of communities and mobility options.

This paper will discuss three factors that contribute to the mobility aspects of livability of a rural community. These factors are:

1. Walkability
2. Drivability
3. Public Transportation

In this paper, I first reviewed the literature to examine these three factors and how they impact the quality of life for aging community members. This review provided a foundation for developing a survey tool to assess feelings and attitudes regarding mobility and a mobility evaluation plan as a basis for improving the quality of life and independence for aging adults in a rural community.

Second, I developed a community assessment to identify community preferences of the case study and to assess the three factors that contribute to community mobility for older adults (walkability, drivability, and public transportation).

## CHAPTER 2. LITERATURE REVIEW

The literature review focused on each of the elements of rural community mobility; walkability, drivability, and public transportation and addressed the impact each of these factors has on a person's quality of life. A review of these mobility options provided a foundation for the development of a survey tool and an evaluation plan to assess the livability of rural communities and identify potential areas for improvement for both the community and its members.

The literature review identified several different definitions of a rural community. According to the U.S. Department of Agriculture (2011), the concept of a rural community can be difficult to define, in part, due to the fact that a rural community in a relatively high-population state can look dramatically different from a similar sized rural community in a less populous state. The Census Bureau does not take these differing logistics into consideration and defines rural places as those with fewer than 2,500 residents (Federal Reserve Bank of Kansas City, 2004). The definition of rural that fits the purpose of this research, because it is not solely based on a population number, is from the U.S. Department of Housing and Urban Development (2004). This definition includes either an area with a population not to exceed 2,500 residents or a population in excess of 2,500 but not in excess of 10,000 if it is rural in character. Rural characteristics, according to Whitaker (1984) include factors such as the number of year-round residents, persons per household, degree to which jobs are concentrated on a few industries, percentage of resident workers in farming or fishing, monthly fluctuations in employment and percentage of housing built before 1940.

Johnston, Brosi, Hermann, and Jaco (2011) conducted a study on rural communities and the aging population. This study emphasized that rural communities generally have a greater percentage of older adults compared to urban areas and that by the year 2030, there will be more Americans over the age of 65 than ever before. As the U.S. population ages, serious efforts need to be made to evaluate the mobility of rural communities and identify changes that can be made in order to enhance older adults' quality of life (Shank, 2010). This expected growth of aging adults in rural communities also raises questions as to whether or not these communities will be able to sustain and maintain the growth (Shergold et al., 2012). In their study, Shergold et al. found that community activity is the key to quality of life for older adults. Shergold et al. concluded that problems will arise if rural communities rely on the car as the solution for rural transportation. If rural communities have aging adults who no longer drive, these communities need to have a range of transportation modes available to ensure not only resident quality of life but also community sustainability (Shergold et al.).

Researchers have linked mobility with a person's quality of life. Webber, Porter, and Menec (2010) defined mobility as someone having the ability to move around by either walking or by use of community transportation. Webber et al. linked mobility to health status and quality of life, and found that mobility was necessary for active aging. Shergold et al. (2012) also concluded that community activity was a key factor to quality of life for many aging adults and that mobility was the necessary link between the two.

Having mobility options contributes to maintaining independence and assists people to feel that they have control over their own lives. Israel et al. (2012) found that when people can get where they want or need to go, they were also more likely to age

successfully and when transportation options did not exist, older adults were inclined to stay at home. According to research completed by Prohaska, Anderson, Hooker, Hughes, and Belza (2011), mobility and movement within and between environments is a central component of healthy aging and is fundamental to everyday day life. Prohaska et al. presented evidence that it is critical to have diverse means of mobility options available for the older population in order to maintain independence and promote quality of life. These options need to consider the broad array of factors that affect mobility, such as structural issues, personal abilities, and environmental factors (Prohaska et al). In a study conducted by Sungyop and Gudmundur (2004) travel patterns and travel mode choices of adults over the age of 65 and retired were analyzed. The results of this study concurred with other research that transportation options must move beyond automobile usage to prepare for the dramatic increase in the elderly population and meeting their mobility needs (Sungyop & Gudmundur).

A study completed by Kaur and Saini (2011) identified that, with the current trend of encouraging aging adults to remain in their homes and communities longer, combined with the fact that we are a highly mobile society with fewer adult children, the issue of social isolation takes on a whole new meaning. Nicolson (2008) indicated that social isolation, which can have a negative impact on health, is a growing problem in the older adult population. Some of the factors that influence social isolation include lack of relationships, physical barriers, and prohibitive environments (Nicolson). To prevent community dwelling older adults from falling into a spiral of social isolation, Shank (2010) considers accessible transportation to be an important preventive factor. Shank also found that lack of transportation and social isolation are more evident in rural areas

where personal transportation costs are high and community destinations are less accessible.

### **Walkability**

In 2004, the State Advisory Council on Aging held discussions on livable communities for aging adults. According to an annual report, they concluded that the number one characteristic of the “elder friendly” livable community was walkability (Michigan Commission on Services to the Aging, 2005). This report indicated that the walkability of a community could be measured by how easy it is to get around on foot and is an important factor in determining livability. To support this conclusion, national data shows that walking is often a preferred option for getting around a community and is the second most important travel mode for older people (Rosenbloom, 2009). Studies completed by both Shergold et al. (2012) and Sungyop and Gudmundur (2004) also found that aging adults prefer walking as the mode of transportation when going shorter distances for recreation and personal trips.

The walkability of a community can impact a person’s quality of life in three main ways: 1) increased social interactions, 2) improved physical condition, and 3) improved mental health.

The social interaction that becomes possible when the number of people walking increases is a major factor for improving quality of life (AARP, 2001). Ryan (2003) found that walking improves community interaction because people are more likely to talk to neighbors and shop in local stores when walking through a community. According to Ryan (2003) appropriate pedestrian facilities enable increased interaction between community members that is otherwise limited through personal vehicle use. According

to the AARP, Blueprint for Action report (2001) these increased interactions strengthen relationships and create a healthy sense of identity and place. A study completed by the Oregon Research Institute (2008) concluded that a walkable community program is not only feasible, but is beneficial in promoting quality of life among senior residents at a community level. This study shows that walking on a regular basis can make a positive impact on quality of life.

