# Addressing Elderly Mobility Issues in Wisconsin

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Final Report No. 0092-10-19 CFIRE 04-05 September 2011



Wisconsin Department of Transportation Research & Library Unit



National Center for Freight & Infrastructure Research & Education Wisconsin Transportation Center University of Wisconsin, Madison



# **Technical Report Documentation**

1. Report No. CFIRE 0405	3. Recipient's Catalog No. CFDA 20.701		
4. Title and Subtitle	5. Report Date September 2011		
WisDOT Policy Research Program: Addressing Wisconsin	6. Performing Organization Code		
7. Author/s Jason Bittner, Patrick Fuchs, Tim Baird, Adam s	8. Performing Organization Report No. CFIRE 04-05		
9. Performing Organization Name and Address	10. Work Unit No. (TRAIS)		
National Center for Freight and Infrastructure R University of Wisconsin-Madison 1415 Engineering Drive, 2205 EH Madison, WI 53706	11. Contract or Grant No. T002688		
12. Sponsoring Organization Name and Addres Wisconsin Department of Transportation	13. Type of Report and Period Covered Final Report [7/10/10-9/6/11]		
4802 Sheboygan Avenue Madison, WI 53707		14. Sponsoring Agency Code 0092-10-19	

#### 15. Supplementary Notes

Project completed by CFIRE as part of the Wisconsin DOT Policy Research Program. This report also represents a portion of the matching obligation against DTRT06-G-0020.

#### 16. Abstract

The aging of baby boomers poses significant challenges to Wisconsin's existing transportation infrastructure and specialized transit programs. From 2010 to 2035, the number of elderly Wisconsinites is projected to grow by 90 percent, an increase of 702,760 persons. By 2035, residents age 65 and over will comprise nearly a quarter of the population of Wisconsin, as every county in the state will experience growth in the elderly share of their population over the next 25 years. The U.S. Department of Transportation's 2003 National Household Travel Survey found that personally-owned vehicles account for over 90 percent of trips taken by elderly residents; the extrapolation of this data suggests an overwhelming majority of Wisconsin's future elderly residents will be accustomed to driving. Because elderly persons are vulnerable to a decline in visual, cognitive, and psychomotor skills, a dramatic increase in the number of elderly drivers has serious safety implications for the state. Elderly drivers are more likely to have crashes on a per-mile basis, more likely to be at fault in a multicar crash, and more likely to be killed or injured than are younger people in a crash of comparable magnitude. When elderly drivers are forced to stop driving or self-regulate in response to declining abilities and safety concerns, they face increased isolation from social, family, and civic activities and decreased access to medical services. These safety and social ramifications demand an examination of the state's current driver licensing and education practices, infrastructure design protocols, and specialized and public transit efforts.

This report provides analysis of Wisconsin's existing services, coordinated by the DOT and other State agencies, collects information from elderly residents, and reviews national and international best practices to allow the Wisconsin Department of Transportation (WisDOT) to better manage approaching demographic challenges. Recommendations are provided that include changes in internal structure to address older residents' mobility concerns, education and outreach opportunities, and development of incentives to provide off prime hour services.

17. Key Words WisDOT, Wisconsin, DMV, transportation,	18. Distribution Statement No restrictions. This report is available through the Transportation Research Information Services of the National Transportation Library.			
aging, mobility, elderly, older drivers, senior citizens, transit				
19. Security Classification (of this report) Unclassified	20. Security Classification (of this page) Unclassified	21. No. of Pages 163	22. Price - <b>0</b> -	

Form DOT F 1700.7 (8-72) Reproduction of form and completed page is authorized.

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# Introduction

The aging of baby boomers poses significant challenges to Wisconsin's existing transportation infrastructure and specialized transit programs. From 2010 to 2035, the number of elderly Wisconsinites is projected to grow by 90 percent, an increase of 702,760 persons.<sup>1</sup> By 2035, residents age 65 and over will comprise nearly a quarter of the population of Wisconsin, as every county in the state will experience growth in the elderly share of their population over the next 25 years. The U.S. Department of Transportation's *2003 National Household Travel Survey* found that personally-owned vehicles account for over 90 percent of trips taken by elderly residents; the extrapolation of this data suggests an overwhelming majority of Wisconsin's future elderly residents will be accustomed to driving.<sup>2</sup>

Because elderly persons are vulnerable to a decline in visual, cognitive, and psychomotor skills, a dramatic increase in the number of elderly drivers has serious safety implications for the state. Elderly drivers are more likely to have crashes on a per-mile basis, more likely to be at fault in a multicar crash, and more likely to be killed or injured than are younger people in a crash of comparable magnitude.<sup>3</sup> When elderly drivers are forced to stop driving or self-regulate in response to declining abilities and safety concerns, they face increased isolation from social, family, and civic activities and decreased access to medical services.<sup>4</sup> These safety and social ramifications demand an examination of the state's current driver licensing and education practices, infrastructure design protocols, and specialized and public transit efforts. The analysis of Wisconsin's existing services, collection of input from elderly residents, and review of national and international best practices will allow the Wisconsin Department of Transportation (WisDOT) to better manage these approaching demographic challenges

This research study is divided into five distinct tasks. For the first task, Current Practices, the research team reviews Wisconsin state and local government elderly driving and transit programs and initiatives. We describe common themes garnered from interviews with state- and local-level managers of the most expansive programs for elderly mobility. For the second task, Demographic Analysis, the research team examines state- and county-level projections to ascertain future population shifts, both in terms of absolute elderly population growth and elderly population share growth. For the third task, Elderly Input, the research team presents information received from a large-scale survey documenting elderly Wisconsinites' transportation habits, needs, preferences, and satisfaction levels. We obtained 4,099 responses from a geographically and demographically diverse subset of the state elderly population. In addition, we hosted 16 separate focus groups of seniors and service providers around the state, with a particular emphasis on visiting rural areas. We visited two gatherings of tribal nations for

<sup>&</sup>lt;sup>1</sup> Ofstead, C. (2010, March). Demographics of Aging in Wisconsin. Retrieved March 28, 2010, from Wisconsin Department of Health Services, Division of Long Term Care, Bureau of Aging and Disability Resources: http://dhs.wi.gov/aging/demographics/index.htm

<sup>&</sup>lt;sup>2</sup> About 60 to 80 percent of POV trips (depending on age) consist of elderly persons as drivers, and the rest are as passengers. U.S. Department of Transportation. (2003, November). Safe Mobility for a Maturing Society: Challenges and Opportunities. Retrieved March 28, 2010, from Office of the Assistant Secretary for Transportation Policy: http://ostpxweb.dot.gov/policy/data/safemobility.pdf

<sup>&</sup>lt;sup>3</sup> Rosenbloom, S. (2003, July). The Mobility Needs of Older Americans: Implications for Transportation Reauthorization. Retrieved March 27, 2010, from The Brookings Institution, Center on Urban and Metropolitan Policy:

http://www.brookings.edu/~/media/Files/rc/reports/2003/07transportation\_rosenbloom/20030807\_Rosen\_bloom.pdf

<sup>&</sup>lt;sup>4</sup> Bailey, L. (2004, April). Aging Americans: Stranded without Options. Retrieved March 27, 2010, from Surface Transportation Policy Project: http://www.transact.org/library/reports\_html/seniors/aging.pdf

even broader qualitative data coverage. We present our findings from these focus groups and discuss common themes.

For the fourth task, Best Practices, the research team provides an overview of the most innovative and effective licensing, education, roadway design, equipment, and alternative transit initiatives nationally and internationally. We examine exemplary elderly mobility plans from other states and synthesize published research from external organizations. Finally, for the fifth task, we issue analysis and recommendations based upon information accumulated in the previous four tasks. Policy recommendations account for the funding constraints and jurisdictional issues faced by WisDOT.

Prior research efforts by Wisconsin state agencies presented opportunities for this study. The Wisconsin Department of Health Services' Bureau of Aging and Disability Resources, together with the Wisconsin Department of Administration's Demographic Service Center, published detailed population projections for elderly residents through 2035 and a long-term state plan for managing the coming retiree boom; both resources were helpful for analyzing demographic data and trends.<sup>5</sup>

The research team confronted a research void as it aimed to collect quantitative and qualitative data on elderly transportation issues in Wisconsin. We also faced the challenge of applying population and economic projections to Wisconsin transportation issues. Research efforts from other states, such as Michigan and Pennsylvania, were invaluable to this report, as were independent studies conducted by local governments in Wisconsin. A 2008 report on the state' transportation coordination model, prepared by Nelson\Nygaard Consulting Associates, offered valuable suggestions for improving intergovernmental harmonization.<sup>6</sup> However, because the report focused on coordination and not specifically on elderly mobility needs, it neglected to examine many of the broader educational, technological, and infrastructure-related improvements that would enhance existing WisDOT efforts. This study endeavored to fill that research void and provide actionable recommendations while remaining cognizant of the various fiscal and intergovernmental barriers encountered by public bodies and non-profit agencies.

<sup>&</sup>lt;sup>5</sup> For the long-term plan, see Schmidlkofer, J. (2009, July). Wisconsin Plan for Older People 2010-2012. Retrieved March 2010, 25, from Wisconsin Department of Health Services, Division of Long Term Care, Bureau of Aging and Disability Resources: http://dhs.wi.gov/aging/Publications/Final%20State%20Plan%2007-24-09.pdf. For the projectins, see

Ofstead, 2010.

<sup>&</sup>lt;sup>6</sup> Nelson\Nygaard Consulting Associates, 2008.

# 1. Current Practices

Wisconsin, like states across the nation, will see a dramatic increase in its population of older adults over the coming years. As driving skills tend to deteriorate with age, many elderly individuals find that they must rely upon other options for transportation in order to accomplish daily activities and remain active in their communities. A study recently released by Transportation for America predicts that more than 15.5 million older Americans will have only "poor" access to public transportation by 2015,<sup>7</sup> yet, most Americans want to "age in place," rather than move to areas with more comprehensive transportation options. Meeting the challenges posed by this demographic shift requires that state and local agencies consider the structure and function of the transportation system with respect to older Wisconsinites.

Within the state, an array of programs and policies exist that support mobility of elderly individuals. This section seeks to identify current practices related to meeting the transportation needs of Wisconsin's older populations, focusing upon state government efforts but also incorporating the activities of other groups. The overview of current practices begins with a discussion of practices pertaining to elderly drivers including outreach and education efforts, self-assessment tools, licensing and vehicle equipment, and roadway design. The discussion of current practices then continues with a description of specialized and public transit programs administered by the Wisconsin Department of Transportation (WisDOT), programs funded and administered by other state agencies, local initiatives and programs, and efforts toward coordinating transit services. The final section presents themes gathered throughout the review of current practices, suggesting several possible issues that state and local officials should consider in efforts to improve elderly mobility in Wisconsin.

## **Older Drivers in Wisconsin**

For many elderly residents of Wisconsin, the ability to access and drive one's own vehicle serves a critical role in retaining independence and connections in the community. Physical impacts associated with the aging process, however, along with changing regulations and roadway design features may compromise an individual's ability to safely operate one's own vehicle. This section highlights current practices with respect to elderly drivers in Wisconsin.

## 1.1 General Outreach and Education

Communication about transportation policies, standards, and services is an important part of ensuring that older drivers understand current guidelines, their own abilities, and other transportation options. Additionally, information-sharing between interested stakeholders is critical in creating a consistent, comprehensive approach to issues surrounding older drivers.

#### **1.1.1 WisDOT informational resources for older drivers**

The Wisconsin Department of Transportation website offers a number of general online resource pages geared toward older drivers or those interested in learning about elderly mobility in Wisconsin. For a more detailed description about the specific resources offered, see Appendix 1. The WisDOT Medical Review Unit has composed a publication titled "Be Safe, Not Sorry: Older Driver Workbook." This document provides responses to common questions and concerns facing aging drivers including information about the license renewal process and additional medical tests that aging drivers may need to undergo. It also provides a basic self-

<sup>&</sup>lt;sup>7</sup> Transportation for America (2011). Aging in Place, Stuck without Options: Fixing the Mobility Crisis Threatening the Baby Boom Generation. p. 4. Accessed: http://t4america.org/docs/SeniorsMobilityCrisis.pdf

assessment tool and a general guide to identifying alternative means of transportation.<sup>8</sup> Selfassessment resources assist a driver in determining their ability to continue driving safely. The general information guide to other transportation options also provides aging drivers with a starting point to identify suitable alternatives available in specific locations.

#### 1.1.2 Educational resources for older drivers

A number of external organizations furnish educational resources and assessment tools to elderly drivers. Two of the most notable groups include the American Automobile Association (AAA) Foundation for Traffic Safety and AARP. In addition to various web-based tools and resources, the AAA provides a brochure to those interested in assisting older drivers and a short video: "The Older & Wiser Driver."<sup>9</sup> AARP offers a seminar called "We Need to Talk," geared towards families of older drivers to assist them in discussing mobility transitions with their aging family members. AARP also designed a Driver Safety Program course geared toward aging drivers. This course is currently offered online and in more than 30 communities throughout Wisconsin sponsored by senior centers, Aging and Disability Resource Centers, medical centers, retirement housing facilities, and other organizations.<sup>10</sup> A number of other states require insurance companies to provide discounts to drivers who complete such courses; however, Wisconsin is not among these states.

#### 1.1.3 Older driver training services

Independent groups including the National Highway Traffic Safety Administration and the Insurance Institute for Highway Safety provide training resources and services for older drivers. For example, the American Occupational Therapy Association (AOTA) lists 17 facilities in Wisconsin that provide driving specialist services to individuals over 65. Occupational therapists can provide support to older drivers recovering from an injury or those experiencing cognitive or physical changes impacting driving abilities. These specialists, including private therapy providers and medical centers, offer a range of services related to driving skills including evaluation, training, driving simulation, and information on alternative transportation services.<sup>11</sup> Additionally, AOTA, along with AARP and AAA, sponsors a program called CarFit, which is a free educational program for older drivers. This program helps drivers adjust vehicle equipment (including mirrors and seats) to promote safe and comfortable driving positions while introducing assistive devices and informational materials. A number of Wisconsin communities have hosted CarFit events in the past.<sup>12</sup>

#### 1.1.4 Reporting at-risk drivers

The Medical Review Unit has also taken a lead role in helping to improve reporting with respect to at-risk drivers. While there is no mandatory requirement for physicians or other medical professionals to report medically at-risk drivers, WisDOT's Medical Review Unit has developed resources to aid law enforcement officers, medical professionals, department staff, and private citizens in reporting and tracking medically at-risk drivers. First, the Unit developed the Driver

<sup>&</sup>lt;sup>8</sup> Wisconsin Department of Transportation (Spring 2008). *Be safe, not sorry: older driver workbook.* Accessed: http://www.dot.state.wi.us/drivers/docs/bds345.pdf

AAA Foundation for Traffic Safety. SeniorDrivers.org. Accessed: http://www.seniordrivers.org/home/ <sup>10</sup> AARP. AARP Driver Safety Program Classroom Course Locator. Accessed:

http://www.aarp.org/applications/VMISLocator/searchDspLocations.action <sup>11</sup> American Occupational Therapy Association, Inc. *Find a Driving Specialist*. Accessed from: http://myaota.aota.org/driver\_search/index.aspx <sup>12</sup> Additionally, as of 8/13/11, three upcoming CarFit events had been scheduled for Wisconsin. Accessed:

http://www.car-fit.org/carfit/RegisterCarFit/WI

Condition or Behavior Report form. Since the Medical Review Unit cannot take any formal action without external information, this critical form helps start the process of evaluating an atrisk driver (this process is discussed further in section 1.3). In 2010, the Unit received 4,280 of these forms.<sup>13</sup> Department records indicate that historically, about 75 percent of these forms are filed in regards to a driver over the age of 55.<sup>14</sup> Law enforcement officials submit about 75 percent of all Driver Condition or Behavior Report forms (with fewer filed by medical professionals and private citizens). Law enforcement officials can file these forms via their automated reporting system, TraCS (Traffic and Criminal Software), providing for convenient and user-friendly reporting. Since officers are accustomed to using TraCS for a wide range of reports, identifying at-risk drivers simply represents a similar duty. The Medical Review Unit also created three brochures to help law enforcement officials, medical professionals, and private citizens (respectively) determine appropriate instances in which to report at-risk drivers, as well as guidelines for reporting.<sup>15</sup> Though the office does not formally offer counseling services, Medical Review Unit staff do provide information and advice to drivers and their families. For instance, the Unit keeps a page of pertinent phone contacts for each county including transit providers, county aging units, AARP, etc.<sup>16</sup> The Unit formerly employed a nurse practitioner to provide outreach to the medical and law enforcement communities and encourage reporting; however, the position has remained vacant for several years. In addition, 2007 was the last year in which the Unit collected detailed information about the informant type and the age of the driver.<sup>17</sup>

## **1.2 Licensing Policies and Assistive Vehicle Equipment**

Policies guiding drivers license renewal and cancellation, along with the provision of supportive equipment or technology, also contribute to the mobility of safe drivers while supporting public safety goals for all transportation system users.

#### 1.2.1 License renewal and screening

Currently, each Wisconsin resident with a valid driver's license must have it renewed every eight years. Unlike some other states that mandate accelerated renewal schedules for older drivers, Wisconsin does not use any age-based provisions. At the time of renewal, all licensees must answer medical questions and undergo a test of vision skills. All drivers must renew at a DMV service station, unless they are temporarily out-of-state and cannot renew in person. This initial screening provides an opportunity to identify at-risk drivers.

#### 1.2.2 License cancellation and assessment

As noted above, the license cancellation process often begins with a Driver Condition or Behavior Report form filed in regards to a driver. The submittal of this form often requires a driver to provide the Medical Review Unit with a medical report. Upon receipt of this report, Unit staff check results against the medical licensing standards described in Wisconsin administrative rules.<sup>18</sup> If the driver meets standards but needs restrictions, license restrictions

<sup>&</sup>lt;sup>13</sup> Matthew Brelie (7/21/11). Personal correspondence.

<sup>&</sup>lt;sup>14</sup> ibid.

<sup>&</sup>lt;sup>15</sup> Wisconsin Department of Transportation (9/2007). *Be safe, not sorry: law enforcement guide for reporting drivers to WI-DMV.* Accessed from: http://www.dot.state.wi.us/drivers/docs/bds343.pdf

Wisconsin Department of Transportation (9/2007). *Be safe, not sorry: medical professional guide for reporting drivers to WI-DMV.* Accessed from: http://www.dot.state.wi.us/drivers/docs/bds344.pdf

<sup>&</sup>lt;sup>16</sup> Matthew Brelie (7/21/11). Personal correspondence.

<sup>&</sup>lt;sup>17</sup> Matthew Brelie 7/15/11). Personal correspondence.

<sup>&</sup>lt;sup>18</sup> Wis. Admin. Code TRANS 112 (Jun. 2007). Accessed: http://legis.wisconsin.gov/rsb/code/trans/trans112.pdf

are then issued. If the driver exhibits a condition that is likely to get worse, the Medical Review Unit may require continuous medical reporting. If the condition is temporary but some impairment is present, the Unit may require a driving test. Finally, if the driver fails to meet standards, the license is cancelled.<sup>19</sup> In 2009 the Department canceled 1,445 licenses due to medical conditions (across all age groups). After a license is cancelled, the Medical Review Unit sends out a formal cancellation notice and a separate letter describing the appeal process and the judicial review process. Upon cancellation of a license, a driver may appeal the decision to the Medical Review Board, a panel of volunteers from the medical community. There are generally about ten individuals completing the appeals process each month. As noted above, the Medical Review Unit does not automatically distribute information about other transportation options but do have information and contacts by county on hand. If such information is requested, they distribute it.