According to a 2008 University of Georgia study, older adults can reduce their risk of disability by 41% by participating in a walking program (Science Daily, 2008). This study also found that losing the ability to walk independently leads to a poorer quality of life and that prolonged inabilities leads to higher rates of illness, death, depression, and social isolation. Studies have consistently shown that older adults can decrease their risk of disability and increase their likelihood of maintaining independence by regular walking. One such study, completed by Walsh, Pressman, Cauley, and Browner (2001) found that walking had many health benefits and was also the most common physical activity for older adults. Another study, completed by LaCroix, Leveille, Hecht, Grothaus, and Wagner (1996) found that a sustained program of walking reduced the risk of hospitalization and death in community dwelling older men and women. Spirduso and Cronin (2001) also concluded, with consistency, that long term physical activity was directly related to reduced disability and increased independent living in even the oldest old adults. Spirduso and Cronin's study indicated that individuals with chronic disease can increase their physical function by consistent participation in physical activities.

Walsh, Pressman, Cauley, and Browner (2001) concluded that walking for exercise was connected to other positive health behaviors as well. This included a finding of improved mood which in turn reduced symptoms of depression in older adults. In addition to a reduction in symptoms of depression, Weuve, Kang, and Manson (2004) found that physical exercise, including walking, was associated with significantly better cognitive function and led to less cognitive decline. Walking was the most common form of exercise and the most practical leisure activity for older adults, according to Weuve et al.

The literature reviewed consistently supports that the walkability of a community correlates with a higher quality of life in older adults. However, the environment needs to have certain characteristics that would attract older adults to use walking as a mode of transportation or a form of recreation. Americans would walk more if the physical infrastructure was more conducive to walking (AARP, 2001). Pollak (2000) identified that communities with low walkability scores often have obstacles in their walking environments. Both Pollak and Rosenbloom (2009) identified obstacles that present barriers to safe and pleasant pedestrian travel. These include:

- wide streets that are too difficult to cross;
- missing curb ramps;
- broken concrete;
- lack of sidewalks;
- discontinuous and disjointed routes;
- traffic conflicts;
- personal security;

- poor design;
- lack of maintenance;
- unsafe intersection crossing;
- crowded sidewalks;
- cyclists on the sidewalks;
- poor lighting; and
- lack of shaded rest areas.

### **Public Transportation**

According to Pollak (2000) quality public transportation is another essential factor in determining the livability of a community. Public transportation that supports aging adults may be an important issue for rural communities to consider in creating aging-friendly communities (Israel et al., 2012).

When an older adult lives in a rural community, and is no longer able to drive, several issues may arise according to Israel et al. (2012). These issues include limited access to health care, personal activities, and community events due to the distance between home and town centers. This in turn, may cause the individual to experience a decreased quality of life (Israel et al.). According to Israel et al., an older person's quality of life may decrease when they are no longer able to drive.

Brown (2009) found that public transportation can reduce social and economic inequalities by enhancing mobility for residents, many of whom are disabled and/or elderly, who lack access to cars. Brown suggested that public transportation can help bridge a gap between people and services due to the long distances between the two. According to the American Public Transportation Association (2012) public

transportation in the United States is a crucial part of the solution to the nation helping to bring a better quality of life by providing personal mobility and freedom. Public transportation has played an important role by offering elderly residents access to human services such as health care, educational opportunities, and shopping (Brown).

Public transportation is available in 60% of all rural communities nationwide (Brown, 2009). That leaves 40% of rural communities with no public transit (Valencia, 2004). According to Pollak (2000) when communities lack public transportation, nondrivers need to depend on others for all types of trips (Pollak). This was confirmed by Rosebloom (2009) who found that older people who did not drive were dependant on others, often other older people.

The issues associated with mobility options and public transportation vary among communities and neighborhoods (Pollak, 2000). There are several barriers to public transportation for aging adults. One factor is that most existing rural public transportation options do not promote an independent life style if used as the primary form of transportation (Israel et al., 2012) due to the lack of flexibility of the transport system. Other factors, identified by Kochera and Straight ( 2011) include:

- unavailability;
- physical form of community;
- scheduling;
- personal preference;
- usability;
- cost; and
- difficult accessibility.

Several studies have been completed on meeting the needs of older rural drivers who no longer drive. For example, Hanson and Hildebrand (2011) found when rural residents no longer drive, there is a disconnect between the requirements for mobility and the availability of alternatives. It was also noted that there is a need to consider different modes of transportation such as member-based rural shuttle service with volunteer and paid drivers that can fill in the gaps when family and friends are unable to meet transportation needs.

### **Drivability**

Drivability in rural communities is an important factor in accessing a community's livability for aging adults. There is little evidence that communities are prepared to meet the mobility challenges facing their aging members. Many believe that older drivers who face mobility issues or who no longer drive will be served by public transportation (Rosenbloom, 2009). However, in many rural areas this is not a solution. Rosenbloom felt the most promising focus was to keep older adults driving longer. Enabling older adults to remain mobile and engaged in their communities will require new ways of transportation planning and design (AARP, 2001).

For many older adults, driving an automobile is equated with personal independence. Older adults grew up with easy access to cars and many view driving, not as a privilege, but as a basic human right that, when taken away or reduced, has the potential to greatly impact one's quality of life (Miller, Harris, & Ferguson, 2007). The solution is not to restrict driving but to may be ensure the community promotes safe driving for their aging population (Miller et al.). The freedom of this independent mobility shapes quality of life. According to a study completed by Liddle, Gustafsson,

Bartlett, and McKenna (2011) driving cessation affects the health and well being of older adults. The study found that when compared to current drivers, retired drivers had significantly lower life satisfaction. Liddle et al. suggested that being able to drive in and around the community allowed older adults to remain in touch with social networking and remain engaged in community life long after retirement severs some social relationships. Retired drivers spent less time on social leisure and away from home, and more time in solitary leisure.

A person's definition of a quality of life may differ among individuals and within different stages of life (Spirduso & Cronin, 2001). Miller et al. (2007) concluded that individuals, both young and old, ties their identity and self-worth to the ability to drive and own a car. Far too often the loss of independence and access to social life and community resources that the car gives the older adult is taken for granted (Shank, 2010). The impact that loss of driving has on the quality of life of older adults is tremendous, especially in areas where access to public transportation alternatives do not exist or are inadequate. However, as they age, older drivers generally drive less and limit their trips due to difficulties with the driving environments (AARP, 2001). According to Pollak (2001) all drivers, but especially older adults, benefited from improvements made to community driving environments. Streets that are made safer for older drivers, such as well marked pedestrian crossings, will also create a safer environment for all drivers.