#### 1.2.3 Special license plates

Drivers with limited ambulatory abilities due to a disability (as defined by law and as certified by an authorized health care specialist) may apply for and receive a disabled parking identification permit, disabled license plate, or disabled veterans license plate (in the latter case, only when the disability resulted from an injury incurred in active U.S. military service). These provisions apply to drivers of any age; however, elderly drivers may benefit more frequently than others. Certification of disabled permits or plates is required every four years. Recipients of disabled permits or plates may use parking spaces reserved for disabled individuals, are exempt from most posted parking time limits greater than one-half hour, are exempt from fees in most metered parking spaces owned or leased by a municipality, and may obtain fuel from a full-service pump at the same price as the fuel from a self-service pump (if the location offers both types of service, the recipient is the driver, and the driver asks for the same price available for self-service).<sup>20</sup> These designations support elderly mobility by lowering the level of physical effort that individuals with limited ambulatory abilities must exert in transporting themselves between vehicles and destinations.

#### 1.2.4 Assistive technology and financial support

The Wisconsin Assistive Technology Programs include the WisTech and WisLoan Programs, which provide support to individuals with disabilities for assistive technology, including vehicle upgrades like wheelchair lifts and other adaptive features including devices that make it easier to get in and out of vehicles and operate vehicle controls. WisTech provides technical assistance and demonstrations of these technologies while WisLoan makes low-interest financing available for "modified vehicles, wheelchairs, and ramps." This program is funded under the Assistive Technology Act of 1998.<sup>21</sup> Another program that provides financial support to elderly drivers is the Non-Emergency Medical Transportation (NEMT) program of Medicaid. While most NEMT funds are dedicated to transit or other mobility solutions, NEMT may also reimburse clients on a per-mile basis for driving themselves to and from medical appointments. For a more complete discussion of NEMT, see "Other Wisconsin Agency Elderly Mobility Programs."

<sup>&</sup>lt;sup>19</sup> Matthew Brelie 7/15/11). Personal correspondence.

 <sup>&</sup>lt;sup>20</sup> Wisconsin Department of Transportation. *Important information for use of Disabled Plates, Disabled Veteran Plates, or Disabled Parking Identification Permits*. Accessed: http://www.dot.wisconsin.gov/drivers/forms/mv2752.pdf
 <sup>21</sup> Wisconsin Department of Health Services. *Wisconsin's Assistive Technology Program (WisTech)*. Accessed: http://www.dbs.wisconsin.gov/disabilities/wistech/index.htm

#### 1.3 **Highway Design**

Highway design and engineering practices can make a particularly significant impact upon older drivers' ability to navigate the state's roadways. Declining vision and physiological skills can impede a driver's ability to recognize traffic signs and other important highway elements. Reduced cognitive skills hamper a driver's ability to quickly recognize, process, and respond to large amounts of information about a roadway situation. Changes in design practices also present challenges for drivers unaccustomed to the new facility types.

#### 1.3.1 FHWA guidance

State design practices frequently rely on national guidance from the Federal Highway Administration (FHWA). The FHWA is currently updating the Highway Design Handbook for Older Drivers and Pedestrians, a document that was last published in 2001 and provides guidelines and recommendations to highway designers and engineers.22 The handbook identifies a three-step guide to help officials determine when specific recommendations should be implemented. The extent to which WisDOT guidance adopts these recommendations is not immediately clear; however, WisDOT's design manual does echo at least some of these recommendations. For example, in calculating intersection sight distance for vehicles turning left from major roadways, WisDOT requires a time gap of 8.0 seconds, which conforms to the FHWA Highway Design Handbook for Older Drivers and Pedestrians.23 Further, for new intersections, WisDOT encourages designers to achieve an angle as close to 90 degrees as possible, with a minimum of 70 degrees, another practice supported by FHWA.24 In some design areas related to older drivers, however, the FDM does not appear to offer guidance. For example, regarding the proper width of lanes receiving traffic from left lanes, the FHWA guide encourages 12-foot-wide lanes to best balance the needs of elderly drivers and pedestrians.25 The FDM does not appear to offer a recommendation for this design element.

While WisDOT employs pavement markings in compliance with the requirements set forward by the Manual on Uniform Traffic Control Devices, it is unclear whether these meet the FHWArecommended contrast levels, which aid older drivers in identifying road edges, along with curbs, medians, and other obstacles. On the other hand, WisDOT maintains its own Traffic Signal Design Manual, providing guidance on traffic signals throughout the state. This supports a level of statewide consistency, one of FHWA's recommendations for mitigating any confusion that varied signal designs across jurisdictions may cause.

#### 1.3.2 New design practices

The installation of modern roundabouts is a significant issue for older drivers. Roundabouts represent a departure from traditional intersection designs in Wisconsin and necessitate a behavioral adjustment for elderly drivers and pedestrians alike. WisDOT's Facilities Design Manual includes specific guidelines for outreach and education activities associated with the

<sup>&</sup>lt;sup>22</sup> Federal Highway Administration (May, 2001). *Highway Design Handbook for Older Drivers and Pedestrians*. U.S. Department of Transportation. Publication No. FHWA-RD-01-103. Accessed:

http://www.fhwa.dot.gov/publications/research/safety/humanfac/01103/<sup>23</sup> Wisconsin Department of Transportation. Facilities Development Manual. Chapter 11, Section 10, pp. 12-13. Accessed: http://roadwaystandards.dot.wi.gov/standards/fdm/11-10.pdf#fd11-10-5.1.4 <sup>24</sup> Wisconsin Department of Transportation. Facilities Development Manual. Chapter 11, Section 25, p. 6. Accessed:

http://roadwaystandards.dot.wi.gov/standards/fdm/11-25.pdf#fd11-25-1.5<sup>25</sup> Federal Highway Administration (May, 2001). *Highway Design Handbook for Older Drivers and Pedestrians*. U.S.

Department of Transportation. Publication No. FHWA-RD-01-103. Accessed:

http://safety.fhwa.dot.gov/intersection/resources/fhwasa09027/resources/Highway%20Design%20Handbook%20for% 20Older%20Drivers%20and%20Pedestrians.pdf

introduction of a roundabout into a community.<sup>26</sup> These activities include a public meeting at a relatively early stage in the design process as well as attendance at village or town board meetings and local service organizational meetings. The manual also points out that informational brochures, videos, and a WisDOT web site devoted specifically to roundabouts can help aid public education and outreach efforts. Indeed, the Department has developed a range of publications and multimedia resources providing outreach and information about roundabouts.

## 1.3.3 Traffic Signing and Marking Enhancement Grants Program

In 2005 and 2006, the state administered the Traffic Signing and Marking Enhancement Grants Program, which provided \$3.8 million in funds to local municipalities for traffic signs and pavement markings that would improve visibility for elderly drivers and pedestrians. The program was eliminated from the 2007-2009 budget.

#### 1.3.4 Inclusion in department plans

In preparation of the 2006-2008 Strategic Highway Safety Plan, the Wisconsin Department of Transportation identified 26 issue areas, including "Sustain proficiency in older drivers." While this plan did not prioritize this area among its top ten issues, the document did include a brief discussion of related agency activities.<sup>27</sup> Additionally, *Connections 2030*, the state's long-range multimodal transportation plan, addresses the needs of older individuals in a number of chapters.<sup>28</sup>

## Transit for Elderly in Wisconsin

Wisconsin administers state- and federally-funded programs designed specifically to meet the transportation needs of older individuals who cannot or choose not to drive. Public transit programs with services intended for the general public also benefit elderly individuals. While most of these services are operated at local or regional levels, the Wisconsin Department of Transportation, along with other agencies at state and local levels, administers state and federal funding programs and provides technical support to services that support the mobility of older individuals. See Appendix 2 for a summary of programs that contribute to elderly mobility in Wisconsin,

#### 1.4 **WisDOT Elderly Mobility Programs**

There are four main transit programs that WisDOT administers to support elderly mobility: the Specialized Transportation Assistance Program (s. 85.21), Tribal Transportation for Elders (s. 85.215), the Elderly and Disabled Transportation Capital Assistance Program (Section 5310/s. 85.22), and the New Freedom Initiative. Each program carries different goals, implementation procedures, funding sources, and requirements. Together, these four programs provide nearly \$20 million annually in support of mobility for elderly and disabled individuals.<sup>29</sup>

<sup>&</sup>lt;sup>26</sup> Wisconsin Department of Transportation. *Facilities Design Manual*. Accessed:

http://roadwaystandards.dot.wi.gov/standards/fdm/11-26.pdf#fdm11-26-15 <sup>27</sup> Wisconsin Department of Transportation. *Wisconsin Strategic Highway Safety Plan, 2006-2008.* Accessed:

http://www.dot.wisconsin.gov/library/publications/topic/safety/hwy-strategic-safety-plan.pdf <sup>28</sup> Wisconsin Department of Transportation. *Connections 2030.* Accessed:

http://www.dot.state.wi.us/projects/state/2030-background.htm <sup>29</sup> Wisconsin Department of Transportation. *2011-13 Biennial Budget Request*. Accessed: http://www.dot.wisconsin.gov/about/docs/11-13budgetrequest.pdf

#### 1.4.1 Specialized Transportation Assistance Program

The Specialized Transportation Assistance Program for Counties (s. 85.21) is a state-funded initiative to improve mobility for elderly and disabled populations. Allocations are based upon each county's share of elderly and disabled individuals though no county can receive less that 0.5 percent of the total annual appropriation (in 2011, this was \$68,117). In 2011, 22 counties received the minimum level of aid. Recipients may apply funds to a wide range of eligible expenditures including the direct provision of transit service, payment for service by any public or private organization, fare reimbursements to passengers or cost reimbursements to drivers, planning or management studies, coordination of services, training, or the purchase of capital equipment. About half of counties spend all aid received through this program on direct service provision, and almost all spend at least a portion on direct services.<sup>30</sup> Some counties contract with private non-profits and have successful, efficient systems; however, problems may occur if there is poor coordination with public officials or if priorities are shifted elsewhere (away from providing transportation for elderly individuals). Funding under this program requires a locallyprovided match of 20 percent. In 2008 the program provided nearly 4 million trips across Wisconsin. The vast majority of the trips provided by direct services are medical in nature.<sup>31</sup> In 2011, \$13.6 million was appropriated for the program.<sup>32</sup> For fiscal years 2012 and 2013, the program will also be funded with \$13.6 million in state funds.<sup>33</sup> Notably, this program requires recipients to incorporate anticipated expenditures in local coordination plans. For more information about coordination efforts, see Section 2.5.

#### 1.4.2 Tribal Transportation for Elders Program

The Tribal Transportation for Elders Program began in 2009 and is a state-funded program open to all federally recognized tribes in Wisconsin. Tribes determine the distribution of funds and in 2010, all 11 tribes received and equal share of the total funds (\$247,500), or \$22,500.<sup>34</sup> Program funding will remain the same in fiscal years 2012 and 2013.<sup>35</sup> These funds, which require no match, can go towards direct service provision, the purchase of services, fare reimbursements to passengers or cost reimbursements to drivers, planning or management studies, or coordination of services. Most of these funds go toward demand-response, door-to-door transportation services that use minivans or minibuses. Most trips provided by tribal services involve medical care, grocery shopping, or community or recreational events. Because of the small level of funding that each tribe receives, tribes supplement transit funding with gaming revenues from casinos, non-profit or donation funding, funding from federal or local programs, or other sources.<sup>36</sup>

## 1.4.3 Elderly and Disabled Transportation Capital Assistance Program

The Elderly and Disabled Transportation Capital Assistance Program supports the purchase of specialized transit vehicles that are used for people with disabilities and the elderly. For this program, WisDOT applies for Section 5310 funding from the Federal Transit Administration and receives an amount based upon the state's estimated population of elderly and disabled

<sup>&</sup>lt;sup>30</sup> Thomas Robinson (11/19/2010). Personal correspondence.

<sup>&</sup>lt;sup>31</sup> İbid.

 <sup>&</sup>lt;sup>32</sup> Al Runde. Urban Mass Transit Assistance. Legislative Fiscal Bureau Informational Paper 23 (January 2011).
 Accessed: http://legis.wisconsin.gov/lfb/Informationalpapers/23\_Urban%20Mass%20Transit%20Assistance.pdf
 <sup>33</sup> 2011 Wisconsin Act 32. Accessed: https://docs.legis.wisconsin.gov/2011/related/acts/32.pdf#page=0

<sup>&</sup>lt;sup>34</sup> Wisconsin Department of Transportation. Tribal Transportation for Elders. Accessed:

http://www.dot.wisconsin.gov/localgov/docs/tribal-elders.pdf

<sup>&</sup>lt;sup>35</sup> 2011 Wisconsin Act 32.

<sup>&</sup>lt;sup>36</sup> Thomas Robinson (3/9/2011). Personal correspondence.

individuals. Wisconsin supplements these aids with state funding. Through the state program (s. 85.22), private non-profit organizations apply to WisDOT and compete for funding. A local public body (often the Aging and Disability Resource Center) may also apply if it is the approved coordinator of elderly and transportation services or if there exists no such private, non-profit group.

In recent years, federal funding for this program has remained relatively constant; however, the 2010 Census may significantly impact funding levels. In 2010, the state received \$2.3 million in federal assistance and added about \$913,000 in state aid.<sup>37</sup> In fiscal years 2012 and 2013, the program will receive similar amounts in state funds for an estimated total of about \$3 million in each fiscal year.<sup>38</sup> Applications are reviewed biennially and are evaluated based on identification of transportation needs, coordination with other agencies, service to all elderly and disabled persons in the service area, and the managerial and financial capacity of the applicant. Generally, any provider who meets some scoring threshold receives some funding; however, it may be less than the amount requested based upon their score or the availability of funds. The sum of awarded state and federal aid cannot exceed 80 percent of a project's costs.

Most applicants for this program are "sheltered workshops," groups that take disabled individuals to central locations to do work in safer, controlled environments. Other agencies focus on medical trips. The program manager estimated that a little over one third of the service provided through the vehicles in this program goes toward transportation for elderly individuals. Recipients most commonly allocate aid from this program toward door-to-door services-60 percent of recipients are exclusively door-to-door and 40 percent are a combination of door-todoor service and fixed route service, usually between a senior center and a medical clinic. The state procures a variety of vehicles for the program, from standard minivans-which account for about 15 percent of expenditures-to minibuses seating 7 to 15 individuals, to large buses, though these are somewhat less common. Many vehicles purchased through the program are wheelchair accessible.<sup>39</sup>

Recipients of federal funds from this program must certify that the project was derived from a "locally developed coordinated public transit-human services transportation plan."<sup>40</sup> This requirement is intended to ensure that local officials are taking steps to integrate various transportation programs to best serve target communities while limiting redundancy; however, these plans do not guarantee the elimination of service gaps.

#### 1.4.4 New Freedom

The New Freedom Initiative provides formula-based federal funds to states and large urbanized areas to promote inclusion and access for people with disabilities. In 2010, the Madison and Milwaukee Urbanized Areas received \$83,650 and \$432,839, respectively, based upon their relative shares of individuals with disabilities. Small urbanized areas received \$648,471 and non-urbanized areas received \$433,168.41 WisDOT applies for this funding and awards it to successful applicants on a point-based, competitive basis. Eligible recipients include private non-profit organizations, local public bodies, and public transportation operators. In recent

<sup>&</sup>lt;sup>37</sup> Wisconsin Department of Transportation. *Elderly and Disabled Transportation Capital Assistance Program.* Accessed: http://www.dot.wisconsin.gov/localgov/docs/elderly.pdf

<sup>2011</sup> Wisconsin Act 32.

<sup>&</sup>lt;sup>39</sup> Thomas Robinson (1/27/2011). Personal correspondence.

<sup>&</sup>lt;sup>40</sup> Wisconsin Department of Transportation (Oct. 2010). *Toolkit: Transportation Coordination Plans*. Accessed: http://www.dot.wisconsin.gov/localgov/transit/toolkit.htm <sup>41</sup> Wisconsin Department of Transportation (2/17/2010). *New Freedom funding and apportionments.* Accessed:

http://www.dot.wisconsin.gov/localgov/transit/newfreedom-funding.htm

years, more recipients have dedicated New Freedom funding to mobility management programs. In 2010, there were 56 mobility managers across the state: 27 funded by New Freedom, 20 funded by the Job Access Reverse Commute/Wisconsin Employment Transportation Assistance Program, and 9 funded through other sources.<sup>42</sup> For more information on mobility management, see Section 2.5. Voucher programs and other projects related to the mobility manager also commonly receive New Freedom funds. For mobility management and capital projects funded through this program, New Freedom reimburses recipients at a rate of 80 percent. Funds dedicated to defray operating costs only receive a 50 percent reimbursement, which discourages applicants with operating projects, particularly in consideration of higher matching rates offered through other programs.<sup>43</sup> Recipients of New Freedom funds must also meet the coordination requirements outlined above.

#### 1.5 Other Wisconsin Agency Elderly Mobility Programs

While WisDOT-administered programs contribute significantly to the mobility of Wisconsin's elderly non-drivers, other state agencies also fund and operate important programs in support of this goal. Elderly individuals may account for small proportions of some of these programs, but each acts as a part of the network of transportation opportunities available to aging Wisconsinites.

#### **1.5.1 Non-Emergency Medical Transportation**

The Wisconsin Department of Health Services (DHS) administers the Non-Emergency Medical Transportation Program (NEMT), which provides transportation for Medicaid recipients to and from non-emergency medical appointments that they could not otherwise physically access, using either a common carrier (e.g., taxi service) or, when necessary, special medical vehicles (SMVs). This program provides \$60 million annually for transportation. States are required by the Medicaid program to ensure that all recipients are able to reach their medical appointments and provide rides or reimbursement for rides to those who are unable or cannot afford to drive, ride public transportation, or otherwise travel on their own to medical facilities. While seniors represent a relatively small minority of Medicaid recipients, they are likely over-represented in terms of their use of NEMT services because they may "have reduced driving capabilities and reduced ability to use public transportation and may use more medical transportation services than younger Medicaid recipients."44

The costs of providing non-emergency transportation service are partially covered by federal matching funds; the match rate is determined by whether the state claims transportation as an "optional medical service" or an "administrative service." Claiming costs as an optional medical service allows states to receive a higher matching percentage as determined by the state's Federal Medicaid Assistance Percentage—in Wisconsin, the 2011 Quarter 3 rate is 65.92%<sup>45</sup> but this arrangement requires that the service be provided "by a vendor to whom the Medicaid agency makes a direct payment." Claiming transportation as an administrative expense, on the other hand, provides the State more flexibility in running the program (allowing, for example,

<sup>&</sup>lt;sup>42</sup> Wisconsin Department of Transportation (9/27/2010). *Mobility Mangement in Wisconsin*. Presentation to CalACT Fall Conference. Accessed: http://www.calact.org/assets/Ingrid%20Koch%20Presentation-MM%20Monday.pdf Ingrid Koch (3/4/2011). Personal correspondence.

<sup>&</sup>lt;sup>44</sup> Nelson\Nygaard Consulting Associates (Dec. 2004). The Impact of Federal Programs on Transportation for Older *Adults*. Accessed: http://assets.aarp.org/rgcenter/post-import/2004\_17\_transport.pdf <sup>45</sup> The Henry J. Kaiser Family Foundation (2010). *Wisconsin: Temporary Federal Medicaid Relief*. Accessed:

http://www.statehealthfacts.org/profileind.jsp?cat=4&sub=154&rgn=51

reimbursement of recipients instead of vendors) but matching funds are limited to a 50% rate.<sup>46</sup> In the past, Wisconsin claimed its NEMT services as an administrative expense, but the state recently switched to the optional medical service model to take advantage of higher match rates, contracting with LogistiCare Solutions, LLC to take over statewide NEMT brokering.<sup>47</sup> In adopting LogistiCare, which is active in 38 states, the state also hoped to eliminate fraud and abuse, reduce NEMT expenditures, and collect and report transportation data.<sup>48</sup> However, some stakeholders expressed concern that this move will jeopardize local providers of NEMT services and that service quality or consistency may suffer. In fact, in the first days of LogistiCare's management of NEMT services, one local provider backed out of its contract with the company, citing numerous errors in customer records and significant communications difficulties.<sup>49</sup> A follow-up piece quoted a company representative citing customers who gave insufficient notice for trips as the possible root of the issue. The official added that a large majority of trips in the first several days were complaint-free.<sup>50</sup>

#### 1.5.2 Older Americans Act transportation support

The Older Americans Act was signed into law in 1965 to provide a variety of supportive services to the elderly and their caregivers. Title III-B of the Act specifies a variety of supportive services that can be provided using federal grant money, including counseling, education, housing assistance, employment, abuse prevention, and others; the act also provides for funding transportation that enables access to other services or enhances access to existing transportation services. In Wisconsin, local aging units determine the services to be provided and in the past, approximately \$200,000 (or about 10 percent) of Title III-B funds goes toward transportation. These services are of particular benefit to rural seniors—one in four uses the service, compared to one in eight urban seniors.<sup>51</sup>

#### **1.5.3 Medicaid Infrastructure Grants**

Medicaid Infrastructure Grants are a component of the 1999 Ticket to Work and Work Incentives Improvement Act. The grants funds state efforts to "develop the infrastructure to support competitive employment opportunities for people with disabilities" by improving Medicaid programs, coordinating and integrating Medicaid and other social service providers, and enhancing the comprehensiveness of back-to-work programs.<sup>52</sup> Although these programs do not specifically target the elderly, their elevated rates of disability suggest that these programs benefit older workers. With a minimum grant of \$500,000 with no matching requirement for

<sup>&</sup>lt;sup>46</sup> Health Care Financing Administration and the National Association of State Medicaid Directors' Non-Emergency transportation Technical Advisory Group (Aug. 1998). *Designing and Operating Cost-Effective Medicaid Non-Emergency Transportation Programs: A Guidebook for State Medicaid Agencies.* pp. 3-4. Accessed: http://ntl.bts.gov/lib/12000/12200/12290/medicaid.pdf

<sup>&</sup>lt;sup>47</sup> Greg DiMieceli. (2010, July 2). Personal correspondence.

<sup>&</sup>lt;sup>48</sup> Wisconsin Department of Health Services. Request for Proposal: Non-Emergency Medical Transportation Services Management. Accessed http://www.dhs.wisconsin.gov/rfp/DHCF/archive/1690/RFP-1690-DHCAA-SM-NEMT-Services.pdf <sup>49</sup> Shown Department "Vitel Signe: Redger Ceb service LogistiCore contract." The Conital Times. Accessed http://

 <sup>&</sup>lt;sup>49</sup> Shawn Doherty. "Vital Signs: Badger Cab severs LogistiCare contract." The Capital Times. Accessed July 6, 2011.
 Available: http://host.madison.com/vital\_signs/article\_ab9ce0b0-a75b-11e0-84d3-001cc4c002e0.html
 <sup>50</sup> Shawn Doherty. "Vital Signs: LogistiCare official answers critics." The Capital Times. Accessed July 24, 2011.

<sup>&</sup>lt;sup>50</sup> Shawn Doherty. "Vital Signs: LogistiCare official answers critics." The Capital Times. Accessed July 24, 2011. Available: http://host.madison.com/news/local/health\_med\_fit/vital\_signs/article\_16bb94ba-a8cc-11e0-abe8-001cc4c002e0.html#ixzz1RnR70pVp

<sup>&</sup>lt;sup>51</sup> Nelson/Nygaard Consulting Associates. (2004, December). *The Impact of Federal Programs on Transportation for Older Adults*. Accessed June 23, 2010 from AARP: http://assets.aarp.org/rgcenter/post-import/2004\_17\_transport.pdf <sup>52</sup> Department of Health & Human Services Center for Medicare and Medicaid Services. (2006). *2006 Edition*-

<sup>&</sup>lt;sup>22</sup> Department of Health & Human Services Center for Medicare and Medicaid Services. (2006). 2006 Edition-Announcement: Medicaid Infrastructure Grant To Support the Competitive Employment of People with Disabilities. Accessed July 1, 2010 from https://www.cms.gov/TWWIIA/downloads/2006migsolicitation.pdf

successful applications, Wisconsin and 38 other states have successfully applied for grants from the program. Wisconsin's program, called Pathways to Independence, includes provisions to remove barriers to entry to the workforce. While funding for the transportation component of this program is not specifically identified, surveys of disabled persons in Wisconsin revealed that their second most commonly cited priority was to "improve transportation options," and listening sessions in Wisconsin communities showed a similar concern for transportation issues, especially in rural areas.<sup>53</sup>

#### 1.5.4 Wisconsin Senior Employment Program

Another program supporting elderly mobility is the Wisconsin Senior Employment Program (WISE), also known as the Senior Community Service Employment Program (SCSEP). This job training and placement program seeks to place unemployed and lower-income seniors (55 and older, with preference given to those 65 and older) in unsubsidized jobs. The program is funded by Title V of the Older Americans Act and administered nationally by the U.S. Department of Labor and at the state level by the Wisconsin Department of Health Services, which in turn funds non-profit organizations that provide part-time community service training and placement services. Currently, six non-profit organizations run WISE programs in 28 Wisconsin counties.<sup>54</sup> WISE enrollees who cannot otherwise travel to work receive vouchers for bus and cab fare.<sup>55</sup> Additionally, SER-Jobs for Progress National, Inc., a non-profit that runs SCSEP programs, advises SCSEP administrators and providers to make transportation a priority by educating workers on how to use public transportation or partnering with schools or social service organizations to provide cars, vans, or buses for workers. SER also suggests that a lack of existing transportation resources can be a source of jobs for program participants and "provide needed services to the community if the necessary arrangements can be made."<sup>56</sup> This program is funded at \$300,000.

#### 1.5.5 Veterans Affairs programs

Finally, the Wisconsin Department of Veterans Affairs supports two program that support mobility for veterans of any age. The County Transportation Grant provides financial assistance to counties to provide transportation to Veterans Affairs medical appointments. A total of \$100,000 is available annually. The Disabled American Veterans, a non-profit organization, provides a volunteer-operated fixed-route vanpool service between predetermined locations and medical facilities. In addition to \$100,000 from the Department of Veterans Affairs, this program is supported by donations from individuals, corporations, and other organizations. State contributions to these programs continue at the same levels in the 2011-2013 biennium.<sup>57</sup>

# **1.6 WisDOT General Public Transportation Programs**

In addition to the programs discussed above, WisDOT administers a number of other public transit and employment services programs that increase and enhance transportation options for older residents. These consist primarily of bus systems and shared-ride taxicab service

<sup>53</sup> Ibid.

<sup>&</sup>lt;sup>54</sup> Wisconsin Department of Public Instruction. (2009, May). *Wisconsin Senior Employment Program (WISE) Overview*. Accessed July 2, 2010 from http://dpi.wi.gov/pld/pdf/wise-overview.pdf

<sup>&</sup>lt;sup>55</sup> Monica Snittler (4/8/2010). Personal correspondence.

<sup>&</sup>lt;sup>56</sup> SER-Jobs for Progress National, Inc. *Hallmarks of Successful SCSEP Projects*. Accessed July 2, 2010 from http://www.ser-nationalnews.com/scsep-best-practices/213-hallmarks-of-a-successful-scsep-projects

<sup>&</sup>lt;sup>57</sup> 2011 Wisconsin Act 32.

systems, which operate in places where bus service is infeasible. See Figure 1, below, for a map of the public transit systems throughout the state.

## 1.6.1 Federal Formula Grant Program for Urbanized Areas

The Federal Formula Grant Program for Urbanized Areas (Section 5307) is a federally-funded program that assists transit systems in large communities with capital or operating expenditures. Funds are distributed to transit systems in urbanized areas (with populations greater than 50,000) through a formula based on population, population density, and revenue miles of service provided (the number of miles all vehicles traveled while in service). Under the tiered funding structure, Milwaukee County and Madison's systems (Tier A1 and A2, respectively) receive set appropriations and may only use Section 5307 funds for capital and capitalized maintenance expenditures. Smaller Tier B recipients may also dedicate funding to operating costs and the state distributes this funding, along with state operating funds (to be discussed later), based upon each system's net operating deficit. Capital assistance from the Section 5307 program is provided at 80 percent of project costs while operating assistance may cover 50 percent of the net operating deficit.<sup>58</sup> In 2010, WisDOT distributed \$47.5 million in Section 5307 funding.<sup>59</sup> Significantly, observers expect the Fox Valley system to move to Tier A2 following the results of the 2010 Census. In this case, the state's federal allocation for Tier B systems would decline.<sup>60</sup> Indeed, the budget projects \$38 million in federal revenue for transit in the upcoming budget biennium.<sup>61</sup>

## 1.6.2 Rural and Small Urban Area Public Transportation Assistance Program

The Rural and Small Urban Area Public Transportation Assistance Program (Section 5311) is similar, but supports capital and operating expenses for systems serving non-urbanized areas (populations between 2,500 and 50,000). Municipalities are the most common recipients, though some counties and transit agencies receive aid through this program. Under this program, the state receives federal funding based upon a formula incorporating factors like land area and ridership. Then, program administrators create a pot of combined federal and state funds and distribute it to individual recipients. See the following section for more details regarding this process. Of the federal operating assistance provided, about two-thirds of these funds go toward shared-ride taxi services while the balance of aids are dedicated to bus systems. Bus systems tend to dominate capital costs, however. On average, bus systems and shared-ride taxi systems evenly split Section 5311 funding. Shared-ride taxi systems receive a significant share of riders from older individuals accessing medical care, making this aspect of the program particularly important with regards to elderly transportation. In the last number of years, this program has received more funding based on growth in the number of programs eligible for aid. Currently, 54 systems receive funding through Section 5311; five of these systems are new to the program since 2007.<sup>62</sup> In 2010, the state distributed \$13.4 million under this federal program.

<sup>&</sup>lt;sup>58</sup> Wisconsin Department of Transportation. *Federal Formula Grant Program for Urbanized Areas*. Accessed: http://www.dot.wisconsin.gov/localgov/docs/fedformula.pdf

<sup>&</sup>lt;sup>59</sup> Al Runde (Jan. 2011). *Urban Mass Transit Assistance*. Legislative Fiscal Bureau Informational Paper 23, January 2011. Accessed:

http://legis.wisconsin.gov/lfb/informationalpapers/2011/23\_urban%20mass%20transit%20assistance.pdf <sup>60</sup> Joseph Kapper (3/8/11). Personal correspondence.

<sup>&</sup>lt;sup>61</sup> 2011 Wisconsin Act 32.

<sup>&</sup>lt;sup>62</sup> Jake Miller (3/10/2011). Personal correspondence.

#### 1.6.3 Urban Mass Transit Operating Assistance

As noted above, state funds distributed through the Urban Mass Transit Operating Assistance program (s. 85.20) supplement federal funds by aiding transit systems with operating expenditures in local jurisdictions larger than 2,500. Bus systems eligible for aids from this program must offer a reduced fare (one-half or less of peak adult fare) for elderly and disabled riders during nonpeak hours. The state budget identifies a separate appropriation for each of four funding tiers (the three identified above plus Tier C, referring to those systems serving populations between 2,500 and 50,000). Program funds are distributed such that combined federal Section 5307 funds and state s. 85.20 funds cover an equal share of operating expenditures for all transit systems within a tier while ensuring that federal funds do not cover more than 50 percent of an individual system's operating deficit. In recent years, the combined funds subsidized Tier B systems at about 58 percent of operating costs. In 2010, 73 systems received aid with over 90 percent of funding distributed to bus systems.<sup>63</sup> Bus system recipients of operating funds must provide a non-farebox local match of 20 percent of state aids received.

In the second year of the state's 2011-2013 budget biennium, operating aids will decline from about a \$115 million across all four tiers to about \$106 million, a funding reduction of about 10 percent. However, a new state program intended to support paratransit services will provide \$2.5 million to transit systems operating in urban areas over the next two budget years.<sup>64</sup>

#### 1.6.4 Federal Discretionary Capital Assistance Program

The Federal Discretionary Capital Assistance Program (Section 5309) is a federally-funded discretionary grant program that assists transit systems with capital project costs. Local public bodies are eligible to apply. When Wisconsin receives funds, WisDOT allocates a portion to Milwaukee County and the remainder is distributed by need and availability. In 2010, the state received \$6.9 million in Section 5309 funds. The state also received nearly \$82 million in transit capital funding from the American Recovery and Reinvestment Act during the 2009 and 2010 federal fiscal years.<sup>65</sup>

## 1.6.5 Rural Transit Assistance Program

The Rural Transit Assistance Program (RTAP) allocates federal funds to further the development of skills and abilities for persons involved in providing transit service in Wisconsin's rural and small urban areas. In 2010, Wisconsin received \$196,313 in RTAP funds.<sup>66</sup> The Wisconsin RTAP program, which is administered by a consulting firm, offers a number of training courses geared toward rural transportation providers. The program also provides scholarships for individuals to attend these courses, conferences, or other transit-related events.<sup>67</sup>

<sup>&</sup>lt;sup>63</sup> Al Runde (Jan. 2011). *Urban Mass Transit Assistance*. Legislative Fiscal Bureau Informational Paper 23, January 2011. Accessed:

http://legis.wisconsin.gov/lfb/informationalpapers/2011/23\_urban%20mass%20transit%20assistance.pdf <sup>64</sup> 2011 Wisconsin Act 32.

<sup>&</sup>lt;sup>65</sup> Al Runde.

<sup>&</sup>lt;sup>66</sup> Ibid.

<sup>&</sup>lt;sup>67</sup> Wisconsin Rural Transit Assistance Program. Accessed: http://www.wisconsinrtap.com/

#### 1.6.6 Supplemental Transportation Rural Assistance Program

The Supplemental Transportation Rural Assistance Program (STRAP) was a four-year federal pilot program under SAFETEA-LU that provided operating and planning funds for public transit projects in non-urbanized areas. The program emphasized coordination between transportation services and addressing the needs of non-ambulatory residents, making it particularly relevant to issues surrounding elderly mobility. The federal government provided funding for 80 percent of project costs under this pilot; it is unclear whether a similar program will be reexamined in the future. In 2010, the state awarded \$1.7 million in federal funds under STRAP.68

#### 1.6.7 Wisconsin Employment Transportation Assistance Program

Finally, the Wisconsin Employment Transportation Assistance Program (WETAP) is comprised of local, state, and federal funding from the federal Job Access Reverse Commute Program (JARC) and the state Transportation Employment and Mobility (TEAM) and Employment Transit Aids (ETA) Programs. This program is geared toward meeting the transportation needs of lowincome workers, including older working adults. Eligible applicants include local public bodies, public transit providers, non-profit agencies, and metropolitan planning organizations.<sup>69</sup> The JARC program focuses specifically on transporting low-income individuals to and from jobs and on developing transportation services accessing employment opportunities in suburban areas.<sup>70</sup> In 2010, Wisconsin received about \$2.4 million in JARC funds. WisDOT and the Department of Workforce Development supplement this funding through the TEAM and ETA programs. In 2011, WETAP provided \$3.3 million in federal funds, combined with \$580,000 and \$2.6 million in state and local funds, respectively.<sup>71</sup> Over the 2011-12 and 2012-13 budget years, legislators appropriated \$332,600 to the TEAM program and \$464,800 for ETA.<sup>72</sup> Projects receiving JARC funding must comply with the coordination requirements outlined for the Elderly and Disabled Transportation Capital Assistance and New Freedom Programs. WETAP requires a 25 percent local match.

<sup>&</sup>lt;sup>68</sup> Wisconsin Department of Transportation. *Supplemental Transportation Rural Assistance Program*. Accessed: http://www.dot.wisconsin.gov/localgov/docs/strap.pdf

Wisconsin Department of Transportation. Wisconsin Employment Transportation Assistance Program. Accessed: http://www.dot.wisconsin.gov/localgov/transit/wetap.htm

Al Runde.

<sup>&</sup>lt;sup>71</sup> Wisconsin Department of Transportation. 2011 WETAP Projects. Accessed:

http://www.dot.wisconsin.gov/localgov/docs/wetap-2011.pdf <sup>72</sup> 2011 Wisconsin Act 32.



Figure 1.1 Wisconsin Public Transit Systems, Wisconsin Department of Transportation

#### 1.7 **Coordination Efforts, Mobility Management, and Volunteer** Drivers

Financial support from state and federal programs does not guarantee that local service providers can meet the transit needs of older individuals. Indeed, following reductions in aid from a number of state and federal programs, stakeholders involved in elderly mobility must continue to identify ways in which to most efficiently utilize funds while exploring options for controlling costs.

#### **1.7.1** Transportation Coordination

An important way to support efficient use of resources is through transportation coordination, a process by which human service agencies, transportation providers, consumer groups, and public officials work together to develop and improve services for transportation disadvantaged individuals by ensuring that transportation resources funded by different programs are coordinated.<sup>73</sup> This element is particularly important for elderly mobility because of the high fragmentation of funding sources, program goals, and agencies and organizations involved, whether directly or indirectly.

The Interagency Council on Transportation Coordination (ICTC), created in 2005, is a statelevel body composed of the Departments of Transportation, Health Services, Veterans Affairs, Workforce Development, and the Office of the Commissioner of Insurance. This group has worked to improve coordination from the state level. In 2007, the ICTC held a conference on the future of coordination. The Council also convened a statewide Stakeholder Advisory Committee, fostered joint administration of funding programs between the Departments of Transportation and Workforce Development, and promoted a Commissioner of Insurance survey relating to volunteer drivers. In 2008, the group worked with a consultant to develop the Wisconsin Model of Coordination. This document identified four critical strategies to improving human service transportation coordination at state and local levels: strengthen the ICTC as the lead entity for statewide coordination efforts, encourage county and/or regional coordination councils, require county and/or regional coordination councils, and encourage regionalization through incentives and rewards.74

However, since the development of the statewide model, the group's progress on these initiatives is unclear. A report developed by the group in 2008 specifically recommended that the governor grant the Council a more formalized role with clear responsibilities and authority, as well as the resources to support these efforts.<sup>75</sup> In absence of an executive order or legislation targeting coordination at the state-level, however, the Council has become relatively inactive compared to its initial efforts.

As part of its efforts, the Department of Transportation collaborated with Regional Planning Commission planners to develop a coordination planning process and toolkit in 2008. Federal transit law requires that projects receiving federal funding through the Elderly and Disabled Transportation Capital Assistance, Job Access and Reverse Commute, and New Freedom

<sup>&</sup>lt;sup>73</sup> Wisconsin Department of Transportation (1/26/2011). *Transportation coordination*. Accessed:

http://www.dot.state.wi.us/localgov/coordination/index.htm <sup>74</sup> Nelson/Nygaard Consulting Associates (Jul 2008). *Wisconsin Human Service Transportation Coordination Model.* Wisconsin Department of Transportation. Accessed: http://www.dot.state.wi.us/localgov/coordination/docs/finalreport-

<sup>090508.</sup>pdf <sup>75</sup> Inter-Agency Council on Transportation Coordination (10/2008). *Report of the Inter-Agency Council on* Transportation Coordination to Governor Jim Doyle. Accessed: http://www.dot.state.wi.us/localgov/docs/kit-ictcreport.pdf

programs be "derived from a locally developed, coordinated public transit-human services transportation plan." WisDOT also requires that s. 85.21 funding correspond to county coordination plans. In 2010, WisDOT updated the coordination planning toolkit. While use of this toolkit is optional, the department will be developing a mandatory coordination planning process in 2012.<sup>76</sup> Coordination between local service providers has improved service for elderly riders; however, enhanced regional coordination and more experience in the coordination planning process will identify further improvements in the future.