But, is there an age where driving should be prohibited or restricted? A study was completed on the pros and cons of age based licensing restrictions. According to Hanson and Hildebrand (2011) there are two common driving restrictions placed on older adults; time of day and road class. Hanson and Hildebrand found that rural drivers, age 54-92,

were driving less after dark and avoided major highway driving without having restrictions placed on their driving. It was suggested that a better approach to restrictive driving would be age-friendly upgrades to transportation infrastructures, such as uncongested intersections, to assist rural drivers to stay driving longer. Another approach to enhance rural older driver safety mentioned by Hanson and Hildebrand was to develop mobility alternatives to assist drivers to transition into being non-drivers if and when the situation arises. Statistics showed that the number of drivers 70 years and older increased by 111% from 1980 to 2000 (Pollak, 2000). The car was also a significant mode of transportation for those who do not drive. Non-drivers depend on others who do drive for rides, and most often these are other older adults (Rosenbloom, 2009). About 2/3 of non-drivers, age 75 and older, expect to get rides from friends or family members. Many who do get rides, however, dislike the sense of dependency that comes with getting a ride (Kochera & Straight, 2011). A study was completed by Pucher and Renne (2001) to compare travel behavior in rural and urban areas of the United States. Unsurprisingly to the authors, the car was the most used form of transportation and mobility levels in the rural areas were higher than that in the urban areas. This is related to the more dispersed residences and activity areas in rural communities.

Research showed that driving may become more difficult as a person ages which may be due in part to reaction time being slower, vision becoming less clear and inability to gauge distances (Pollak, 2000). The glare of headlights during night driving is a major factor in driving abilities for older adults (Pollak).

There are several barriers that may prevent older adults from driving in their community. According to Pollak (2000), and (AARP, 2001), these barriers may include:

- difficult to read signage and roadway design;
- unidentified pedestrian crossings;
- glare caused by dark pavement;
- poorly designed intersections that may be confusing;
- lack of community safety programs to enhance older driver's abilities;
- lack of education and refresher training for older drivers; and
- parking areas that are congested and unmarked.

“Livable Communities: An Evaluation Guide” (Pollack, 2000) was one of the assessment instruments reviewed and modified. The purpose of evaluation guide was to encourage people to take a new look at their communities and neighborhoods. This tool was developed to be used as a guide to identify areas the community could improve upon to promote livability for all ages. Areas that could be evaluated through use of this tool included: transportation, walkability, safety and security, shopping, housing, health services, recreation and cultural activities, and the concept of a caring community. Following the initial review of literature, mobility and transportation appeared to have the greatest impact on older adult's quality of life, and therefore was selected for further evaluation. The strength of this tool is that it provides easy directions for completion and allows for efficient calculation of the data. A weakness of this tool is the length and time commitment to complete each of the eight different areas. In addition, some of the areas being evaluated were more relevant to urban communities.

Partnerships for a Walkable America (2010) developed a walkability checklist tool which was used to determine if the community is a friendly place to walk. The tool was designed for parents and their children and consisted of a six point rating system.

There were several areas of evaluation in this assessment that were specific to families with children, and were therefore not included in this author's tool. These included evaluating the ease of following safety rules with children and the behaviors of drivers. One of the strengths of this tool was that it offered recommendations on what family members and their children could do immediately to correct a problem that was encountered during their assessment. The tool also offered long term solutions for consumers that would benefit the entire community. For example, if a driver did not yield to pedestrians, the immediate solution recommended to the pedestrian would be to pick another route for the time being and the long term solution might be petition for more enforcement. The weakness of this tool was the rating system. Participants were asked to rate their walking experience on a scale of 1-6 and then used the cumulative score to determine if the walk was pleasurable or not. This scoring method makes it difficult to analyze specific elements of the assessment.

Walk Friendly Communities (2010) created an assessment tool and provided detailed information in a document to assist agencies in improving walking conditions within communities. This assessment is comprehensive and compared data that was gathered in 1990 through 2000. This tool was designed to be completed through collaboration of government agencies, private sectors, and not-for-profit agencies. The portions of the assessment that were used by the author in this study included curb ramp and sidewalk construction and information on pedestrian-friendly block length standards.

### CHAPTER 3. METHODS AND ASSESSMENT DEVELOPMENT

This paper will focus on assessing mobility and transportation in small rural communities. To develop a plan for a survey and assessment, the author, using the literature review as the foundation, located assessments that could be modified to fit the purpose of this paper and developed an assessment specific to rural communities. A plan for conducting assessments and presenting the results was also developed. The survey and community assessment includes three factors that were identified by Pollack (2000), AARP (2001), and Rosenbloom (2009) as areas for a community to consider when evaluating transportation and mobility for their aging adults; the walkability of the community, the availability of public transportation, and the drivability in and around the community.

A survey form of research was selected as the best way to obtain the data needed since the author will seek to obtain the feelings and attitudes about what constituted quality of life. The surveys that will be used in this study (Appendix A and Appendix B) were developed after reviewing other surveys and literature about community livability and quality of life.

This assessment was developed for the community of Tomahawk, WI. In 2008, Tomahawk received a Wisconsin Department of Commerce's Community Development Block Grant to address a downtown revitalization project. The project included plans for future road improvements, including vehicular pedestrian infrastructures, which would meet the long term needs of the community. A community steering committee was formed. The steering committee has the authority to act as the ultimate decision maker in handling political, legal, organizational, cost and management of a project. The steering

committee completed several studies that were utilized from surveys that previously were conducted such as retail sales analysis, business retention and expansion surveys. These surveys were primarily business focused and lacked the input from the people residing in the community. Although not requested by the steering committee, this paper supplies the missing link to ensure that community members have a voice in ensuring their mobility needs are met.

Tomahawk is a rural community located in northern Wisconsin and had a population of 3,346 at the town and surrounding townships 2010 census. Tomahawk was founded in 1886 and incorporated in 1891. According to the Tomahawk Chamber of Commerce's website ([www.goTomahawk.com](http://www.goTomahawk.com)), Tomahawk is a vibrant small town community with the amenities of many cities. The city exhibits a certain degree of affluence in some areas as upper middle class people live on the numerous lakes, however, there is also a large population of residents who are not affluent making the per capita income relatively low. According to the United States Census Bureau (2002), the city has a total area of 8.8 square miles of which, 7.4 square miles of it is land and 1.4 square miles of it is water. The 2011 demographics of Tomahawk indicate the racial make up of the city is 98.4% White. The population is 52.9% female. The city population includes 20.5% who are 65 years of age or older. A total of 16.2% of all households had someone living alone who was 65 years of age or older. The median income for a household in the city is \$33,986. About 7.9% of the population is below the poverty line including 4.9% of those aged 65 or over (<http://tomahawk.wisconsin.com/demographics.html>).

The goals developed for this paper include the following:

1. Create an assessment plan to determine the current status and needs for transportation and mobility of older adults in this rural community.
2. Develop a sampling and data collection plan for conducting the assessment.
3. Develop a plan for how the data will be analyzed, presented and used.