#### **1.7.2 Mobility Management**

In particular, New Freedom has helped build technical capacity and support coordination by focusing upon the mobility management concept. Mobility management is a key aspect of coordination, providing a local perspective and services that focus on the individual. Mobility management maximizes use of resources; improves customer access; identifies needs, gaps, and barriers in service; and develops strategies to fill needs for the transportation disadvantaged.<sup>77</sup> Mobility managers complete a range of activities depending on local needs; many implement projects initially identified in the county coordination planning process. These include new transit services; car loan or repair programs; carpool and rideshare programs; volunteer driver and escort programs; call centers; CarFit events; and travel training programs. In addition to these activities, program managers indicate that counties are increasingly collaborating with each other and rethinking the ways in which they provide rides. Significant potential still exists, however, for improved efficiencies as a result of coordination between services.

#### 1.7.3 Volunteer Drivers

As mentioned above, some transit services rely upon volunteer drivers. While a number of funding programs include volunteer reimbursement as an eligible expenditure, Wisconsin does not provide civil immunity for volunteer drivers.<sup>78</sup> However, the state's Commissioner of Insurance manages a list of insurance providers that cover volunteer drivers under personal automobile insurance policies.<sup>79</sup> These groups cover volunteer driving even if the volunteer received reimbursement from the transit service provider. However, coverage appears to exclude volunteers who drive vehicles owned by the transit service provider.

#### 1.8 Examples of Local Programs

The aid programs outlined above fund a variety of services implemented at the local level. One popular model is the shared-ride taxi, which provides on-demand transportation services to individuals, optimized by choosing routes that serve multiple individuals at once. Programs vary widely in funding sources, responsible agency, fleet size, service hours, advance notice necessary, fares, and service areas.

<sup>&</sup>lt;sup>76</sup> Wisconsin Department of Transportation (1/26/2011). *Transportation coordination.* 

<sup>&</sup>lt;sup>77</sup> Wisconsin Department of Transportation (2010). *New Freedom Application.* 

http://www.dot.state.wi.us/localgov/transit/newfreedom-application.htm <sup>78</sup> Sundeen, M and Farber, N. *Volunteer Driver Liability and Immunity: A 50 State Survey*. National Conference of State Legislatures. Accessed: http://ncsl.org/print/transportation/vol\_driverliabl06.pdf <sup>79</sup> Wisconsin Office of the Commissioner of Insurance. Volunteer Driver Insurance. Accessed:

http://oci.wi.gov/consumer/volunteerins.htm

#### 1.8.1 Ozaukee County

Ozaukee County Transit Services administers service in Ozaukee County and has utilized funding from the Specialized Transportation Assistance Program, Older Americans Act, Rural and Small Urban Area Public Transportation Assistance Program, Urban Mass Transit Operating Assistance Program, and WETAP to support its shared-ride taxi program. The County contracts with G & G Enterprises to provide drivers and dispatch while the County owns, fuels, and maintains the vehicles. The program provides service throughout the county and fares are dependent upon the number of zones crossed (but range from \$2.25 to \$5.25 for older citizens). While this service started serving only elderly and disabled individuals, its expansion and shift to a shared-ride format open to all riders resulted in more riders and lower costs. At this point, the elderly and disabled program was able to focus on out-of-county transportation, mostly for medical appointments. While the shared-ride taxi program is popular amongst users and has experienced increased ridership over time, challenges in terms of limited hours of operation and funding remain. An assessment of the program also mentions two free transportation services offered within the county, but provides no discussion on coordination efforts with those services.<sup>80</sup>





#### 1.8.2 Eau Claire County

Eau Claire County offers a similar, but distinct, demand-response paratransit service. Eau Claire Transit (ECT), a city department, manages this countywide service along with a more traditional fixed route bus system and city-based paratransit system. ECT contracts with a private group (Tender Care Transport) for service delivery. This program is funded through the Specialized Transportation Assistance Program and most vehicles in the fleet are used vans originally purchased for other programs through the Elderly and Disabled Transportation Capital Assistance Program. Three carriers provide medical transportation and there is also an active,

<sup>&</sup>lt;sup>80</sup> Ozaukee County Shared-Ride Taxi. Accessed: http://www4.uwm.edu/cuts/bench/ozaukee3.pdf

but limited, volunteer driver service. Additionally, the Western Dairyland group provides mobility management and travel training services within the County while Tender Care attempts to group trips based on hospital and clinic locations and scheduling. These coordination efforts, along with the centralization of operations under ECT, help streamline service delivery and mitigate the fragmentation of funding sources.<sup>81</sup>



Figure 1.3 Eau Claire Paratransit, Tender Care Transport

#### 1.9 **General Themes and Discussion**

In the course of reviewing current practices with respect to elderly mobility in Wisconsin, a number of general themes surfaced. These themes include staffing and funding shortages, a lack of technical capacity, data management issues, coordination challenges, changes and uncertainty at the federal level, land use considerations, and feedback loops with regard to program evaluation. The identification of these issues may suggest ways to improve and better support transportation for Wisconsin's older residents.

## **1.9.1 Staffing and Funding Shortages**

On the state and local level, shortages of funding and staffing represent a major challenge to improved services for elderly mobility. In particular, local communities are reporting difficulty providing matching funds. Small transit systems must cover 35 percent of their costs through farebox and property tax revenue and may not apply for assistance with these costs. For example, Waterloo lost its service because covering these costs became financially infeasible.<sup>82</sup> Another reason for funding shortages is a response from the growth in need around the state. With more systems applying for aid, state and federal funding is becoming less adequate. While the addition of mobility managers in different parts of the state has raised awareness of service

<sup>&</sup>lt;sup>81</sup> SRF Consulting Group, Inc. (Jan. 2008). *Eau Claire County Rural Transportation Project.* Accessed: http://www.dot.wisconsin.gov/localgov/docs/kit08-strap-eauclaire.pdf

Jake Miller (3/10/2011). Personal correspondence.

gaps, funding to fill those gaps with appropriate transit services is insufficient. In addition, declining funding levels and uncertainty surrounding the future of federal and state programs creates disruption and hampers the consistency and reliability that serve as features of wellutilized transit services. A steadier stream of funding would encourage higher ridership and awareness, strengthening the general place of services within each community. Additionally, some program guidelines restrict aid that can be directed toward local programs. The federal funding cap of 50 percent of a program's operating deficit is one such issue.

Low staffing levels at the state level also hamper program outreach, evaluation, and administration for initiatives related to the transportation of older individuals. For instance, the WisDOT Medical Review Unit's nurse practitioner formerly provided outreach to medical and law enforcement communities and kept track of distribution of informational materials; however, this position remains vacant. This position was important in sharing information about the state's reporting process and for developing educational resources for older drivers, their families, and medical and law enforcement professionals. Some WisDOT program managers indicated that, even when sufficient data for program evaluation is present, staff cannot review and analyze it frequently enough to proactively identify problematic issues or other trends. Likewise, auditors are generally focused on other issues. With higher staffing levels in the past, the department could prepare in-house studies to evaluate programs in specific regions around the state; however, regional staff is not engaged with specialized transit issues. A lack of proper program evaluation activities can result in poor program performance and negative impacts for elderly mobility.

#### 1.9.2 Technical Capacity

Significant barriers to local technical capacity were also clear with respect to transit programs geared toward elderly individuals. High levels of staff turnover and the fact that transportation accounts for only a small share of many program administrators' duties stand in the way of applicants and grantees acquiring experience and familiarity with applying for program funds and implementing the programs. There are also limited opportunities for transit program administrators to come together and share best practices or specific challenges.

#### 1.9.3 Data Management Issues

Related to technical capacity, a lack of consistent and efficient reporting at the local and state levels hampers program evaluation and guidance efforts. For instance, the lack of comprehensive budget reporting limits the degree to which program managers can track local coordination activities and utilization of a range and variety of funding sources. With more comprehensive data, WisDOT program managers could more effectively provide technical support to counties and other local agencies in terms of making service decisions and optimizing funding allocations. In 2007, the Medical Review Unit stopped collecting specific data about reports of at-risk drivers. Without this data, the Unit may have difficulty tracking the success and effectiveness of their informational documents and evaluating the effectiveness of the process guiding at-risk driver reporting and license cancellation. Dealing with paper forms may also create unnecessary delays and difficulties in compiling summary data for the purposes of program evaluation. Better crash data could help state and local roadway designers prioritize locations for engineering countermeasures that reduce risks for older drivers. Improved data collection and data systems hold the promise for a wide array of stakeholders who interact with issues of elderly mobility.

#### **1.9.4 Coordination Challenges and Opportunities**

Based upon the high degree of fragmentation in funding sources, program goals, and agencies and organizations involved in supporting elderly mobility, the coordination of services continues to present a challenge to state agencies and local communities alike. Service gaps and duplication of services or efforts may result from a lack of communication between groups. However, opportunities for enhanced coordination activities in the future is great as programs experience funding shortfalls and incentives to share resources grow.

While WisDOT and the ICTC have prioritized coordination and organized sessions to help communities come together and identify opportunities, few strong mandates exist for local providers to communicate with each other. Most programs (with the exception of the Specialized Transportation Assistance Program for Counties and the three federal programs identified above) include no requirement for coordination. Additionally, the future of the ICTC itself is unclear. The group was active in its first several years of development; however, as noted in the group's own 2008 report to Governor Jim Doyle, the Council would benefit from a formalized role and enhanced authority and resources to effectively coordinate transportation at the state level.<sup>83</sup>

Mobility managers can also continue to bolster coordination efforts from the consumer's perspective. These individuals can bring resources together and encourage collaboration among different groups, and funding for such positions has been a priority under New Freedom funding in recent years, though a number of federal programs can provide funding for such positions. This role can be particularly helpful for elderly individuals because they can act as point person for all of the area services and connect individuals with a service based upon needs and eligibility. They can also focus upon raising awareness of existing programs and helping to eliminate duplication with respect to existing services. In addition, they may organize a call center, provide travel training, or start new transit or volunteer driver programs.

An opportunity also exists to help older drivers transition to other alternatives. By working with aging drivers to plan for future mobility, and providing older individuals who lose their license with resources for other options, transportation professionals can help ease a significant transition while building ridership for existing services.

#### 1.9.5 Federal Changes and Uncertainty

Another theme that surfaced relates to the impacts of federal programs and projects, including the American Recovery and Reinvestment Act (ARRA), the 2010 Census, and the uncertainty surrounding the reauthorization of the transportation bill. These uncertainties relate to the lack of stable funding discussed above. While ARRA provided a temporary boost to a number of programs, the impact of federal transportation reauthorization on elderly mobility is uncertain. Requirements, funding levels, and entire programs may shift considerably with a new federal transportation bill. Additionally, the 2010 Census is expected to impact the state's federal transit revenue significantly, particularly for the Federal Formula Grant and the Elderly and Disabled Capital Assistance Programs.

Moving to longer application cycles (like for the 5310/s. 85.22 program, which went from a one year program cycle to a two year cycle about five years ago) reduces administrative costs but forces administrators to make projections on a longer timescale. Additionally, this exacerbates local technical capacity issues, particularly in areas with high administrator turnover.

<sup>&</sup>lt;sup>83</sup> Inter-Agency Council on Transportation Coordination (10/2008).

The FHWA's updated Highway Design Handbook for Older Drivers and Pedestrians is also scheduled to come out in 2011, and may hold a range of new practices guiding roadway design attuned to the needs of older drivers.

#### 1.9.6 Planning and Land Use Considerations

A more minor theme raised in discussions relates to planning with respect to elderly mobility. Many transportation services are designed with the goal of empowering elderly individuals to "age in place" by providing services that allow them to stay in their own homes while maintaining community connections. However, land use patterns may significantly impact the efficiency with which elderly transportation services may be operated. Consideration of elderly mobility impacts in housing and land use plans can provide cost-effective opportunities to connect older individuals with services and activities. Additionally, roadway designs and plans should consider the needs of older drivers and pedestrians.

#### 1.9.7 Feedback and Program Evaluation

Another theme relates to the methods of program evaluation currently practiced by local and state administrators. While standardized metrics are generally not appropriate for specialized transportation services, qualitative data could lead to service improvements. However, many programs lack consumer feedback information about transportation services that could be garnered through surveys or focus groups. In the absence of such data, state program managers generally judge success and failure of local efforts based upon the perceived technical capacity of local administrators, as well as the quality of applications received. First-hand assessments from users or potential users would provide better indications about the degree to which a program is meeting the needs of elderly residents.

#### 1.9.8 Education, Outreach, and Marketing

Heightened education, outreach, and marketing could help address several challenges identified in the course of background research. For instance, putting driver self-assessment information and brochures that clearly outline transportation services available to elderly residents in a specific area could help simultaneously boost utilization of services and help older drivers make the difficult transition to using other mobility options. Additionally, a number of communities rely heavily upon volunteer drivers for at least some transportation services. In areas where a lack of volunteers acts as a barrier, increased marketing and partnerships with local volunteer organizations may increase participation, particularly if potential volunteers are eligible to be reimbursed for expenses. An outreach campaign featuring materials distributed to regional and local facilities like senior centers could help support safer driving habits, better understanding of state policies, and increased awareness of transit services.

# 2. Demographics

By 2030, more than one in five Americans will be over age 65, and one in 11 will be over age 85. As the population of seniors grows, many of its older members—especially women and the disabled—will face serious mobility constraints, often with little family assistance. Wisconsin will not be an exception to this trend. Indeed, counties across the state are expected to see dramatic growth in their elderly populations, often in areas where access to transportation services is constrained by low population densities.

According to a 2005 study by the University of Wisconsin – Milwaukee's Employment and Training Institute, 177,399 elderly persons in Wisconsin lack a drivers license or state-issued photo ID out of a total population of 780,947 persons over age 65. Only 38,199 persons, or approximately 5 percent, reside in a nursing home.<sup>84</sup> As some nursing home residents may still hold a valid driver's license, a significant portion of elderly Wisconsinites who live independently lack automobility. The study notes that 70 percent of unlicensed seniors are female; older women are also more likely to live alone due to having never married or been widowed or divorced, resulting a disparity between older men and women in the availability of a spouse for assistance with transportation difficulties.

The following graphs, tables, and maps detail the research team's analysis of the demographic characteristics of Wisconsin's elderly population.

## 2.1 Demographic Predictions

According to the Wisconsin Department of Administration's Demographic Service Center, the number of Wisconsinites age 65 and over is expected to grow by 89.9 percent from 2010 to 2035, while the general population will only increase by 15.3 percent. In absolute terms, there will be 702,760 more elderly residents (65 and over) in Wisconsin by 2035 than in 2010. By 2035, elderly residents will comprise nearly a quarter of the population.<sup>85</sup>

	2010	2015	2020	2025	2030	2035	2010 to 2035 65+ Pop. Growth	2010 to 2035 65+ Growth Rate
65 & Over (Pop.Share)	782,810 (13.6%)	900,170 <i>(15.0%)</i>	1,060,620 <i>(17.1%)</i>	1,243,600 <i>(19.5%)</i>	1,402,900 <i>(21.4%)</i>	1,485,570 <i>(22.3%)</i>	702,760	89.8%
85 & Over (Pop.Share)	123,980 <i>(</i> 2. <i>1%)</i>	135,460 <i>(</i> 2. <i>3%)</i>	139,780 <i>(</i> 2. <i>3%)</i>	148,980 <i>(</i> 2.3%)	173,600 <i>(</i> 2.7%)	222,550 <i>(</i> 3.3%)	98,570	79.5%
All Ages	5,772,370	5,988,420	6,202,810	6,390,900	6,541,180	6,653,970	881,600	15.3%

Table 2.1: Demographic Projections of Elderly and General Population Growth, 2010-2035

<sup>&</sup>lt;sup>84</sup> Pawasarat, John. (2005, June). *The Driver License Status of the Voting Age Population in Wisconsin*. Retrieved March 27, 2010 from Employment and Training Institute, University of Wisconsin-Milwaukee: http://www4.uwm.edu/eti/barriers/Driversl.icense.pdf

http://www4.uwm.edu/eti/barriers/DriversLicense.pdf<sup>85</sup> Wisconsin Department of Administration, Demographic Service Center. (2009, May) Population Projections.
Since the elderly population is anticipated to grow at a rate much faster than that of people under age 65, their share of the state's population is expected to increase rapidly. As shown below in Figure 2, the population over age 65 is expected to grow from 13.9% in 2010 to 22.3% in 2035; the population share of those over age 85 will grow more modestly, but still expand from 2.1% to 3.3% over the same time period. <sup>86</sup> In short, the demands placed on transportation services for seniors are likely to expand greatly, while the size of the working-age population will grow much more slowly.





Changes will also be seen within the expanding population of elderly residents. Wisconsin's population pyramid will take on a vastly different shape over the next 25 years as baby boomers retire and life expectancy continues to grow. While elderly women significantly outnumber elderly men in 2010, the margin will be greater yet in 2035. In 2035, women age 85 and over will comprise a 4.2% share of the total female population, while men age 85 and over will only comprise a 2.29% share. In 2010, men over 65 comprise 11.6% of the male population, which is expected to grow to 19.9% in 2035. Elderly women make up a greater percentage of the female population; their share of 15.0% in 2010 is expected to rise to 23.5% by 2035.

As shown in population pyramids below (figures 3 and 4), the oldest age groups will become significantly larger, while the percentages of both men and women of working age (15-64) will decline universally across age categories. The 'top-heaviness' of the projected 2035 pyramid is representative of the challenges posed by the aging of baby boomers

<sup>&</sup>lt;sup>86</sup> Ibid.



#### Figure 2.2: 2010 Population Pyramid





Wisconsin, 2035

## **2.2 County-Level Predictions**

While Wisconsin's elderly population is anticipated to grow across the state, great variations exist between different regions in the magnitude of this growth. Based on the same Department of Administration data used above, we analyzed county-level projections of elderly population growth.

Across the state, the elderly share of population is projected to increase in every county between 2010 and 2035. Many Wisconsin counties will see their elderly populations double, and St. Croix County's 65 and over population is expected to nearly triple, increasing by 188%. While no county's elderly population share currently exceeds 25%, over half of Wisconsin's counties will exceed this level by 2035. Seniors will make up at least a third of the populations of 11 counties, and nearly half of Door County will be age 65 or older. In absolute terms, Dane County will experience the largest growth in its elderly population, increasing by 73,091. Milwaukee County and Waukesha County, growing at 56,813 and 46,470, respectively, will experience the next-highest elderly population increase.

County	2010 65+ Population	2035 65+ Population	2010 65+ Share	2035 65+ Share	2010-2035 65+ Pop. Growth
Adams	4590	9624	21%	38%	110%
Ashland	2625	4276	15%	25%	63%
Barron	8479	16244	18%	30%	92%
Bayfield	2973	5808	18%	32%	95%
Brown	28757	62987	11%	20%	119%
Buffalo	2514	4226	18%	28%	68%
Burnett	3853	7129	23%	38%	85%
Calumet	5328	13322	11%	19%	150%
Chippewa	9423	19004	15%	25%	102%
Clark	5039	7413	14%	18%	47%
Columbia	8126	15699	14%	23%	93%
Crawford	2950	4942	17%	27%	68%
Dane	50229	123320	10%	19%	146%
Dodge	12561	22494	14%	22%	79%
Door	6959	13994	23%	44%	101%
Dunn	5279	12663	12%	23%	140%
Eau Claire	12994	26682	13%	22%	105%

#### Figure 4: Elderly Population Projections by County

County	2010 65+ Population	2035 65+ Population	2010 65+ 2035 65+ Share Share		2010-2035 65+ Pop. Growth
Fond du Lac	15104	27198	15%	23%	80%
Forest	2233	3766	22%	37%	69%
Grant	8321	14710	16%	28%	77%
Green	5466	10800	15%	23%	98%
Green Lake	3583	5821	18%	29%	62%
Iowa	3171	6697	13%	23%	111%
Iron	1669	2701	24%	39%	62%
Jackson	2924	5022	14%	21%	72%
Jefferson	10573	20076	13%	20%	90%
Juneau	4524	8323	16%	27%	84%
Kenosha	18031	35438	11%	17%	97%
Kewaunee	3309	6233	15%	24%	88%
La Crosse	15072	29786	13%	23%	98%
Lafayette	2586	4135	16%	25%	60%
Langlade	4326	7560	20%	32%	75%
Lincoln	5416	9176	17%	27%	69%
Manitowoc	13607	23089	16%	25%	70%
Marathon	18804	36250	14%	22%	93%
Marinette	8798	15383	19%	33%	75%
Marquette	2976	5389	19%	31%	81%
Menominee	502	867	11%	24%	73%
Monroe	6162	11564	14%	21%	88%
Oconto	6303	13799	16%	27%	119%
Oneida	8087	13975	21%	33%	73%

County	2010 65+	2035 65+	2010 65+	2035 65+	2010-2035
Ozaukee	13023	24524	15%	24%	88%
Pepin	1297	2319	17%	26%	79%
Pierce	4466	11476	11%	21%	157%
Polk	7749	16758	16%	28%	116%
Portage	8874	19753	12%	24%	123%
Price	3150	5627	20%	35%	79%
Racine	25761	45254	13%	21%	76%
Richland	3136	4803	17%	26%	53%
Rock	21515	37220	13%	20%	73%
Rusk	3009	4987	19%	32%	66%
St. Croix	9365	26988	11%	18%	188%
Sauk	9160	19388	15%	24%	112%
Sawyer	3435	6804	19%	33%	98%
Shawano	7210	12455	17%	26%	73%
Sheboygan	16310	29056	14%	21%	78%
Taylor	3178	5585	16%	28%	76%
Trempealeau	4649	8144	16%	25%	75%
Vernon	4949	8230	16%	23%	66%
Vilas	5654	9900	25%	38%	75%
Walworth	14328	32468	14%	24%	127%
Washington	17536	39894	13%	24%	127%
Waukesha	56131	102601	14%	23%	83%
Waupaca	9710	17478	18%	30%	80%
Waushara	4777	8522	19%	31%	78%
Wood	13439	23426	17%	30%	74%

The rates of growth in elderly populations across Wisconsin counties do not necessarily correlate with current populations: many counties expected to see dramatic increases in their over-65 population currently have comparatively small numbers of elderly residents. As shown in Figure 6 (below), Milwaukee County currently constitutes the largest number of the state's seniors but is projected to grow at a much slower rate than the majority of the state. Conversely, many counties with small elderly populations, especially in the northern and western regions of the state, are expected to experience rapid growth.

# **Current Elderly Population** and Projected Elderly Population Growth Rates by County Population Growth Rate, 2010 to 2035, Residents Aged 65 or Older 47% - 71% In this cartogram, county land areas have been recalculated to represent 72% - 78% their share of the state's older residents. Areas with disproportionately high 79% - 90%

#### Figure 5: Elderly Population Cartogram

91% - 109%

110% - 188%

numbers of residents aged 65 or older appear larger than their actual area, while areas with relatively few seniors appear smaller. For example, 14.5% of Wisconsin seniors live in Milwaukee County, which occupies less than 2% of Wisconsin's land area. Therefore, Milwaukee County is represented as much larger (approximately 7.25 times its land area) than actual size.

# 2.3. Socioeconomic Characteristics

In order to further characterize the resources, needs, and challenges of the state's current and future elderly population, we examined socioeconomic indicators, including religious adherence, poverty rate, access to healthcare, and access to food.

Data on religious adherence, as measured and defined by the Association of Statisticians of American Religious Bodies, was obtained for Wisconsin counties. Adherence rates ranged from 28% to 96% (see Figure 7, below) with a statewide average of approximately 69%.<sup>87</sup> While this data is not specific to older Wisconsinites, who may attend religious services more frequently than the population as a whole, it suggests variation between counties in both the needs of older adults for transportation to and from religious events (often on weekends), and the capacity of churches and other religious communities to act as service providers, coordinators, or resources for publicizing and/or staffing transportation services for the elderly.

Across the state, approximately 7.4 percent of Wisconsinites over 65 are estimated by US Census Bureau's Current Population Survey to be below the poverty line. By county, poverty rates for seniors vary from 4.0 to 13.4 percent. For obvious reasons, seniors in poverty are likely to encounter increased difficulties obtaining adequate transportation, and even low-cost transportation services may constitute a financial burden.

Lack of adequate transportation can be especially harmful to older residents of areas with poor access to grocery stores and other sources of nutritious food. According to USDA estimates, 26,498 elderly Wisconsin residents reside within designated food deserts-areas lacking access to supermarkets within a reasonable distance. However, this figure may understate the number of rural seniors with limited access to food: food deserts in rural areas are limited to areas over 20 miles, a "drivable distance," from supermarkets.<sup>88</sup>

According to the Dartmouth Atlas of Health Care's 2006 statistics on healthcare availability, the 127 Hospital Service Areas (HSAs) serving Wisconsin (as well as residents of neighboring states, in some cases) have an average of two available hospital beds, four registered nurses, and 15 full-time equivalent hospital employees per thousand residents. Per 100,000 residents, the state's HSAs employed 213 doctors of all specializations, and 90 primary care physicians. These figures compare to national averages of 2.41 hospital beds, 3.69 nurses, 14.0 full-time equivalent employees, 202.0 doctors, and 71.9 primary care physicians.<sup>89</sup>

<sup>&</sup>lt;sup>87</sup> Association of Statisticians of American Religious Bodies. "Religious Congregations and Membership Study, 2000." <sup>88</sup> Ver Ploeg *et al.* "Access to Affordable and Nutritious Food—Measuring and Understanding Food Deserts and Their Consequences." USDA Economic Research Service, 2009.

<sup>&</sup>quot;Hospital and Physician Capacity." The Dartmouth Atlas of Health Care, 2006.

#### Figure 6: Religious Adherence Rates



Data Archives' Religious Congregations and Membership Study, 2000.

# 3. Elderly Input: Surveys and Focus Groups

The research team gathered input from elderly residents in two ways: surveys and focus groups. Our aim was to document elderly Wisconsinsites' transportation habits, ascertain their satisfaction with current programs and services, and identify concerns and potential service gaps. We administered the Wisconsin Transportation Services Survey for Older Residents to reach a diverse cross-section of elderly residents and quantify transportation habits and needs. Concurently, we hosted 16 separate forums around the state, with a particular emphasis on visiting rural areas. For broader qualitative data coverage, we also visited two gatherings of Wisconsin's tribal nations.

# 3.1 Wisconsin Transportation Services Survey for Older Residents

#### 3.1.1 Survey Design

The research team created a survey that would reflect the mobility challenges of Wisconsin seniors by drawing upon studies undertaken elsewhere in the United States. We tailored the survey to the particular programs and services available in Wisconsin, and time and financial constraints of the project. In particular, the research team opted for a market research design of the survey, rather than a scientific sample. Although the results cannot be reliably generalized to characterize Wisconsin's elderly population as a whole, the results do provide guidance on certain trends across Wisconsin and specific to particular regions.

In the early stages of the design process, the research team examined several transportation surveys aimed at the general public, conducted by Wyandotte County, Kansas; Grand Island, Nebraska; and New Jersey Transit.<sup>90,91,92</sup> These surveys sought to identify current transportation usage, gather information about transportation difficulties (in terms of times, geography, and activities), and profile current and potential users of transportation services. Our goals in this survey were similar but more focused. In some cases, language and structure from these transportation surveys suited our needs. For example, the structure of questions examining what service qualities elderly residents would require to consider using public transportation was taken from Grand Island's TAP Transportation Survey. In general, questions regarding usage of and satisfaction with transportation options were modeled on existing surveys, with modifications relevant to the options available in Wisconsin communities.

However, the research team expanded on these surveys in several ways. As publicity has been identified as a potential stumbling block to greater utilization of transportation services for the elderly, we sought to determine the degree to which older Wisconsinites were aware of transportation options in their community, in addition to the transportation services they currently use. Additionally, we wanted to obtain a more detailed picture of respondents' health than whether or not respondents considered themselves disabled was considered desirable: some conditions that may be considered a 'disability' do not impair ability to drive or use transportation services, although seniors who are ill or frail but not disabled may nevertheless experience transportation difficulties. We developed metrics of health in consultation with a University of Wisconsin epidemiologist.

The research team oriented requested demographic information towards identifying factors that could increase or decrease access to transportation, including income, marital status,

<sup>&</sup>lt;sup>90</sup> "Wyandotte County Community-Based Transportation Survey." Wyandotte County, Kansas.

<sup>&</sup>lt;sup>91</sup> "TAP Transportation Survey for Residents," Grand Island, Nebraska.

<sup>&</sup>lt;sup>92</sup> "Passenger Transportation Survey," New Jersey Transit, 2006.

household composition, type and area of home, disability status, and English language proficiency. These factors may all have an impact on the elderly person's resources for getting the transportation they need and their ability to use public transportation services.

Throughout the survey design process, the research team worked to balance a desire for precise and detailed information—for example, soliciting opinions on specific service characteristics of a favored mode, as opposed to overall assessments—with the need to develop a concise instrument that would not be perceived as an undue burden by respondents, including those with age-related attention or cognitive deficits. Although the large number of completed responses we received indicates that these competing priorities were well-balanced, at least one county reported that older residents had found the survey too long.

#### 3.1.2 Survey Distribution

The survey was distributed in printed format and online. For the printed format, Gail Schwersenska, director of the Office on Aging for the Wisconsin Department of Health Services, solicited orders from the Wisconsin Aging Network. The Wisconsin Aging Network consists of staff from County Aging Units, Tribal Aging Units, and Aging and Disability Resource Centers (ADRC). The Aging Network submitted requests for 21,625 paper copies of the survey. Nearly 80 percent of counties (56 of 72 counties) submitted requests. The number of requests ranged from 2,000 surveys for La Crosse County to 50 surveys for several counties, including Monroe, Pepin, and Lafayette. The research team mailed the surveys in December 2010 and collected them at the end of February 2011.

For the online version of the survey, the research team generated custom links for all 72 counties and 11 tribal nations. The links directed survey respondents to a website hosted by Qualtrics Survey Software. Each link contained a unique identifier for each county and nation, which allowed the research team to track distribution and send targeted follow-up notifications. The research team e-mailed the links and distribution instructions to the directors of the Aging Units and ADRCs in December 2010.

When staff from the Aging Network received printed and online versions of the survey, they primarily distributed it in four ways. First, Aging Network staff placed the survey in a highly visible areas in local senior centers or places frequently visited by seniors, including banks, grocery stores, and clinics. Some local senior centers designated computers with which to take the online version of the survey. Second, Aging Network staff distributed the survey to elderly service providers, including public and specialized transit staff and assisted living facility attendants. Third, Aging Network staff published a notification of the survey and its corresponding link in local newspapers and senior-focused newsletters. The research team drafted sample notifications with instructions for seniors to obtain directly a copy of the survey. These notifications resulted in a high number of surveys mailed independently by seniors from around the state. Fourth, Aging Network staff allowed the research team to distribute and collect surveys at each of the 16 focus groups hosted for this study.

Although the research team identically distributed surveys to Aging Network staff, each locality selected its own on-the-ground distribution method, consistent with one of the four methods described above. The distribution aimed to maximize response rates and geographic and demographic diversity, provide flexibility for different local conditions, and minimize added burden to Aging Network staff. As a result of differing on-the-ground distribution methods, the research team lost some comparability of its results but gained a broader picture of the transportation needs and habits of Wisconsin seniors.

#### 3.1.3 Survey Response Rates

The survey received 4,099 responses in printed and online formats from 69 of 72 counties. One of the three counties without responses—Clark County—received 114 responses for its own senior transportation survey administered in July and August 2010.<sup>93</sup> The two other counties without responses—Pierce<sup>94</sup> and Marinette Counties<sup>95</sup>—compiled comprehensive needs assessment and human services transportation plans with a public input component. Many counties, such as Dunn, Ozaukee, and Eau Claire, completed independent studies in recent years and sent responses to this survey. Thus, the research team received direct input from nearly 96 percent of counties and had access to information on all counties. Figure 3.1 below shows the broad geographic coverage of the survey.



#### Figure 3.7: Survey Responses by Zip Code

<sup>&</sup>lt;sup>93</sup> Internal data provided by Mary Sladich on December 9, 2010.

<sup>&</sup>lt;sup>94</sup> For Pierce County, see http://psrc.org/assets/1730/PCCTC\_Plan.pdf and

http://www.co.pierce.wa.us/xml/abtus/ourorg/comsvcs/housing/NeedsAssmnt2008finaldocument.doc.pdf <sup>95</sup> For Marinette County, see http://www.newrat.org/counties/coord\_plans/florence-marinette-oconto.pdf

The paper version of the survey received 3,600 responses and the online version received 499 responses. The research team manually entered the paper responses with a protocol for dealing with ambiguous responses (See Appendix E). With 21,625 total paper copies distributed, the paper survey had a 16.6 percent response rate. Because nearly 85 percent of respondents who began the online survey completed it, the research team surmises a number of counties did not distribute a high percentage of the surveys mailed.

#### 3.1.4 Survey Response Coverage

The geographic distribution of responses closely tracked elderly population densities. In other words, the areas with highest elderly populations also had the most survey responses. Additionally, counties for which elderly residents comprise a large percentage of the population, such as Door County, have proportionally higher response rates. Figure 3.2 shows the relationship between survey responses and elderly population distributions.



#### Figure 3.8: Survey Responses and Elderly Population Distribution

County population figures provided by the Wisconsin Department of Administration Demographic Services Center.

As indicated by Figure 3.2, Milwaukee and Dane County-the two counties with the highest elderly populations in the state—have two of the highest survey response rates. Not only did these counties return a high number of responses, they returned broad geographic distribution within the counties themselves. Figure 3.3. shows the responses by zip code within the counties, suggesting effective on-the-ground distribution methods.



#### Figure 3.9: Survey Responses for Dane (left) and Milwaukee (right) Counties

#### 3.1.5 Survey Responses—Demographics

The survey asked respondents for information about their age, neighborhood, living situation, race, ethnicity, health, and income. The research team compared these results to established benchmarks, including the American Community Survey and the National Health Interview Survey. Where the survey and benchmarks substantively differed on critical variables, the research team conducted additional analysis.

*Age.* Wisconsin residents age 65 and over comprised the target demographic of the survey. As shown by Table 3.1 below, over 80 percent of respondents reported ages over 65, and nearly 20 percent of respondent reported ages over 85. Based on U.S. Census data described in the Demographic Analysis section, the survey overdrew from the 75 to 84 demographic. To gain broader input from all users of specialized and public transit services and to provide some insight into emerging needs, the research team did not exclude respondents below age 65. Instead, the research team performed an age group results comparison, which is detailed in Appendix E.

#### Table 3.2: Responses by Age

Answer	%
Under 60 years	8.62%
60-64 years	9.80%
65-74 years	30.35%

75-84 years	31.54%
85-94 years	18.29%
95 years or older	1.40%

*Area.* As suggested by the survey response maps in section 3.1.4, survey respondents consisted of a mix of urban, suburban, and rural areas. The research team asked respondents to pick one of the three as the best description of their own neighborhood. As shown by Figure 3.4 below, about 40 percent reported rural, 35 percent reported urban, and 25 percent reported suburban. U.S. Census and recent University of Wisconsin scientific polling data on Wisconsin rural characterizations are largely consistent with the survey results. The survey slightly overdrew from urban areas, likely a result of transportation service usage rates.<sup>96</sup>



Figure 3.10: Respondents by Characterization of Area

*Sex.* Over 68 percent of survey respondents reported their sex as female. As detailed in the Demographic Analysis section, women comprise a much larger share of the elderly population than men; in 2010 about 60 percent of all Wisconsinites age 65 and over are female.<sup>97</sup> However, the survey overdrew from females by about 8 percent. The research team performed a comparison of the sexes in Appendix G.

*Marital status and residency occupancy.* Based on the literature and the research team's focus groups, one of the most critical determinants for mobility was a relationship with an able driver.<sup>98,99</sup> As shown in Table 3.2 and Figure 3.5 below, over 40 percent of respondents reported being widowed, and over 45 percent of occupants reported having no other occupants

<sup>&</sup>lt;sup>96</sup> For UW survey data, see http://www.uwsc.wisc.edu/BP32PressRelease3\_WIregions\_FINAL.pdf. For a more thorough explanation of Wisconsin spatial distributions, see http://www.hindawi.com/journals/ijpr/2011/856534/ <sup>97</sup> Wisconsin Department of Administration, Demographic Service Center. (2009, May.) Population Projections.

 <sup>&</sup>lt;sup>98</sup> Rosenbloom, S. (2003, July). The Mobility Needs of Older Americans: Implications for Transportation Reauthorization. Retrieved March 27, 2010, from The Brookings Institution, Center on Urban and

Metropolitan Policy:

http://www.brookings.edu/~/media/Files/rc/reports/2003/07transportation\_rosenbloom/20030807\_Rosen bloom.pdf

<sup>&</sup>lt;sup>99</sup> Bailey, L. (2004, April). Aging Americans: Stranded without Options. Retrieved March 27, 2010, from Surface Transportation Policy Project: http://www.transact.org/library/reports\_html/seniors/aging.pdf

in their homes. The survey results are consistent with Census data, although it overdrew respondents who were never married.<sup>100</sup> The research team performed a comparison of responses based on marital status in Appendix H.

Answer	%
Never married	9.88%
Separated or divorced	15.27%
Widowed	40.81%
Married	34.04%

#### Table 3: Respondents by Marital Status



#### Figure 11: Respondents by Other Occupants in Residence

*Race, Ethnicity, and Language.* Nearly 91 percent of respondents reported White as their race, higher than the 86 percent calculated by the U.S. Census.<sup>101</sup> With 1.63 percent reporting Black as their race and 1 percent reporting Hispanic as their ethnicity, the survey underdrew from these populations by about 4 percent. About 11 percent reported English as their second language, which is consistent with U.S. Census estimates. However, the research team intentionally overdrew from American Indian or Alaska Native population through aggressive outreach efforts, including two site visits at tribal conferences. The results from these outreach efforts are in Appendix F. The research team engaged in these efforts as a result of the unique structure and funding sources of tribal transit programs. Table 3.3 below shows the racial composition of the survey.

<sup>&</sup>lt;sup>100</sup> For Census data, see http://www.census.gov/hhes/www/laborfor/Working-Beyond-Retirement-Age.pdf

<sup>&</sup>lt;sup>101</sup> For U.S. Census information for Wisconsin, see http://quickfacts.census.gov/qfd/states/55000.html

#### Table 3.4: Respondents by Race

Answer	%
White	90.81%
American Indian or Alaska Native	5.82%
Black or African American	1.63%
Asian or Pacific Islander	0.52%
Other, please describe:	1.22%

*Health status.* Over 75 percent of survey respondents reported their health as good or better. These results were almost identical to the National Health Interview Study (NHIS) data from 2007 to 2009, in which 77 percent of respondents from the Midwest reported their health as good or better.<sup>102</sup> The distribution of results were also similar, with 35 to 40 percent of respondents reporting good and about 20 to 25 percent reporting fair or poor. Figure 3.6 below shows the distribution of respondents by health status.



#### Figure 3.12: Respondents by Health Status

*Physical functioning difficulties.* Related to their responses to health status, survey respondents reported functional limitations that critically affect mobility. For example, about 56 percent of respondents reported difficulty walking one-quarter mile, with 20 percent unable to do. A majority of respondents also reported difficulty both hearing and remembering things people tell them. These results were consistent with the Medicare Beneficiary Study (MCBS) in 2008, with the survey usually slightly titled toward respondents reporting more difficulty.<sup>103</sup> For example, 27 percent of MCBS respondents reported difficulty grasping small objects, compared to 38 percent in this survey. Table 3.4 below summarizes respondents' functioning difficulties.