## CHAPTER 4. RESULTS

### **Assessments**

The quality of life survey (Appendix A) and the community needs assessment survey (Appendix B) developed for this paper were based on a review of other surveys and literature about community livability and quality of life. Assessments reviewed included; The Walkability Checklist (Partnership for a Walkable America, 2010), the Walk Friendly Community Assessment Tool (2010), and AARPs Livable Communities: An Evaluation Guide (Pollak, 2000).

### **Quality of Life Survey**

Participants will be asked to respond to the phrases by ranking them in the order of what they consider to be most important for their own mobility and quality of life in the areas of walking, public transportation, and drivability. Number one (1) indicates the item that is most important and the number six (6) indicates the item that is least important for the six items in each area.

This portion of the survey covers areas that participants may consider more important than others. For example, when participants are walking, the areas to be considered are safety, resting areas, well defined cross walks, maintenance, walking path directions, and handicap accessibility. Ranking these areas in order of importance may vary according to each participant's views and physical condition. A second area that may also differ according to each participant is that of public transportation. Included in this section are bus routes, dial-a-ride options, taxis, medical transportation services, volunteer programs, and social transportation services. For some participants, it may not be important to have a dial a ride option or taxi service, but for others who are dependent

upon such services, this area will rank high on the public transportation section of this survey. The driveability section pertains to participants who drive. Differing areas of importance may include street sign visibility, left turn lanes, adequate parking, and safety. For some participants, safety may be the number one concern, while for others parking may be most important. In addition, participants will be asked to indicate their preferred mode of travel within the community, as walking, driving, public transportation, or riding with others.

Appendix A was developed by modifying the six point rating system identified in the assessment created by the Partner's for a Walkable America (2010). Rather than use a cumulative score to determine outcome, the six point scale was revised to measure individual preferences rather than environment characteristics. Appendix A also includes portions of the evaluation guide developed by Pollak (2000) but was modified to gather data on quality of life preferences rather than limiting the responses to environmental characteristics. For example, Pollak's assessment asked participants if there were shaded rest areas along walking paths. Appendix A, however, asked participants on a scale of 1-6 if having shaded rest areas along walking paths was important to them.

### **Demographics**

Participants will be asked to identify the name of their community, their age range and gender. This data will be gathered and presented in a table for further analysis and prioritizing improvements. For example if the survey results indicate that the under 60 age range identifies that it is important to them to have a dial a ride service within the community, and yet the over all community population is primarily over the age 60, the

dial a ride program may not be a high priority for the community to consider. Participants will also be asked to if they drive and how far they are able to walk.

### **Driving and Walking Assessment**

In this second part of the survey, participants will be asked to complete a community assessment by driving and walking throughout the area. This assessment tool was developed using criteria from other previously created tools which included: The Walkability Checklist (Partnership for a Walkable America, 2010), the Walk Friendly Community Assessment Tool (2010), and AARPs Livable Communities: An Evaluation Guide (Pollak, 2000). Appendix B was created using portions of both Pollack's assessment, and the Partner's for a Walkable America assessment. Concepts that pertained to rural areas were included in Appendix B and those concepts pertaining to urban areas were omitted. This includes areas such as mass transit, double lane highways, and pedestrian push button-cross walks.

Participants will be given instructions to complete the assessment during a walking and driving tour of the community. Participants that are unable to drive or walk should indicate this on the survey and leave the applicable sections unanswered. Participants will be asked to place a check mark next to the item if it is present in the community and to leave the item blank if it is missing or not present in the community. This portion of the survey consists of three sections. Section A is to be completed during the walking tour of the community. Participants will be looking for characteristics related to sidewalks, crosswalks, and resting areas. For example, are the crosswalks well marked and are sidewalks maintained. Section B is to be completed during either a walking or driving tour of the community and relates to public transportation. In this

section, participants will be evaluating bus services, dial-a-ride programs, taxi services, and other specialized services such as volunteer programs, medical transports, and religious based services that are offered in the community. Section C is to be completed by participants who drive. A driving tour of the community will focus on street sign visibility, street lighting, medians, left turn lanes, parking lots, traffic lights, traffic circles, and safety. For example, participants will be asked if they feel street lane markings are clear and if traffic lights are easy to see.

### **Sample**

The group surveyed will consist of random community members identified as being age 55 and older. A computerized printout of all persons residing within the city limits of the community will be requested from the City Clerk. The listing will include the name, address and age of the individual. Persons under the age of 55 will be eliminated from the selection process. From the remaining list of names, a sample will be selected by choosing every fifth name on the list for a total of 100 community members. The survey will be sent through the U.S. Postal Service with a cover letter (Appendix C). A self-addressed envelope with the author's name and address will be included with the letter.

### **Data Collection**

Participants will be given one month to complete the survey and community assessment. To enhance the return rate, a reminder letter (Appendix D) will be sent to all participants two weeks after the initial survey. Following the one-month time frame, the author will compile the data received. The data received from Appendix A will be presented to the steering committee, survey participants, and other interested community members, in 6 different charts and tables. The data received from Appendix B will be

presented in 3 different tables that will outline the community's strengths and weaknesses.

### Data Analysis- Quality of Life

The following tables will be completed using the tabulated data from the quality of life and preferred mode of travel surveys (Appendix A). Sample tables were prepared to demonstrate how the data could be presented. Figure 1 represents the female participants and their age ranges and Figure 2 represents the male participants and ages.

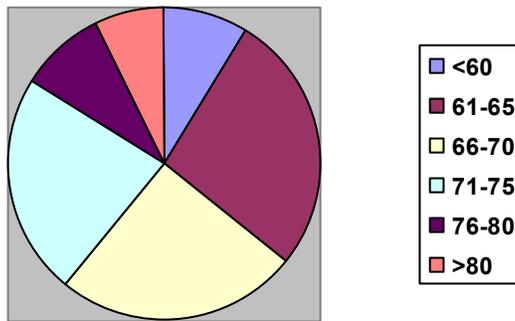


Figure 1. Age ranges of female participants.

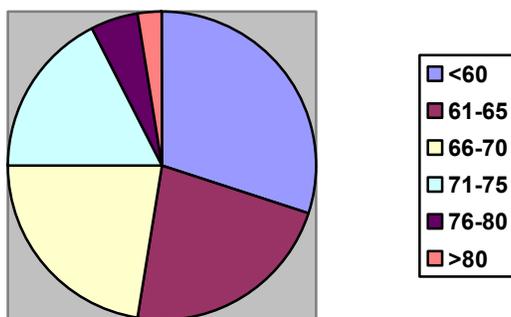


Figure 2. Age ranges of male participants.

Figure 3 represents the preferred mode of travel, within the community, according to age ranges. The number on the left edge of the table represents the number of participants.