<sup>&</sup>lt;sup>102</sup> For CDC NHIS data, see http://205.207.175.93/HDI/TableViewer/tableView.aspx

<sup>&</sup>lt;sup>103</sup> For MCBS data, see http://205.207.175.93/HDI/TableViewer/tableView.aspx

Question	Unable to Do	A Lot of Difficulty	Some Difficulty	A Little Difficulty	No Difficulty
Reading ordinary print in newspapers	3.41%	4.56%	12.13%	18.10%	61.80%
Reading street signs or the names of stores	2.34%	3.10%	9.03%	14.09%	71.45%
Hearing things people tell you	0.80%	6.50%	16.16%	29.39%	47.15%
Walking a quarter of a mile	18.63%	10.23%	12.30%	15.13%	43.71%
Lifting, or carrying objects as heavy as 10 pounds	11.56%	10.45%	15.88%	15.66%	46.46%
Handling or grasping small objects	1.88%	5.81%	13.24%	16.91%	62.17%
Losing control of your body	1.35%	2.32%	8.97%	13.40%	73.96%
Losing consciousness	1.64%	0.45%	1.64%	3.70%	92.56%
Making plans or decisions	0.82%	1.78%	7.04%	14.87%	75.49%
Remembering things people tell you	1.03%	4.17%	13.65%	33.05%	48.10%
Concentrating on one thing at a time	0.64%	2.44%	9.49%	20.42%	67.01%
Losing interest in things you usually enjoy	1.05%	2.69%	9.06%	17.34%	69.85%
Feeling sad, empty, or depressed	1.47%	3.80%	11.09%	20.66%	62.98%

#### Table 3.5: Respondents by Physical Functioning Difficulties

*Work and Income.* About 87 percent of survey respondents reported they were retired, although about half do volunteer or paid work outside of their homes. The time spent in volunteer or paid work was most often 1 to 9 hours. These results were consistent with national averages, where Wisconsin has lowest percentage of retirees working more than 35 hours per work.<sup>104</sup> Survey respondents reported a wide range of incomes, most heavily concentrated in the \$10,000 to \$24,999 range. Compared to the Current Population Survey (CPS) Annual Social and Economic Supplement, the survey overdrew respondents making less than \$25,000 and underdrew respondents making \$75,000 per year. For example, he 2008 CPS reported 7 percent of

<sup>&</sup>lt;sup>104</sup> For news article on retirement percentages, see [insert]

respondents below \$10,000 income, compared to nearly 18 percent in this survey.<sup>105</sup> Table 3.5 and Figure 3.7 below show work and income distributions for the survey. The research team performed an analysis of survey results based on income in Appendix D.

Answer	%
Do not do paid or volunteer work	50.08%
1 to 9 hours	30.09%
10 to 19 hours	8.49%
20 to 29 hours	5.39%
30 to 39 hours	2.40%
Greater than 40 hours	3.55%

Table 3.6: Respondents by paid work or volunteer hours



#### Figure 3.13: Respondents by Income

#### 3.1.6 Survey Responses—Transportation Habits

The first objective of the survey was to capture a snapshot of the transportation habits of the Wisconsin elderly population. The research team asked respondents about their selection of transportation modes, their reasons for selecting their most frequently taken mode, and their

<sup>&</sup>lt;sup>105</sup> For CPS income data, see http://www.census.gov/cgi-bin/broker.

overall satisfaction with their most frequently taken mode. The survey contained specific questions on driving, including questions on license renewal, accidents, and adaptive equipment. Finally, the research team specifically inquired about public and specialized transit use, preferences, and satisfaction. The selection of topics in the survey corresponds with the overview of topics in the Current Practices and Best Practices sections.

*Modal choice*. A vast majority of survey respondents reported driving on a regular basis. As shown by Table 3.6 and Figure 3.8 below, nearly 46 percent reported driving every day, and only 26 percent reported rarely or never driving. Outside of walking, no other mode had more than 10 percent of respondents report every day use; the next most frequent modal choice selection was private auto use as a passenger. About 80 percent reported a private automobile as their most frequent transportation mode. Despite high auto use percentages, ACS data indicates the survey underdrew private auto users by 10 percent, as shown by Figure 3.9.

Among public and specialized transit modal choice, bus had the most frequent usage with about 18 percent, with nearly ten percent at few times per week or more. About 5 percent of respondents reported bus as their most frequent mode of transportation. Respondents reported similar levels of taxi, mini-bus, biking, and paratransit service use, ranging from 8-12 percent.

Question	Rarely or Never	A Few Times Per Month	A Few Times Per Week	Every Day
Private auto (you are the driver)	26.08%	5.50%	22.56%	45.86%
Private auto (you are the passenger)	28.41%	35.81%	26.87%	8.91%
Bus	81.74%	8.41%	6.49%	3.36%
Taxi (you are the only passenger)	88.69%	8.11%	2.59%	0.61%
Taxi (shared ride with other passenger)	90.13%	6.20%	2.98%	0.69%
Mini-bus	89.00%	7.47%	2.63%	0.89%
Paratransit service	91.76%	4.14%	3.27%	0.83%
Biking	87.77%	7.20%	3.89%	1.14%
Personal motorized device	92.48%	2.19%	2.12%	3.21%
Walking	37.38%	19.97%	19.76%	22.89%

#### Table 3.7: Respondents by Modal Choice



Figure 3.14: Respondents by Type of Transportation Used Most Often

Figure 3.15: Comparison of American Community Survey and WTSSOR Modal Choice



*Reasons for Modal Choice.* Respondents reported convenience, flexibility, and speed as their strongest reasons for selecting their most frequent modal choice. As shown by Table 3.9, cheapness, safety, and restricted choice ranked lower. Given most respondents selected private auto as their most frequent modal choice, these preferences largely explain why respondents chose to drive—a car can take respondents where they want to go, when they want to go, and the costs of driving are generally not judged to be prohibitive.

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
It is cheaper	9.83%	19.52%	33.93%	20.81%	15.91%
It is physically easier to board/operate	4.32%	6.38%	42.62%	31.52%	15.16%
It is more convenient	5.19%	1.79%	38.61%	49.09%	5.32%
It is faster	4.84%	5.85%	37.28%	43.55%	8.47%
It is more reliably on time	4.21%	4.07%	39.01%	43.56%	9.15%
It allows me to go to a wider variety of destinations	5.00%	4.44%	35.98%	48.22%	6.35%
It allows me go to more destinations in one trip	5.91%	4.76%	35.54%	46.57%	7.23%
It is safer	4.97%	14.30%	39.13%	25.12%	16.48%
It is the only kind of transportation available	11.19%	22.45%	25.56%	24.39%	16.41%

#### Table 3.9: Reasons for Most Frequent Modal Choice

Satisfaction level with most frequent modal choice. Respondents reported high satisfaction with their most frequent modal choice, with the majority reporting they are very satisfied. The private auto had higher levels of satisfaction than almost every other mode. About 59 percent of drivers were very satisfied with the private auto, compared to 42 percent who most frequently ride the bus and 39 percent who most frequently take an individual taxi. Mini-buses had higher satisfaction levels compared to other modes, with about 54 percent respondents reporting very satisfied. Shared ride taxis had lower levels of satisfaction compared to other modes, with about 38 percent of respondents reporting very satisfied. Figure 3.17 below shows aggregate satisfaction levels.





Additional Driving Information. About six percent of respondents reported involvement in an accident or injury while driving over the past two years. Respondents reporting accidents or injuries skewed younger; respondents over age 75 reported a disproportionately low number of accidents. For example, respondents age 75 to 84 comprised 18 percent of survey responses and nine percent of accident responses. About four percent of respondents reported difficulty when they last renewed their drivers' licenses, and three percent reported adaptive equipment on their vehicles. For respondents reporting difficulty with license renewal, the distribution of respondents by age was proportional to the number of survey responses by age. Appendix C shows aggregate responses to specific questions on driving.

*Public or Specialized Transportation Choice.* Although predominant modal choice is private auto, about 40 percent of respondents reported using public or specialized transit services within the last two years. Amongst those services, respondents reported local aging office services as the most frequent modal choice, followed by local bus and medical transportation services. Over half of respondents who used public or specialized transit services used one or more of these three services. Slightly less than half of transit-using respondents reported use of shared ride taxi services. Respondents least frequently used veteran and medical transportation services, with nearly a quarter reporting they never heard of these services. Figure 3.18 and Table 3.10 below show aggregate public and specialized transportation choice.



Figure 3.18: Type of Transit Service Used Most Often

Table 3.10: Respondents by Modal Choice

Question	Never Heard of These Services	Never Use These Services	Sometimes Use These Services	Frequently Use These Services
Medical transportation services	6.78%	47.25%	31.73%	14.24%
Employment transportation services	23.14%	71.33%	3.11%	2.42%
Veteran transportation services	20.07%	74.96%	3.52%	1.46%
Local aging office or senior center transportation services	9.81%	41.06%	29.66%	19.47%
Local bus services	10.74%	46.23%	26.07%	16.97%
Local shared taxi services	11.07%	57.26%	21.82%	9.84%
Other public transportation services	15.73%	57.33%	20.00%	6.93%

*Public or Specialized Transportation by Geography.* Depending on the county, respondents reported 13.7 percent to 65.7 percent public and specialized transportation usage rates. Figures 3.19 displays reported public or specialized transit use by county. Public and specialized transportation choice by county was likely affected by the survey distribution method, but respondents in counties with higher elderly populations were more likely to report local aging office service use. Figures 3.20 and 3.21 show reported type of public transportation use by county.



Figure 3.19: Transit Service Use, by Geography

#### Figure 3.20: Type of Transit Service Used Most Often, by Geography



Favored Modes of Transportation Among Residents Age 65 And Older



Figure 3.21: Type of Transit Service Use, by Geography

# Reported Use of Public Transportation By Mode Respondents Using Public Mode 5.1 - 15.0% Insufficient Data 15.1 - 25.0% 0 - 5% 25.1 - 36.8% Other Local Bus Shared Ride Taxi

Reasons for Most Frequent Public or Specialized Transportation Choice. Respondents reported the locations pick-up and drop-off points as their most important reasons for their public or specialized transportation choice. Safety, prompt arrival, affordability and accessibility all also highly ranked as important determinants of modal choice. Wait times and availability on short notice ranked lower in terms of importance. Respondents reported physical and language help with service use as the least important reasons for modal choice, but respondents with poor health or with English as a second language valued these factors significantly more highly. Figure 3.11 shows the aggregate importance of factors influencing transit modal choice.

Question	Not Important	Slightly Important	Somewhat Important	Very Important
Fares are affordable	7.56%	7.16%	24.34%	60.94%
Transit stops are near or at my home	9.05%	4.40%	14.11%	72.45%
Transit stops are near or at places I want to go	8.62%	3.33%	14.51%	73.55%
I can reach my destination without a transfer	13.04%	7.40%	19.43%	60.13%
Wait times are short	9.41%	6.59%	27.03%	56.97%
Transit is available on short notice	11.93%	10.72%	27.57%	49.78%
Transit reliably arrives on time	6.57%	4.11%	22.19%	67.13%
Vehicles are easy to board	7.15%	6.10%	20.96%	65.78%
Transit is safe and secure	5.34%	3.72%	17.23%	73.71%
Transit system can work around language barriers	44.04%	13.76%	16.88%	25.32%
Someone helps me use the service	28.94%	11.47%	18.75%	40.84%

Satisfaction with Most Frequently Used Transit Service. Respondents reported overwhelming satisfaction with the type of transit service they used most often. As shown by Figure 3.21, over 90 percent reported they were satisfied or very satisfied with their service. Respondents' aggregate satisfaction levels with their most frequently used public transit service were similar to their satisfaction levels with their most frequently used modal choice overall (most often private auto). As shown by Figure 3.22, respondents' satisfaction levels with public transit was even geographically similar satisfaction levels with private auto.



Figure 3.21: Satisfaction with Type of Transit Service Used Most Often

Figure 3.22: Satisfaction with Type of Transit Service Used Most Often, By Geography

Reported Satisfaction with Automotive and Public Modes



#### 3.1.7 Survey Responses—Transportation Needs

The first objective of the survey was to capture a snapshot of the transportation needs of the Wisconsin elderly population. The research team asked respondents about their time, activity, and reason for mobility difficulty.

*Time of Mobility Difficulty.* Nearly three-quarters of survey respondents reported no mobility difficulty at any time. The least frequent times of mobility difficulty were weekend mornings and weekday afternoon, perhaps a result of decreased demand. The most frequent time of mobility was weekend evenings, a time with many social events but lower transit availability. As shown by Figure 3.23, although the absolute percentage of respondents reporting a time of mobility difficulty was relatively even across different times, respondents reported difficulty on weekend evenings about a third more often than on weekend mornings. Figure 3.24 shows as much as 36 percent of respondents report difficulty on weekend evenings in some counties.



#### Figure 3.23: Time of Mobility Difficulty



Figure 3.25: Time of Mobility Difficulty, by Geography

Activities with Mobility Difficulty. When asked specifically about activities, more respondents reported some mobility difficulty than they did when asked specifically about times. As shown by Figure 3.25, about 68 percent reported no mobility difficulty for any activity. However, alarmingly, almost 17 percent of respondents reported difficulty accessing medical appointments. Further, almost 13 percent of reported difficulty buying essentials such as food and medicine. Figure 3.26 shows many of the counties with a high percentage of seniors in "food deserts", as defined by the United States Department of Agriculture, also had a high percentage of seniors report difficulty buying essentials. About 10 percent of respondents reported difficulty attending civic, religious, or social events with friends and family.



Figure 3.25: Activities with Mobility Difficulty



#### Figure 3.26: Comparison of Difficulty Buying Essentials and Availability of Essentials

*Reasons for Mobility Difficulty.* When asked specifically about reasons for mobility difficulty, more respondents reported some mobility difficulty than they did when asked specifically about times or activities. About 62 percent of respondents reported no mobility difficulty for any reason. The most common reasons for mobility difficulty were limited access to car or public

transportation, long distances to destinations, and cost issues. As shown by Figure 3.27 respondents reported less difficulty with health challenges and concerns about safety.





## 3.2 Wisconsin Transportation Services Focus Groups

To collect information from elderly residents, the research team completed 18 forums in a range of locations across the state, as shown in figure 3.28. The general template used for conducting the focus group is found in Appendix I.



#### Figure 3.28: Focus Group Locations

#### 3.2.1 Appleton

The Appleton Focus Group was held at the Thompson Community Center in downtown Appleton on February 15<sup>th</sup>, 2011 beginning at 9:30am. There were eight participants.

All participants indicated awareness of Valley Transit and Thompson Center programs. A concern about stigma, particularly among male riders was raised. Several participants commented that cost and convenience were major issues for them.

Most participants were drivers, citing a need for "spur of the moment" trip choices. Wait times in excess of 45 minutes were reported as common and reasons for not relying on government provided systems.

Weaknesses in the system included responses varied from convenience to handicapped accessibility. Service to rural areas, by the formal transit system and the volunteer driver programs, was presented as a weakness. Participants noted costs, including a desire to trip chain more affordably, as another challenge.

Transportation options for the morbidly obese was raised as a concern, as no programs are in place to move extremely large, and potentially less mobile, residents.

A tiered approach to paying for service was also offered as a potential solution to cost concerns – either based on income or trip purpose.

#### 3.2.2 Augusta

The Augusta Focus Group was held at the Augusta Senior Center on March 14th, 2011 from 12:30pm until 2:00pm. There were 16 participants.

Most participants here had been active participants at Augusta Senior Center activities. Some participants used Tender Care Transportation or provided volunteer transportation for others in the past. One participant provided Veterans' related transport but indicated that more people do need to know what is available for veterans.

Most of the participants were drivers. They commonly cited convenience, independence, and no other option available as the primary reason they used their vehicles. Especially rural residents have no public transportation available. Some indicated that taxis are not always willing to service clients with assistance animals. Participants indicated that stop proximity to their homes is a critical factor for choosing to use public transit. Others reported that the city bus does not run early enough to use for work. Many respondents indicated that they simply enjoy driving, can visit family out of state

Some weaknesses observed included responses varied from fixing potholes and performing better snow removal to better signs & education. Some hoped that public transportation to rural areas could be provided at reasonable prices.

Participants requested better education on how to use roundabouts. In addition participants suggested that:

- Better city-to-city public transportation is needed
- Sunday, same day and evening service public transportation improvements is needed
- The lengthy approval process for Tender Care Transportation service could be shortened
- Marketing Tender Care Transportation to a participant's family to purchase gift certificates would be valuable

#### Suggestions for best and future transportation services

• Center for Independent Living for Western Wisconsin should continue to contract to provide evening and weekend services

- Wheelchair access vehicles that volunteer drivers use.
- Area churches offer wheelchair accessible vehicle for transportation to church
- DOT to recognize transportation needs
- Stable State transportation budget so programs can be planned
- Accessible taxi service similar to service available in Black River Falls

#### 3.2.3 Brookfield

The Brookfield Focus Group, hosted by Waukesha County, was held at the Brookfield Senior Community Center on March 18<sup>th</sup> from 11:00am until 12:30pm. Three people participated at the
Brookfield event. The primary issues raised in this forum involved jurisdictional boundaries – namely service issues between counties were extremely challenging. Logisticare was raised as an emerging issue that required evaluation going forward.

No service was reported as being available on weekends and evenings, making activities scheduled in these time windows nearly impossible to attend without using regular taxi services. Other reported weaknesses included: small lettering on street signs in the Brookfield area and general traffic volumes. Stigma associated with using public services was raised as a concern among certain ridership groups.

Suggested improvements included education on using roundabouts, door through door programs, and increased funding for non-medical trips. An example was noted that in an adjoining city, service costs \$9.00 for a roundtrip to grocery stores, when many users pay for the grocery items with public assistance. Trips for dialysis were noted as an emerging concern.

#### 3.2.4 Dodgeville

Two Forums were held in Dodgeville on March 15<sup>th</sup> at the Iowa County Social Services offices. The first was focused on transit providers and the second specific to users. The user event attracted 14 residents while 8 providers participated in the first session.

Participants indicated that senior centers were the primary means by which they learned about programs. Several reported that once you get a person on the bus one time, they will likely be a repeat user. Encouraging that initial experience is the most effective tool. The social nature of shared ride services (either in private automobiles, volunteer programs, or public transit) was noted as a key benefit for older users.

Noted weaknesses included a sense of cost and inconvenience. Participants noted a concern with the impending contracting with Logisticare as a potential weakness. Weekend travel and Sunday travel in particular were included in the participant responses.

Roundabout education, programs specifically targeting male riders, and comfort were primary suggestions for improvement. Halogen headlamps were cited as a concern for nighttime driving as they "blinded" oncoming traffic. In addition, one participant added that striping and flashing lights on rural sections of highway could be improved for safety, especially in inclement weather conditions. The intersection of State Highways 61 and 133 was noted as concern due to sight lines.

#### 3.2.5 Janesville

The Janesville Focus Group was held at the Rock County Job Center on February 23. Eleven people participated.

All participants indicated some familiarity with the publicly available options for elderly mobility in the Janesville area. The group was primarily composed of drivers, including one that has medical issues and blindness in one eye. This participant felt that other options were extremely limited.

One participant raised stigma as a primary concern, indicating that "there's something really wrong with you" if you are using public transportation services.

System weaknesses that were noted included transit stops that are not well marked, consistency of bus drivers (whether they were willing to deviate from routes or not), and shelter placements (the group expressed a desire for more shelters along heavily used routes). Personal finances prevent some from using the services available more frequently as it was viewed as costly. Rural area service was described as "non-existent."