This table will be used to correlate age and mobility preference when determining community livability for an aging population. An example of possible compiled data is shown in this table. The results indicate that: <60 years of age participants either walk or drive, ages 61-65 participants walk and use public transportation but mainly drive or ride with others, ages 66-70 walk, use public transportation, drive and ride, ages 71-75 mainly walk, use public transportation or ride with others, ages 76-80 walk, use public transportation or ride with others; and over 80 years of age use public transportation or will ride with others. Figure 4 represents the results of the quality of life characteristics of a community as it relates to walkability. Adding the total number of points given to a certain characteristic will tabulate this data. For example, if 50 of the participants ranked

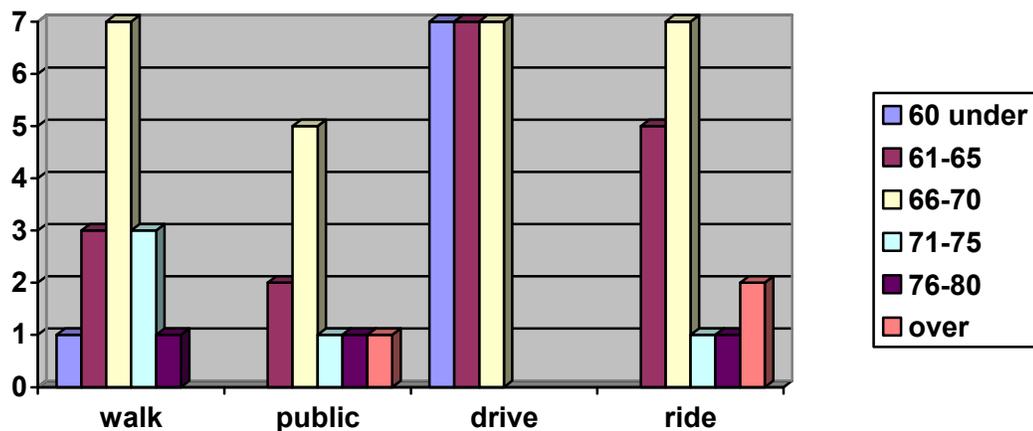


Figure 3. Participants preferred mode of travel.

feeling safe while walking as a 6, and 50 others ranked it a 5, the total score for that characteristic would be 550 out of a possible 600. After data from each of the characteristics is calculated, the total score will be placed in this figure. Using the same design, Figure 5 represents the total scores for public transportation characteristics and Figure 6 represents scores for community drivability. These figures will be used to show

that the definition of a quality of life for aging community members may not be the same as county board members or those in decision making positions. This data will be used to prioritize community livability improvement strategies.

_____	It is important for me to feel safe while walking.
_____	It is important that community sidewalks are well maintained.
_____	It is important that pedestrian crossing areas are well identified.
_____	It is important that there are resting areas along sidewalks.
_____	It is important that there are directions/maps for those who walk.
_____	It is important that the sidewalks and curbs are handicap accessible.

Figure 4. Participants total scores for walkability quality of life.

_____	It is important that a taxi service is available.
_____	It is important that medical centers offer transportation services.
_____	It is important that the community has a volunteer driver program.
_____	It is important that the community has transportation social activities.
_____	It is important that the community have regularly scheduled bus routes.
_____	It is important that the community has a dial-a-ride option.
_____	It is important that the community the senior center has a ride program

Figure 5. Participants total scores for public transportation quality of life.

## Data Analysis- Driving and Walking Assessment

The following figures will be completed using the tabulated data from the community needs assessment (Appendix B). The results of this survey will be presented

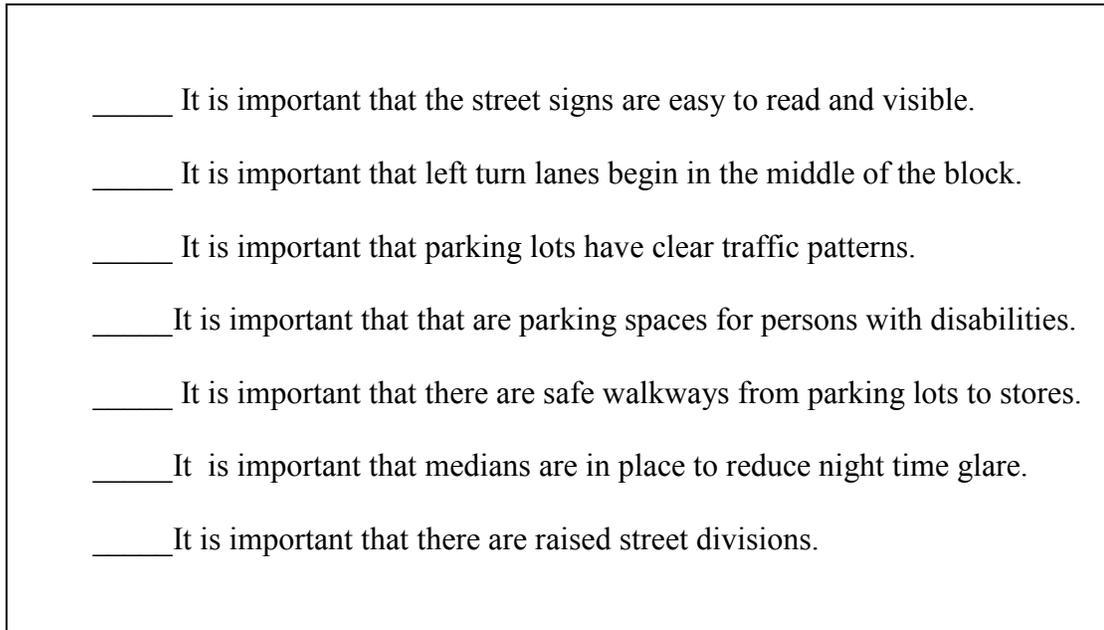


Figure 6. Participants total scores for drivability quality of life.

as strengths and weaknesses and are based on the majority of the responses received from the participants. The number of participants that contributed to the majority will be identified to the left of each item.

Figure 7 represents an example of how this data could be presented on the strengths and weaknesses of community walkability. Figure 8 represents the strengths and weaknesses of community public transportation, and Figure 9 represents the strengths and weaknesses of community drivability. Items that were not identified by the majority of the participants could be included depending on the needs and requests of the focus groups.

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
90-Sidewalks are present in the area	85-Sidewalks are not clear of debris
87-The curb cuts are visible	85-Sidewalks are overgrown
69-Path directions are available	80-Sidewalks are not accessible

Figure 7. Strengths and weaknesses of walkability.

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
88-There is a Dial-a-Ride program	90-There is no public bus system
88-The Dial-A-Ride fee is nominal	90-There is no taxi service
75-The senior center offers rides	

Figure 8. Strengths and weaknesses of public transportation.

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
69-Street signs are readable	70-There are no medians installed
70-The streets are well lit	70-Roundabouts are difficult
68-Street lanes are well marked	70-There are no speed bumps
70-Parking lots are roomy	59-There is no disability parking

Figure 9. Strengths and weaknesses of drivability.

The strengths and weaknesses from the Appendix B survey will then be compared to the results of the quality of life (Appendix A) survey. A written document will be

prepared that will include recommendations based on this comparison. For example, if the community needs survey determines that there is no medical transportation available to local clinics, but the quality of life survey indicates that this is not a concern for participants, no recommendation will be made to consider a medical transport. In another rural community, however, the quality of life survey may indicate that a medical transport is important to the participants. In that case, a recommendation in support of a medical transport service could be made. In another example, the community needs survey could find that there are missing sidewalks throughout the community, and the quality of life survey finds that this element is a priority for participants; a recommendation for sidewalk installation could be made. However, in another community, there may be no sidewalks, but the quality of life survey determined that this is not a concern for the participants; therefore no sidewalk installation may be necessary.

### **Presentation**

The completed study will be presented by Power Point and in person to the steering committee. The steering committee will be asked to give consideration on improvements to mobility options for aging adults in and around the community. Included in the presentation will be the survey responses, community assessments, and the statistical analyses. The presentation will also include recommendations based on the data from Appendix A and Appendix B. With the approval of the steering committee, a community informational session will be held to obtain input on community improvements with the hopes of generating interest in creating a more livable and mobile environment. Public service announcements will be sent to the local radio stations (Appendix E) and flyers distributed (Appendix F). Focus groups will then be formed to

concentrate on the areas of walkability, drivability, and public transportation. Survey participants who have expressed an interest in being involved in future work groups will be contacted. Following discussion and planning phases, final recommendations will be presented to the steering committee.

### **Usage**

It is hoped that the surveys and assessments generated will be useful tools to rural communities that are interested in improving the livability of their environment as it relates to mobility. Results of this study will be shared on the local level with community members including the focus groups, the area Chamber of Commerce, senior centers, local county officials and senior program representatives. Results will also be shared with others outside the case study area including, Commission on Aging, Area Administration, Coalition for Wisconsin Aging Groups (CWAG), Department of Transportation and other aging advocacy groups. Results will be shared with other interested stakeholders who will be identified during the data collection, such as local medical centers, clinics, churches, shopping centers, taxi services, public transportation officials, law enforcement, schools, local fitness programs, and neighborhood watch programs. The results will also be shared with not-for-profit service organizations, such as the Lion's Club, Civic Club, and Jaycees. These groups may be interested in donating resources for community improvements.

## CHAPTER 5. DISCUSSION

The livability of a community is directly impacted by the transportation options available (Pollak, 2000). As a community ages, transportation becomes increasingly a concern both for the individual and for the community itself (Shergold et al., 2012). Mobility enhances community involvement for the aging individual and this involvement helps the community grow and prosper (Shergold et al.). The overall results of this study will have some important implications for all community stakeholders. Because of the uniqueness of each community and the people living there, communities wanting to make livability improvements cannot rely solely on literature.

The goal of this paper was to develop a research plan to look at what characteristics of a community are important for its aging members. The first part of the survey (Appendix A) will have participants identify characteristics of the community that are most important for personal quality of life. The purpose of this survey is to inform the community of mobility needs and views of older adults so that adaptations can be made to better meet those needs. The second part of the survey (Appendix B) asks participants to complete an assessment of the community as it relates to mobility options. The purpose of this survey is to identify areas that are in need of improvement and then to prioritize these areas based on the results of the quality of life survey. For example, if the community assessment identifies that there is no regular taxi services offered in the community, but participants identified that a taxi service is not something they would use, the taxi service as a mobility option would become a low priority for this community. However, if participants identify that a taxi service is important to them and would increase their quality of life, a taxi service would then become a higher priority for

the community. This study will suggest what mobility options and improvements the community should focus on. Since communities need to rely on local information to accurately identify the mobility needs of their members, it is important to conduct surveys such as this to ensure stakeholder preferences are considered.

The barrier to this case study is moving it from the planning stage to the action stage. Many smaller communities do not have the financial resources to make major renovations or improvements. This challenge is the reason for the focus groups that will be formed. The groups will prioritize recommendations based on the results of the surveys. The groups will also conduct brainstorming sessions related to funding the recommendations. For example, the study may find that it is important for participants to have shaded and rest areas along walking paths. Focus groups can be creative with this community livability improvement by conducting fundraising events, creating bench memorials, designing a wood working school project, or meeting with the local Boy Scouts for a badge development project. Local green houses and tree farms may also be interested in assisting with the shade trees as a form of advertising. Larger, more expensive projects, like curb redesign or traffic signal alterations may require the focus groups to apply for grant monies.

The strengths of the study include the validity of the survey. The survey is measuring what it is intended to measure and that is the needs and preferences of the survey sample as well as the community mobility environment. The questions included in the assessment were supported in the literature review. The random sampling procedure is also strength of this survey. Randomization allows all persons over the age of 55 to be selected to participate in the survey. An additional strength to this

questionnaire survey design is that it is cost effective. The researcher will not have travel expenses and costly telephone interviews.

There are some limitations and weaknesses to this study. The researcher would need to conduct more specific assessments based on the community needs assessments. Another limitation is low return rates associated with questionnaire type surveys. Not everyone will return the survey so the accuracy may be challenged. The people who do not return the survey may be different than those who do. In addition, those people who do complete the survey may have differing reading and writing skills so their interpretations of the questions may also be different. The author is also assuming that the community will want to improve mobility options for the aging population. A pre-feasibility assessment may need to be conducted. The steering committee would be consulted to determine feasibility and asked for input on the questions being asked.

Sheridan et al. ( 2012) clearly identifies that community sustainability is related to competing for the aging population, but not all communities may realize the necessity of conforming to aging adult's needs and wants. A weakness to this survey form of research is the variability in each participant's views and the reliance on self-report data. One participant may view the sidewalks as being maintained because they are free of litter, while another participant may view the sidewalks as not maintained due to cracks in the cement. The validity of this survey may become an issue if the participants are merely indicating what they think the community wants to hear. Interviewing a small subgroup and comparing the responses based on the two methods could check validity. An impact evaluation could be conducted within five years following the development of the focus groups. Data could be collected through observational tours and satisfaction

surveys. The aging population growth could also be measured to determine if there was a correlation in older residents moving into the community and the improvements that were made. The natural growth of the older population would need to be considered if using this correlation. Specific mobility changes and the cost associated with these changes could be tracked for future use. Future evaluations could also focus on the impact that improved walking environments has on the physical and emotional health of aging adults in a rural community.