As with other areas, a concern was raised about the increased use of roundabouts and a call for more public education in this arena specific to older drivers was cited as a useful recommendation. In addition, intercity transport options were suggested as needed. Service between Beloit and Janesville was noted as an example. A private operator does currently run the route and the session participants viewed it favorably.

#### 3.2.6 Madison

The Madison Focus Group was held in November 2010 at the Warner Park Community Center. Twelve people participated, including the directors of several programs and case managers. Nearly all participants were drivers.

Madison participants identified word of mouth as one of the strongest opportunities for increasing program awareness. They also noted the important role that mobility managers in the aging units serve. Case officials know the clientele and can problem solve well.

Participants suggested that city street signage, particularly in Stoughton, needs to have larger lettering. Better education for roundabouts, brightness of lighting, and traffic congestion were also noted. Signal timing to allow for people with walkers to cross busy intersections and allowing for spouses to travel with service users were other suggestions. It was noted that costs can be extremely high (as much as \$40) for spouses to accompany partners on medical appointments.

#### 3.2.7 Mellen

The Mellen Focus Group was held at the Mellen Senior Center on June 22, 2011 following a snow-related cancellation in April. Seventeen people participated in Mellen.

A primary concern at this focus group was the cessation of taxi service in the area effective July 3. Without the taxi availability, there were limited mobility options for people of all ages without personal vehicles. The Logisticare contract was viewed unfavorably by participants. With respect to program awareness, the Mellen participants noted that the Bayfield area was still well served, but outside of that, there were limited options. Volunteer programs were suffering from a lack of volunteers willing to participate at limited reimbursement rates. Intercity trips were cited as a primary need for people in the area. Medical services in Duluth or Marshfield could be particularly challenging for those without means to pay for service.

This focus group added concerns about people who retire to the area without family close by. As these retirees age, they do lose their driving skills. In many places, the retirement properties are on winding roads near lakes or other natural features. Established transit routes cannot deviate efficiently to serve these areas.

Rutting on State Highways 2 and 13 was raised as a problem in the area. It was also noted that the availability of comfortable seating was something that could be addressed to encourage more ridership on area buses.

#### 3.2.8 Milwaukee

The Milwaukee Focus Group was held at the Clinton Rose Senior Center on February 17. Twelve people participated in the Focus Group.

The Senior Center was hailed as the primary place where residents could learn about programs available to the larger community. Many reported using family and friends if they needed transport. Several participants offered complaints about existing Milwaukee County Transit plus services, principally focused on inconsistency in waiting periods.

Many reported taking advantage of existing programs, including subsidized taxi programs. The other primary theme from the Milwaukee group was that most felt a sense of despair in having to repeatedly ask for assistance from peers, relatives, or friends. A stigma of being dependent was raised by two participants in particular.

#### 3.2.9 Plymouth

The Plymouth Focus Group, hosted by Sheboygan County, was held on April 19<sup>th</sup> at the Plymouth Senior Center. Nine people, form six different communities, participated during an intense spring snow storm. One participant was a 92 year old gentleman that still drives regularly during daylight hours.

Mobility managers were cited as the primary means by which information about alternative programs is disseminated. Other successful mechanisms included cooperation with the Salvation Army and local senior centers. Regular newsletters, especially sent from municipalities, were also noted as a potential source that has not been used consistently in the area.

Among the suggested activities included education on roundabouts targeting senior drivers, increasing mileage reimbursements to encourage volunteer driver programs, and consideration of changes to state laws allowing operation of modified neighborhood electric vehicles (i.e. golf carts). Creating a system to provide for insurance of volunteer drivers was another suggested need. Many are discouraged by the inability to gain insurance on their personal vehicle if they participate.

#### 3.2.10 Rhinelander

The Rhinelander Focus Group was held at the Oneida County Department On Aging Office on April 14, 2011. Twenty people participated.

Successful ways that increased program awareness reported in this session included referrals through the senior center or other services, including nursing homes, advertisements in local papers, and one on one contacts.

Several of the attendees were drivers that lived in more remote parts of the county. These individuals noted that no alternative to private automobiles existed for them. Intercity transport for longer distances for shopping or other purposes also was not being met if needed. Some scheduled service (2-3 days per week) was offered in certain corridors with varying degrees of success.

Door through door services, wheelchair lift accessibility, and more frequent intercity bus services were suggested as means for ensuring future mobility. From an infrastructure perspective, participants requested consistency in sign placements alerting drivers for curves and stopping distances, middle rumble strips, and better striping as safety measures they would prefer to see in rural areas.

Another observation from the group was that families are now very scattered, so many people do not have the same security net they may have held in the past. Job opportunities in the rural areas were also reported as "becoming scarce" causing people to travel much longer distances.

#### 3.2.11 Rice Lake

Rice Lake hosted a Focus Group at the Rice Lake Senior Center on March 22, 2011. Twenty five people participated in the focus group.

Participants expressed knowledge of several programs available in the area including bus and taxi-based programs. Service hours (9-2pm) were viewed as a challenge to making these programs more effective.

A volunteer driver program, and the impending Logisticare arrangements, were offered as opportunities for improvement. Several areas in the surrounding region are not currently served by volunteer driver programs due to "insufficient" mileage reimbursements. Some surrounding churches were reported as having Sunday service transportation options.

Participants reported high school events, grocery trips, and evening events as the primary occasions that were extremely difficult to attend. Those that drove indicated a self-imposed decision to avoid nighttime driving and one even added that he has stopped driving on routes where he knows there is a roundabout installed.

Costs were raised as a concern for residents. One participant's "perfect system" would need to include door to door service with regularly scheduled options that people could rely upon. Another noted that the insurance regulations for volunteer programs need to be changed. With the increased need for personal liability insurance, many people won't become volunteer drivers.

Generally, the participants expressed their appreciation for the existing transit service, however, noted that headways and routes need to be changed to get more use from the system. Several participants noted that coordination of transportation options would be a valuable investment for the community.

#### 3.2.12 Shawano

Shawano County hosted a Focus Group at the Shawano Civic Center on the afternoon of February 15<sup>th</sup>. Eight people were in attendance.

The primary issues that arose in the Shawano focus group involved improving the availability of regularly scheduled services. The participants expressed their pleasure with the existing county bus service (which operates in Shawano one day per week) and the Cap Taxi program. The taxi operates within the city limits at a subsidized rate.

Other concerns that were raised included safety concerns at school dismissal times, snow storage and removal creating limited sightlines at intersections, winter driving refreshers for all drivers, and coordination of services generally.

#### 3.2.13 Sturgeon Bay

Sturgeon Bay hosted a Focus Group on March 29 at the Municipal Offices in Sturgeon Bay. Fourteen people participated in the focus group.

Door County annual updates their inventoried collection of transportation services. This guide helps make connections for people and residents depending on differing transportation needs. It is available on the county's website as well. Program awareness is broadcast via newsletters, word of mouth, and 211 service. They also prepare posters to publicize services.

The shape of the county requires that nearly all trips end up going through Green Bay. Time, convenience, costs, and requirements of jobs were noted as reasons that people principally drove their own personal vehicles.

Participants generally agreed that taxi service in Sturgeon Bay was adequate in the mornings and that the bus service also was effective during the day. Concerns about evenings and

weekends were evident. One participant expressed a concern for needed outreach and education on what the costs of running these programs really were. He believed that people generally do not factor in all of the costs and expect service to be free.

Some concern was conveyed by representatives at the focus group from Washington Island residents about the availability of emergency transportation services in winter. The reliance on ferry service poses an interesting transportation challenge. Insurance issues related to liability, education on roundabouts, and concerns about the Bay View Bridge were raised. The participants noted that the bridge is slippery in inclement weather conditions.

#### 3.2.14 Tomah

The Tomah focus group was held on March 1 at the Tomah Senior Center. Twenty two people participated in Tomah. This session was facilitated by Patrick Fuchs.

Participants here highlighted the importance of a network of family and friends for adequate transportation. One participant pragmatically noted "I don't need other transportation, I have a boyfriend." While humorous, this view also was evident as most of the attendees had arrived in personal vehicles.

Most of the participants, but not all, were aware of programs in place through the Senior Center. Even with a brochure readily available, several frequent users of the Senior Center reported that they were unaware of subsidized taxi or other programs. Only one company serves Tomah so wait times are often long.

Many reported that they just truly enjoyed the driving experience and would keep driving as long as they were able. Education opportunities – including roundabouts and use of lights in fog – were cited as opportunities for WisDOT to make improvements.

Cost issues were raised – a shared ride taxi fare in the city limits is 2.50, 5.00 roundtrip – as a potential barrier for some users. Service was generally requested on weekdays – but at least 5 participants expressed desire for 24 hour a day options.

#### 3.2.15 Middleton

The Middleton Focus Group was held on April 1. Eight participants attended. The primary focus for this session was on the availability of services on the outskirts of a more major metropolitan area (Madison).

All participants were aware of several programs in the area, including the POPS (Projects for Older People) program. They cited the need to call well in advance for transportation services – regardless of program – as a challenge to their increased uses of these initiatives. In general, the participants learned of the available programs either through their retirement homes, the Senior Center, or through an assigned intake worker. While most attendees were drivers, at least two expressed concerns about driving at night or for long distances (e.g. to Milwaukee).

Wheelchair equipped services are viewed as a weakness as their availability was limited via taxi service. In addition, Saturday and Sunday events are a particular challenge. Participants expressed concern about routes and service reductions for the Madison Metro on weekends. Service to outlying areas was also noted as a concern. Specific routes between Middleton and Verona or further are not existent without many transfers or long headways.

#### 3.2.16 Wisconsin Rapids

The Wisconsin Rapids Focus Group was held at the Centralia Center on February 28. Seventeen people participated in the focus group.

Primary issues emerging from the Wisconsin Rapids group included weekend and evening service, noting that the taxi service is often overrun on Sundays. Other concerns included intercity transportation options, coordination of services, and general concerns in rural areas.

A strong preference for "funding" improvements permeated the discussion. Volunteer drivers could not continue to participate at a low reimbursement rate. Insurance issues also emerged as a primary detractor for increased participation.

Accessibility of service, and reliability of service, also were discussed frequently.

Some participants expressed interest in tightening the testing requirements of license renewal. Four year renewal periods were suggested.

#### 3.2.17 Mole Lake: Tribal

On February 12, the research team participated in a meeting of the Great Lakes Elders Native American Association in Mole Lake Wisconsin. At this meeting, research team members were able to administer the comprehensive survey directly to several participants and also solicit specific feedback from tribal members.

#### 3.2.18 Wittenberg: Tribal

In November, 2010 the research team met with members of the Tribal Aging Unit Directors' Association at their meeting at the Ho-Chunk Nation facility in Wittenberg. This discussion allowed further refinement of the focus group format as well as soliciting tribal input and experiences.

Among the key observations: concern for communications among the various programs, reliance on funding from tribal operations (including gaming revenues), consistency of service across varied geographic areas, and tribal/county relationships.

## 4. Elderly Mobility Best Practices

A successful collection of programs and services in support of elderly mobility requires the coordinated efforts of a wide range of stakeholders crossing institutional, geographic, and professional boundaries. From program managers in state agencies to medical professionals to local service providers, a sole agency or group of individuals cannot by itself achieve a responsive, comprehensive system of transportation for aging individuals. This section features an overview of best practices, as identified by the experiences of other states, guidance from federal agencies, and the opinions of researchers and experts in private foundations and organizations.

The American Automobile Association (AAA) Foundation for Traffic Safety, for instance, convened a workshop of international experts in 2008 to review and identify best practices related to driver licensing policies. Other groups, including the Community Transportation Association and The Beverly Foundation, also provide best practices related to elderly mobility. The Federal Highway Administration's (FHWA) handbook for older drivers and pedestrians provides specific guidance for highway design practices. Reports completed by the National Highway Traffic Safety Administration (NHTSA) identify relevant practices from a federal perspective. Among other states, Michigan has a long history of engagement in the issue, and the state's Senior Mobility Action Plan serves as a helpful guide to identifying a wide range of successful practices. A study completed for the Pennsylvania Department of Transportation (PennDOT) focuses specifically upon the improvement of older driver safety. Wisconsin's efforts have already embraced a number of these policies, programs, and guidelines; however, these documents and resources provide a helpful framework for improving mobility for the state's

aging population. This section divides best practices into five areas: licensing, screening and assessment; education and training; vehicle adaptations and advanced technology; roadway design; and alternatives for mobility.

#### 4.1 Licensing, Screening and Assessment

For many older Wisconsinites, driving represents a critical aspect of retaining one's independence. However, if health- or age-related impacts temporarily or permanently jeopardize an individual's fitness to drive safely, responsible agencies must prioritize the safety of that driver along with that of other transportation system users. Issues surrounding screening, assessment, and licensing for older drivers can be controversial, but other states and organizations have identified a number of tactics and guidelines for balancing the continued rights of safe drivers with the protection of public safety.

#### 4.1.1 Avoid age-triggered assessment requirements for older drivers

Decisions about an individual's fitness to drive often require a specific context-based assessment. As noted above, the AAA Foundation for Traffic Safety sponsored the 2008 North American License Policies Workshop. Many experts in attendance agreed that age-based screening (such as vision tests at the time of license renewal) is appropriate; however, they cautioned against age-triggered assessment tools that could determine license retention.<sup>106</sup> Instead, medical guidelines can serve to inform licensing agencies. The National Highway Traffic Safety Administration (NHTSA) and the American Association of Motor Vehicle Administrators (AAMVA) collaborated to develop guidance for licensing agencies with respect to medical conditions.<sup>107</sup> State agencies should base license policies on these evidence-based findings from the medical community.

#### 4.1.2 Require in-person driver license renewal for drivers of all ages

Experts convened for the 2008 North American License Policies workshop generally agreed that all drivers should renew licenses in-person.<sup>108</sup> This practice adds to administrative costs for the licensing agency; however, it allows trained personnel an informal opportunity to screen all drivers while minimizing accusations of discrimination that might follow in-person renewal requirements for older drivers alone. Wisconsin requires all drivers to renew licenses inperson.<sup>109</sup>

#### 4.1.3 Provide educational materials, guidance, and outreach to related stakeholders

Many reports encouraged licensing agencies to develop resources for the medical and law enforcement communities, as well as licensing personnel and concerned family members regarding:

General fitness-to-drive issues;

<sup>&</sup>lt;sup>106</sup> AAA Foundation for Traffic Safety. 2008 North American License Policies Workshop Proceedings. p. 11. Accessed: http://www.aaafoundation.org/pdf/LPWorkshopProceedings.pdf. <sup>107</sup>National Highway Traffic Safety Administration (NHTSA) and the American Association of Motor Vehicle

Administrators (AAMVA). Driver Fitness Medical Guidelines. Accessed:

http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/811210.pdf AAA Foundation for Traffic Safety. p. 11.

<sup>&</sup>lt;sup>109</sup> Wisconsin Department of Transportation. Driver license renewal. Accessed: http://www.dot.wisconsin.gov/drivers/drivers/renew/license-renewal.htm

- Laws, regulations, and policies related to reporting at-risk drivers; and
- How and when to make referrals regarding at-risk drivers.

Further, a number of sources encouraged state agencies to reduce barriers to reporting by offering convenient computer-based reporting mechanisms (including the TraCS system for law enforcement officials).<sup>110</sup> As mentioned in the Current Practices section, the Wisconsin Department of Transportation has already developed brochures and guidance for the law enforcement and medical communities; additionally, Wisconsin police officers can use TraCS to report at-risk drivers to the state's Medical Review Unit.

## 4.1.4 Encourage or require a broad range of medical professionals to engage in proactive reporting of at-risk drivers

A report completed for the Pennsylvania Department of Transportation suggests that licensing agencies should also reach out to a wide variety of medical professionals, rather than only general practitioners. In particular, they encourage the agency to contact eye doctors, dentists, and pharmacists when distributing information about reporting potentially dangerous drivers.<sup>111</sup>

#### 4.1.5 Utilize license restrictions rather than relying solely on cancellations

The National Highway Traffic Safety Administration's Older Driver Program, as part of its recently completed five-year strategic plan, identifies the use of restricted licenses as one opportunity for licensing agencies to explore.<sup>112</sup> Older drivers may be willing to limit their driving to geographic, temporal, or necessary adaptive technology, particularly if it means they may keep their license. The Wisconsin Department of Transportation allows a number of restrictions including daytime-only driving, limited area driving, or non-interstate/freeway driving.<sup>113</sup>

## 4.1.6 Employ low-cost screening interventions at the time of license renewal and integrate them with "second tier" assessment tools

The NHTSA suggests that agencies may support medical driving policies by training personnel at DMV facilities to screen older drivers.<sup>114</sup> Additionally, the PennDOT study suggests requiring older drivers to fill out a medical condition checklist when renewing a license.<sup>115</sup> Through this preliminary self-reporting mechanism, the checklist could help identify potentially at-risk drivers. The licensing agency may then require more detailed medical information or a reexamination, at which time the agency may appropriately make a licensing decision.<sup>116</sup> Many older drivers are perfectly safe—a multi-tiered system consisting of both screening and assessment interventions protects the rights of these drivers and controls administrative costs while identifying at-risk

<sup>&</sup>lt;sup>110</sup> See, for instance, Vance & Renz, LLC. Improving Mature Driver Safety: Task 6: Final Report with Recommendations. Submitted to Pennsylvania Department of Transportation. August 2, 2010. p. 23, recommendations 3b and 3d. Accessed:

ftp://ftp.dot.state.pa.us/public/pdf/BPR\_PDF\_FILES/Documents/Research/Complete%20Projects/Education%20and %20Training/Improving%20Mature%20Driver%20Safety.pdf

<sup>&</sup>lt;sup>111</sup> Vance & Renz, LLC. p. 24.

<sup>&</sup>lt;sup>112</sup> National Highway Traffic Safety Administration. Older Driver Program Five-Year Strategic Plan 2012-2017.

December 2010. p. 5. Accessed: http://www.nhtsa.gov/staticfiles/nti/pdf/811432.pdf <sup>113</sup> Wisconsin Department of Transportation. Driving with a medical condition. Accessed:

http://www.dot.state.wi.us/drivers/drivers/aging/medical.htm

<sup>&</sup>lt;sup>114</sup> National Highway Traffic Safety Administration. pp. 5, 11.

<sup>&</sup>lt;sup>115</sup> Vance & Renz, LLC. p. 22.

<sup>&</sup>lt;sup>116</sup> AAA Foundation for Traffic Safety. p. 8.

drivers in support of public safety goals. Wisconsin requires all drivers to take a vision test and answer medical questions at the time of license renewal.

#### 4.1.7 Develop cognitive screening tools that are predictive of driving ability

The Michigan Senior Mobility Action Plan acknowledges and supports efforts to develop computer-based cognitive screening tools.<sup>117</sup> These products could supplement other activities, including vision tests, to provide a more comprehensive screening process.

#### 4.1.8 Establish strong, well-funded medical advisory boards

Medical Advisory Boards (MABs), staffed by medical professionals, can assist agencies in making decisions on individual competency as well as policy decisions relating to licensing. Experts at the AAA workshop endorsed MABs and recommended that agencies provide incentives for physician participation on boards, along with education and training for board members.<sup>118</sup> Michigan's plan lists the initiation of a Board as a recommendation.<sup>119</sup>

#### 4.1.9 Increase access to assessment and rehabilitation services

Another initiative noted by the participants of the AAA-sponsored workshop encourages agencies to expand the number of professionals who support older individuals in assessing or rehabilitating driving skills, such as occupational therapists. Experts noted that older drivers' demand for such services outpaces supply and that the situation is likely to continue in future years. By working closely with rehabilitation centers and professional associations to develop driving programs and encouraging training, agencies can help mitigate this future gap. On a related matter, the workshop participants also encouraged private and public insurance entities to augment reimbursement for driver assessment and rehabilitation.<sup>120</sup> Agencies should also explore options to expand coverage for these driving-related healthcare costs.