There have been many studies conducted on the importance of mobility as it relates to quality of life for aging adults. Studies by Shergold et al., (2011) and Kochera and Straight (2005), all concluded that mobility, or the lack of, affects a person's well being and quality of life. This project will develop a model that can be used to explore these issues. It may also identify unique quality of life preferences for aging adults living in rural areas that need to be taken into consideration when communities want to become more "livable".

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typology of rural areas.

## APPENDIX A. QUALITY OF LIFE SURVEY

The following phrases relate to walkability in and around the community. Rank the phrases in order of importance to you. (1) is most important and (6) is the least important. Do not complete this section if you are unable to walk independently.

### Walkability

- \_\_\_\_\_ It is important for me to feel safe while walking.
- \_\_\_\_\_ It is important that community sidewalks are well maintained.
- \_\_\_\_\_ It is important that pedestrian crossing areas are well identified.
- \_\_\_\_\_ It is important that there are resting areas along sidewalks.
- \_\_\_\_\_ It is important that there are directions/maps for those who walk
- \_\_\_\_\_ It is important that the sidewalks and curbs are handicap accessible.

The following phrases relate to Public Transportation in and around the community. Rank the phrases in order of importance to you. (1) is most important and (6) is the least important.

### Public Transportation

- \_\_\_\_\_ It is important that the community have regularly scheduled bus routes.
- \_\_\_\_\_ It is important the community has a dial-a-ride option.
- \_\_\_\_\_ It is important that a taxi service is available.
- \_\_\_\_\_ It is important that medical centers offer transportation services.
- \_\_\_\_\_ It is important that the community has a volunteer driver program.
- \_\_\_\_\_ It is important that the community has transportation to social programs

The following phrases relate to Drivability in and around the community. Rank the phrases in order of the importance to you. (1) is most important and (6) is the least

important. Do not complete this section if you are unable to drive.

### Drivability

- It is important that the street signs are easy to read and visible.
- It is important that left turn lanes begin in the middle of the block.
- It is important that parking lots have clear traffic patterns.
- It is important that that are parking spaces for persons with disabilities.
- It is important that there are safe walkways from parking lots to stores.
- It is important that medians are in place to reduce night time glare.

### Demographics

Tell us a little about yourself.

What is the name of your community?

\_\_\_\_\_

Indicate which is your preferred mode of travel within the community:

- Walk
- Public Transportation
- Drive
- Ride with others

Do you currently drive?

- Yes
- No

Approximately how far are you able to walk?

- Less than 1/2 mile
- 1/2 mile

\_\_\_\_\_ 1 mile

\_\_\_\_\_ 1-2 miles

\_\_\_\_\_ 2 miles or more

What is your gender?

\_\_\_\_\_ Male \_\_\_\_\_ Female

What is your age range?

\_\_\_\_\_ under 60 \_\_\_\_\_ 61-65 \_\_\_\_\_ 66-70 \_\_\_\_\_ 71-75 \_\_\_\_\_ 76-80 \_\_\_\_\_ over

## APPENDIX B. COMMUNITY ASSESSMENT

Section A. Community Walkability. Complete this section during a walking tour of the community. If you feel the item is present in the community, place a check mark next to the item. If you feel that the item is not present in the community, leave the space blank.

- \_\_\_\_\_ There are sidewalks throughout the community.
- \_\_\_\_\_ The sidewalks are well maintained.
- \_\_\_\_\_ The curb cuts are visible and curbs are accessible.
- \_\_\_\_\_ Sidewalks are clear from bushes and overhanging trees.
- \_\_\_\_\_ There is an ordinance for snow removal from winter sidewalks.
- \_\_\_\_\_ The community has a program to assist older adults with snow removal.
- \_\_\_\_\_ Sidewalks are wide enough for two people to walk together.
- \_\_\_\_\_ Sidewalks are clear of skateboarders, roller skaters, and bicyclists.
- \_\_\_\_\_ The sidewalks are free of animal waste and unleashed pets.
- \_\_\_\_\_ There are traffic signals at pedestrian crossings.
- \_\_\_\_\_ Traffic signals provide adequate time for crossing.
- \_\_\_\_\_ There are push buttons on traffic signals to stop busy traffic.
- \_\_\_\_\_ Long streets with no intersections have mid-block crosswalks.
- \_\_\_\_\_ Crosswalks are well marked.
- \_\_\_\_\_ Curb cuts are textured.
- \_\_\_\_\_ Sidewalks have shaded areas.
- \_\_\_\_\_ There are resting areas along sidewalks.
- \_\_\_\_\_ The resting places are shaded.
- \_\_\_\_\_ Community signage provides clear directions for pedestrians.

Additional Comments \_\_\_\_\_

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Section B. Public Transportation. Complete this section during either a walking or driving tour of the community. If you feel that the item is present in the community, place a check mark next to the item. If you feel that the item is not present in the community, leave the space blank. Please indicate: I completed this section while \_\_\_\_\_ driving or \_\_\_\_\_ walking.

**#1 PUBLIC BUS SYSTEM**

\_\_\_\_\_ There is a regularly scheduled bus or other public transportation service that picks up passengers at designated pick up points. (If there is no public transportation, go to #2).

\_\_\_\_\_ These pick up points are located within a 10 minute walk of older resident housing units.

\_\_\_\_\_ The sidewalks that serve these pick up points are properly maintained.

\_\_\_\_\_ The street crossings leading to the pick up points are safe.

\_\_\_\_\_ The transportation system provides service to hospitals and clinics.

\_\_\_\_\_ The transportation system provides service to shopping and other interests to older persons.

\_\_\_\_\_ The transportation system accommodates wheelchairs.

\_\_\_\_\_ The transportation system operates 7 days a week.

\_\_\_\_\_ The schedule for the public transportation system is readily available and easy to read.

\_\_\_\_\_ There is a phone contact for public transportation information.

\_\_\_\_\_ Information is available for those adults with hearing or visual impairments.

\_\_\_\_\_ The transportation fee is reasonable and a reduced fee is available for older adults.

\_\_\_\_\_ The pick up points are well marked.

\_\_\_\_\_ The pick up points offer shade, seating, and shelter.

\_\_\_\_\_ The pick up points are well lit in the evening.

\_\_\_\_\_ The transportation vehicle is handicap accessible.

## **#2 DIAL A RIDE**

\_\_\_\_\_ There is a Dial a Ride service in the community. (If there is no Dial a Ride program, go to #3)

\_\_\_\_\_ The service areas covered by this service is accommodating.

\_\_\_\_\_ The Dial a Ride offers door to door service.

\_\_\_\_\_ The service is easy to contact without advance notice.

\_\_\_\_\_ The service is dependable.

\_\_\_\_\_ The fee is reasonable.

## **#3 TAXI**

\_\_\_\_\_ There is a taxi service in the community. (If there is no taxi service, go to #4)

\_\_\_\_\_ The taxi serves the entire community.

\_\_\_\_\_ The cost of the taxi service is reasonable.

\_\_\_\_\_ The taxi services provide out of town travel.

\_\_\_\_\_ The taxi service provides 7 day per week transportation.

#### #4 SPECIALIZED SERVICES

- \_\_\_\_\_ The senior center has transportation services.
- \_\_\_\_\_ The local hospitals and clinics offer transportation services.
- \_\_\_\_\_ Church groups offer transportation services.
- \_\_\_\_\_ There are other specialized services available in the community.
- \_\_\_\_\_ There are volunteer transportation services available.
- \_\_\_\_\_ These specialized services are well advertised.

Section C. Community Drivability. Complete this section during a driving tour of the community. If you feel that the item is present in the community, place a check mark next to the item. If you feel that the item is not present in the community, leave the space blank.

- \_\_\_\_\_ Street signs are large enough to see at a distance.
- \_\_\_\_\_ Street signs are readable at night.
- \_\_\_\_\_ The streets are well lit.
- \_\_\_\_\_ Streets have dedicated left hand turn lanes.
- \_\_\_\_\_ The left hand turn lanes begin in the middle of the block.
- \_\_\_\_\_ Medians are installed in heavy use streets.
- \_\_\_\_\_ Street lane markings are clear.
- \_\_\_\_\_ The lane markings are reinforced with reflectors.
- \_\_\_\_\_ Parking lots have clear travel patterns.
- \_\_\_\_\_ Parking lots are easy to use- parking spaces are roomy.
- \_\_\_\_\_ There are disability parking spaces.
- \_\_\_\_\_ The walkways from parking lots to stores are well maintained and safe.
- \_\_\_\_\_ The streets are well maintained.

\_\_\_\_\_ Traffic lights are easy to see.

\_\_\_\_\_ Traffic circles (round-a-bouts) are easy to maneuver.

\_\_\_\_\_ Speed control bumps are installed on city streets.

Additional Comments \_\_\_\_\_

\_\_\_\_\_

## APPENDIX C. INTRODUCTORY LETTER

North Dakota State University  
Department of Family Studies  
1340 Administration Avenue  
PO Box 6050  
Fargo, ND 58108-6050  
701-231-1234

### Community Mobility for Rural Older Adults

Dear Community Member:

My name is Joanne Powell. I am a graduate student in gerontology at the North Dakota State University. I am conducting a research project to explore factors that influence community mobility for rural aging adults. It is our hope, that with this research, we will be able to make improvements to community mobility and therefore enhance the quality of life for aging adults living in rural areas.

You were randomly selected to participate in this project. Your participation is entirely your choice, and you may change your mind or quit participating at any time, with no penalty to you.

It is not possible to identify all potential risks in research procedures, but the researcher has taken reasonable safeguards to minimize any known risks. These known risks may include the loss of confidentiality.

By taking part in this research, you may benefit by improvements made to mobility options in the community. However, you may not get any benefit from being in this study. Benefits to others are likely to include improvements made to the community and increased transportation options.

It should take about 2 hours to complete the two part survey. Please return the survey in the self addressed stamped envelope within 2 weeks.

This study is anonymous. This means that no one, not even members of the research team, will know that the information you give comes from you.

If you have any questions about this project, please call me at 123-444-5657, or call my advisor, Dr. Greg Sanders, North Dakota State University, at 234-453-8228.

You have rights as a research participant. If you have questions about your rights or complaints about this research, you may talk to the researcher or contact NDSU Human Research Protection Program at 701-231-8908, [ndsuirb@ndsuh.edu](mailto:ndsuirb@ndsuh.edu), or mail at NDSU HRPP Office, NDSU Dept. 4000, PO Box 6050, Fargo, ND 58108-6050.

Thank you for taking part in this research. If you wish to receive a copy of the results, please give instructions for how to let you know.

## APPENDIX D. REMINDER LETTER

North Dakota State University  
Department of Family Studies  
1340 Administration Avenue  
PO Box 6050  
Fargo, ND 58108-6050  
701-231-1234

### Community Mobility for Rural Older Adults- Reminder Letter

Dear Community Member:

My name is Joanne Powell. I am a graduate student in gerontology at the North Dakota State University. I am conducting a research project to explore factors that influence community mobility for rural aging adults. It is our hope, that with this research, we will be able to make improvements to community mobility and therefore enhance the quality of life for aging adults living in rural areas.

You were randomly selected to participate in this project. Two weeks ago you were mailed a community needs assessment and asked to complete it and return to me. If you have not already returned the assessment, please do so within the next two weeks. Your participation is important to the results of this project.

By taking part in this research, you may benefit by improvements made to mobility options in the community. However, you may not get any benefit from being in this study. Benefits to others are likely to include improvements made to the community and increased transportation options.

It should take about 2 hours to complete the two part survey. Please return the survey in the self addressed stamped envelope within 2 weeks.

If you have any questions about this project, please call me at 123-444-5657, or call my advisor, Dr. Greg Sanders, North Dakota State University, at 234-453-8228.

You have rights as a research participant. If you have questions about your rights or complaints about this research, you may talk to the researcher or contact NDSU Human Research Protection Program at 701-231-8908, [ndsuirb@ndsu.edu](mailto:ndsuirb@ndsu.edu), or mail at NDSU HRPP Office, NDSU Dept. 4000, PO Box 6050, Fargo, ND 58108-6050.

Thank you for taking part in this research. If you wish to receive a copy of the results, please give instructions for how to let you know.

## APPENDIX E. PUBLIC SERVICE RADIO ANNOUNCEMENT

Are you looking for a way to get involved in the community? Are you concerned about the livability of the community as you get older? Mobility options for the community will be explored in an informational meeting to be held on July 16, 2012 at 6:30 PM in the public library. A presentation will be provided by Joanne Powell, a graduate student who recently completed a community mobility assessment in Tomahawk. Come join the aging community as we prepare our community for the future!

# COMMUNITY LIVEABILITY

WHO: ALL COMMUNITY MEMBERS

WHAT: INFORMATIONAL SESSION ON  
COMMUNITY LIVEABILITY

WHEN: JULY 16, 2012- 6:30 PM

WHERE: PUBLIC LIBRARY