#### 4.1.10 Support the development of driver assessment tools and processes

Optional self-testing systems could help provide drivers with feedback about their fitness to drive safely and could lead to better individual decisions regarding driving, including voluntary cessation. These assessment tools could be computer-based or located at senior centers and other community facilities frequented by older drivers. The Michigan plan and the PennDOT study both mention this practice.<sup>121</sup> Experts attending the AAA-sponsored workshop also called for agencies to develop road course tests and driver simulation measures to formally assess drivers.<sup>122</sup>

#### 4.1.11 Protect individuals who report at-risk drivers

States may grant civil immunity for physicians or other individuals who report at-risk drivers. This action would mitigate the fear of lawsuits as a barrier to reporting. The original 1999 Elderly Mobility and Safety plan for the state of Michigan set passage of a physician immunity law as a

<sup>&</sup>lt;sup>117</sup> Governor's Traffic Safety Advisory Commission. Michigan Senior Mobility Action Plan 2009-2012. January 2009. p. 12. Accessed: http://www.michigan.gov/documents/MichiganSeniorMobilityActionPlanfinal\_162718\_7.pdf
 <sup>118</sup> AAA Foundation for Traffic Safety. pp. 9-12.
 <sup>119</sup> Governor's Traffic Safety Advisory Commission. p. 12.

<sup>&</sup>lt;sup>120</sup> AAA Foundation for Traffic Safety. pp. 9-10.

<sup>&</sup>lt;sup>121</sup> Governor's Traffic Safety Advisory Commission. p. 12; Vance & Renz, LLC. p. 23.

<sup>&</sup>lt;sup>122</sup> AAA Foundation for Traffic Safety. p. 12.

goal.<sup>123</sup> AAA workshop participants also prioritized civil immunity legislation.<sup>124</sup> Another study urges states to allow confidential reporting of at-risk drivers. Confidential reporting could reduce barriers for would-be reporters who wish to retain positive relationships with their patients, family members, or older members of their community.<sup>12</sup>

#### 4.1.12 Improve data collection and systems to support licensing decisions and analyze trends

The PennDOT study and the AAA workshop participants both identify the importance of access to high-quality data with regard to licensing, driver records, crash databases, reported medical decisions, and other issues.<sup>126</sup> Collection of comprehensive data along with user-friendly systems help support individual licensing decisions, ease administrative tasks, and assist agencies in identifying trends and evaluating policies or practices.<sup>127</sup>

### 4.2 Education and Training

Another general area of best practice material relates to education, outreach and training. Comprehensive support for elderly mobility includes a wide range of stakeholders in the public. private, and nonprofit sectors and at the local, state, and national levels. Supporting information flows between these groups and, most importantly, to older individuals themselves, is critical in achieving any goal associated with elderly mobility.

#### 4.2.1 Distribute informational resources in a variety of formats

The study completed for PennDOT encourages agencies to provide informational materials in a variety of formats.<sup>128</sup> Possible media include newspaper advertisements, mailed brochures, television and radio advertisements, and civic organization presentations. The NHTSA also recognizes that many consumer products are internet-based. Since internet usage rates tend to be lower in rural areas, older drivers and their support networks may not have reasonable access to these resources.<sup>129</sup>

#### 4.2.2 Develop educational materials for older drivers, their families, and related professionals to assist in understanding implications of aging on mobility

Many reports identified the production and promotion of general educational materials as an important step.<sup>130</sup> Raising awareness of the impacts of aging for mobility is critical, particularly for those whose lives are most affected by it (older individuals and their families) and whose occupations may help to support it (caregivers, traffic engineers, transit providers, etc.). In addition to an agency's own materials and self-assessment tools, promote resources developed by private organizations like the AAA and AARP. Michigan's recent plan includes the development of a multi-media toolkit aimed toward adults over the age of 65, their caregivers. family, and friends.<sup>131</sup> Agencies should make these resources available at local or regional

<sup>&</sup>lt;sup>123</sup> Southeast Michigan Council of Governments. Elderly Mobility and Safety—The Michigan Approach: Final Plan of Action. August 1999. pp. 55, 57.

AAA Foundation for Traffic Safety. pp. 9, 11-12.

<sup>&</sup>lt;sup>125</sup> Vance & Renz, LLC. p. 10.

<sup>&</sup>lt;sup>126</sup> Vance & Renz, LLC. p. 30-31.

<sup>&</sup>lt;sup>127</sup> AAA Foundation for Traffic Safety. p. 12. <sup>128</sup> Vance & Renz, LLC. p. 26.

 <sup>&</sup>lt;sup>129</sup> National Highway Traffic Safety Administration. p. 3.
 <sup>130</sup> See, for instance, Southeast Michigan Council of Governments. pp. 55, 57.

<sup>&</sup>lt;sup>131</sup> Governor's Traffic Safety Advisory Commission. p. 10.

offices and places frequented by aging individuals. These locations include shopping centers, senior citizen centers, recreation centers, medical offices, places of worship, and grocery stores. Providing material for use at assisted living facilities and other senior care locations also is recommended.

#### 4.2.3 Evaluate educational opportunities for safe driving, create incentives for participation

A number of reports urge agencies to evaluate documents and classroom-based educational opportunities for safe driving, including those developed by private organizations. The PennDOT study encourages the state to offer insurance discounts for older drivers who complete an approved driving skills course.<sup>132</sup> Thirty-six states currently require insurance companies operating within the state to provide discounts to individuals who complete a state-approved driver-improvement course like AARP's Driver Safety Program course.<sup>133</sup> Some insurance companies offer these discounts voluntarily; however, Wisconsin is not among those states that mandate cost reductions. This is one step that states can take to encourage safe practices on the part of elderly drivers.

#### 4.2.4 Build effective messages

The NHTSA encourages agencies to carefully consider their messaging with regard to older individuals. To effectively change attitudes, perceptions, and social norms of aging drivers and their support networks, agency communications should focus on themes such as prevention, the benefits of choosing appropriate mobility transitions, the costs of unsafe driving, and selfefficacy. Testing messages and incorporating them in all resources targeted to older individuals will lead to the most effective communication.<sup>134</sup>

#### 4.2.5 Establish and maintain partnerships with other interested stakeholders

Multiple observers suggest establishing and maintaining partnerships with other parties who work with aging populations.<sup>135</sup> Some states have embraced formal committee approaches mandated by statutes and others focus on ad hoc task forces and coalitions composed of interested groups. Communication between groups working on elderly mobility issues is critical.<sup>136</sup> The original Michigan plan urged the state to host periodic "mature mobility summits" to raise awareness and aid stakeholders in sharing current issues and solutions.<sup>137</sup>

#### 4.2.6 Improve awareness of transportation options among aging populations

To most effectively utilize existing mobility programs, it is critical that agencies promote awareness of these options at every appropriate opportunity. The original Michigan plan suggests a statewide education campaign and regional resource centers that carry information about alternatives, among other issues.<sup>138</sup> The updated version urges the state to continue to provide alternative transportation contact information when a driver's license is suspended or

<sup>&</sup>lt;sup>132</sup> Vance & Renz, LLC. p. 25.

<sup>&</sup>lt;sup>133</sup> Accessed from: http://www.aarp.org/home-garden/transportation/info-05-2010/auto\_insurance\_discounts.html

<sup>&</sup>lt;sup>134</sup> National Highway Traffic Safety Administration. pp. 6-7.

<sup>&</sup>lt;sup>135</sup> ibid. pp. 9-11.

<sup>&</sup>lt;sup>136</sup> Governor's Strategic Highway Safety Plan Older Driver Task Force. Rural and Human Services Transportation Coordination Final Workshop Report. (Georgia) Governor's Office of Highway Safety. August 31, 2010. Accessed: http://www.gahighwaysafety.org/2010ruralhumanworkshop/finalworkshopreportaugust2010.doc

 <sup>&</sup>lt;sup>137</sup> Southeast Michigan Council of Governments. p. 69.
 <sup>138</sup> Southeast Michigan Council of Governments. p. 11, 38.

revoked.<sup>139</sup> The experts convened by the AAA also encouraged agencies to "have a role in assisting older adults' transition from driving to other mobility options," and to be ready with a list of alternative transportation options in the community to help mitigate the difficulty associated with giving up one's license.<sup>14</sup>

#### 4.2.7 Encourage older drivers to plan for continued future mobility

Prioritization of individual planning and a proactive and preventative approach to elderly mobility also surfaced as a common theme. One study suggested that agencies provide planning tools and materials for drivers aged 45 to 64 to assist these individuals in planning for future mobility.<sup>141</sup> The original Michigan elderly mobility plan likened this process to the retirement financial planning process.<sup>142</sup> One intriguing goal advanced in the recent Michigan Senior Mobility Action Plan is the training of Mobility Resource Counselors in all parts of the state. These counselors would assist older adults in planning for continued mobility.<sup>143</sup> These services are similar to the concept of mobility management, which, as discussed above, adopts a more individual-based perspective in guiding transportation-related decisions.

#### Vehicle Adaptations and Advanced Technology 4.3

Technological advancements hold significant potential to improve mobility for older individuals. Vehicle adaptations such as smaller steering wheels can improve the ability of older drivers to safely operate vehicles: additionally, intelligent transportation systems could improve the efficiency of demand-response transportation services.

### 4.3.1 Partner with CarFit program

AARP, AAA, and the American Occupational Therapy Association have teamed up to sponsor CarFit, a program that helps older drivers appropriately adjust their vehicles for safe use. The program also provides information about assistive technology and community-specific resources that enhance driving safety and increase mobility in the community. CarFit events are held across the country and are staffed by trained technicians.<sup>144</sup> Reports compiled for Pennsylvania and Michigan encourage partnerships with CarFit.<sup>145</sup> A number of Wisconsin communities have hosted CarFit events in the past and several events are currently scheduled within the state.

#### 4.3.2 Research and promote specialized equipment and resources for older drivers

State agencies should work with vendors and auto manufacturers to improve in-vehicle safety features for older drivers.<sup>146</sup> States should also promote existing technologies. Wisconsin's WisTech and WisLoan programs educate individuals about assistive devices and provide financing for modified vehicles and other special features.

<sup>&</sup>lt;sup>139</sup> Governor's Traffic Safety Advisory Commission. p. 9.

<sup>&</sup>lt;sup>140</sup> AAA Foundation for Traffic Safety. p. 12-13.

<sup>&</sup>lt;sup>141</sup> Vance & Renz, LLC. p. 25.

 <sup>&</sup>lt;sup>142</sup> Southeast Michigan Council of Governments. p. 69.
 <sup>143</sup> Governor's Traffic Safety Advisory Commission. p. 11.

<sup>&</sup>lt;sup>144</sup> CarFit: Helping Mature Drivers Find Their Safest Fit. Accessed: http://www.car-fit.org/

<sup>&</sup>lt;sup>145</sup> Governor's Traffic Safety Advisory Commission. pp. 10, 15; Vance & Renz, LLC. p. 25.

<sup>&</sup>lt;sup>146</sup> Southeast Michigan Council of Governments. p. 13.

#### 4.3.3 Identify intelligent transportation systems solutions

By partnering with the academic and research communities, agencies can explore and test new technologies holding wide-ranging potential for the improvement of elderly mobility. For instance, geographic information systems could aid shared-ride taxi providers in choosing ideal routes. Similarly, real-time transit information at senior centers or other locations could improve the transit experience for older riders by reducing uncertainty. Additionally, in-vehicle communication systems could aid older drivers in preparing for sudden changes in roadway or traffic conditions.<sup>147</sup>

### 4.4 Roadway Design

Road system design and engineering practices also impact elderly mobility. In 2001, the Federal Highway Administration (FHWA) developed a set of recommendations detailing ways in which physical design of highway infrastructure—such as intersections, interchanges, roadway curvature, construction zones, and rail crossings—can be enhanced to improve safety for elderly drivers. The report, "Highway Design Handbook for Older Drivers and Pedestrians," summarizes research on how age-related physical, perceptual, and cognitive declines affect driver behavior and increase risks of accidents, and suggests design considerations that can improve safety for older drivers.<sup>148</sup> Adoption of the techniques and countermeasures found in this document, along with related activities, provide a comprehensive set of best practices for state and local agencies.

#### 4.4.1 Review and adopt applicable FHWA recommendations

As noted above, the FHWA handbook incorporates design recommendations enhancing elderly mobility in five key areas: intersection issues, interchange issues, roadway curvature and passing lane issues, construction zones, and rail crossings.<sup>149</sup> Discussion of intersections includes recommendations for 17 specific design elements including intersection angles and roundabouts. The handbook identifies four specific practices in relation to interchanges, including clarification of exit ramp signs and the design of acceleration and deceleration lanes. FHWA also lists four topics relating to roadway curvature and passing zones, including guidelines for pavement markings on curves and passing zone length. The handbook covers five construction and work zone issues including general lane closure practices and construction zone signage. Finally, the document includes recommendations regarding passive rail crossing control devices.

Documents guiding state practices in Michigan and Pennsylvania embrace this document and encourage state transportation agencies to review and adopt applicable recommendations and policies.<sup>150</sup> The PennDOT study encourages the department to review and consider adopting any revised or new recommendations that follow from the new version of the handbook, currently scheduled for release in 2011. Additionally, the study recommends that state and local staff attend any training associated with the revised handbook.<sup>151</sup>

<sup>&</sup>lt;sup>147</sup> ibid. pp. 24, 36.

<sup>&</sup>lt;sup>148</sup> Federal Highway Administration. Highway Design Handbook for Older Drivers and Pedestrians. U.S. Department of Transportation. Publication No. FHWA-RD-01-103. May, 2001. Accessed:

http://safety.fhwa.dot.gov/intersection/resources/fhwasa09027/resources/Highway%20Design%20Handbook%20for% 20Divers%20and%20Pedestrians.pdf

<sup>&</sup>lt;sup>149</sup> ibid.

<sup>&</sup>lt;sup>150</sup> Governor's Traffic Safety Advisory Commission. p. 8.

<sup>&</sup>lt;sup>151</sup> Vance & Renz, LLC. p. 29.

#### 4.4.2 Create and distribute checklist of issues or factors to consider

The original action plan for Michigan encourages the state transportation agency to create a checklist for transportation design professionals to consider during the design or redesign process.<sup>152</sup> This can simplify implementation of adopted standards and policies.

#### 4.4.3 Make presentations to local and statewide audiences on engineering enhancements

Recommendations encouraged agencies to share any adopted countermeasures with relevant state officials, business partners, and local municipalities through presentations at conferences, seminars, or other events.<sup>153</sup> This information sharing will help speed implementation and clarify state policies and standards.

#### 4.4.4 Incorporate adopted design practices into state policies, manuals, and publications

To further boost implementation and consistency of application, state agencies must incorporate adopted practices in all relevant state policies, manuals, and publications.<sup>154</sup> For instance, state Strategic Highway Safety Plans should address older driver safety issues, including adopted design practices.<sup>155</sup>

#### 4.4.5 Investigate crash data involving older drivers

Both the Michigan Action Plan and the Pennsylvania study encourage state agencies to undertake comprehensive research to learn about the nature, location, and scope of crashes involving older drivers.<sup>156</sup> From this information, agencies can learn about older driver crash trends and more accurately identify problematic areas where engineering countermeasures should be applied.

#### 4.4.6 Implement design practices through both "black spot" and "systematic" methods simultaneously

The report produced for PennDOT recommended that the agency implement engineering countermeasures across the board (systematically) and also identify specific problem areas or problem design types with histories of crashes involving older drivers ("black spot").<sup>157</sup>

#### 4.4.7 Convene a standing group to review older driver issues

Previous reports also recommend the formation of a group responsible for keeping track of activities pertaining to elderly mobility and investigating how they can be incorporated into the agency's everyday work.<sup>158</sup> The PennDOT study urges the agency to "Institutionalize a process to integrate the latest thinking from partners and external sources" into the agency's approach to achieving older driver safety.<sup>159</sup> The Government Accountability Office identified five states as having model programs for older driver safety. Each features a state-level coordinating group

<sup>&</sup>lt;sup>152</sup> Southeast Michigan Council of Governments. p. 11.

<sup>&</sup>lt;sup>153</sup> ibid. p. 29; Governor's Traffic Safety Advisory Commission. p. 8.

<sup>&</sup>lt;sup>154</sup> Vance & Renz, LLC. pp. 28-29.

 <sup>&</sup>lt;sup>155</sup> Vance & Renz, LLC. pp. 10, 30.
 <sup>156</sup> Governor's Traffic Safety Advisory Commission. p. 11; Vance & Renz, LLC. pp. 27-28.

<sup>&</sup>lt;sup>157</sup> Vance & Renz, LLC. pp. 26-27.

<sup>&</sup>lt;sup>158</sup> Governor's Traffic Safety Advisory Commission. p. 8.

<sup>&</sup>lt;sup>159</sup> Vance & Renz, LLC. p. 30.

that guides research, development, outreach and/or implementation of new initiatives and action items.<sup>160</sup>

#### 4.4.8 Fund additional traffic engineering services at local level

Another recommendation offered in the first strategic plan for Michigan was to fund additional local traffic engineering services to focus on older driver issues.<sup>161</sup> Wisconsin's Traffic Signing and Marking Enhancement Grants program formerly provided funds to local governments to improve visibility of highway elements.

### 4.5 Alternatives for Mobility

A number of observers envision elderly mobility as a spectrum with actions that promote safe practices for older drivers on one side to those that support alternative modes of transportation on the other side of the spectrum. Transportation services designed for older individuals are often known as specialized transportation or human service transportation. Many of these practices are also relevant to other transportation programs, particularly those serving people with disabilities.

Growing populations of older individuals present a central challenge for transportation providers.<sup>162</sup> These groups will stop or reduce their driving but still require, benefit from, and demand mobility. This population is highly diverse in social, economic, and geographical terms, but a majority is located in suburban and rural areas, where existing transportation options are limited and providing efficient transit service is more difficult.<sup>163</sup> Since most seniors wish to continue living in their homes and communities as they age, practitioners must find innovative solutions to meet their transportation needs.

#### 4.5.1 Build strong conventional public transportation systems

Although seniors have some special mobility needs, the Community Transportation Association of America (CTAA) notes that "[t]he best way for transit providers to meet the transportation needs of most older Americans is to meet the transportation needs of the general adult population."<sup>164</sup> Elderly Americans take similar kinds of trips to similar destinations as the population at large, and can often use conventional public transportation, especially if accessibility measures are implemented. Public transportation provides access to shopping, medical care, religious services and community events, and visiting friends and family; active older people are also increasingly reliant on such transportation for employment.<sup>165</sup>

However, many seniors cannot access fixed-route public transportation to meet their mobility needs because their communities lack such services. Approximately 60 percent of rural residents live in areas where public transportation is either "negligible" or absent altogether, <sup>166</sup>

<sup>&</sup>lt;sup>160</sup> AAA Foundation for Traffic Safety. pp. 146-154.

<sup>&</sup>lt;sup>161</sup> Southeast Michigan Council of Governments. p. 24.

<sup>&</sup>lt;sup>162</sup> Foley, D. J., Heimovitz, H. K., Guralnik, J. M., and Brock, D. B. (2002). "Driving Life Expectancy of Persons Aged 70 Years and Older in the United States." American Journal of Public Health, 92(8).

 <sup>&</sup>lt;sup>163</sup> Community Transportation Association of America (2003, May). Senior Transportation Toolkit and Best Practices.
 Accessed: http://www.ctaa.org/webmodules/webarticles/articlefiles/senior\_toolkit\_color1.pdf
 <sup>164</sup> Ibid.

 <sup>&</sup>lt;sup>165</sup> Community Transportation Association of America (2003, May). Senior Transportation Toolkit and Best Practices.
 Accessed: http://www.ctaa.org/webmodules/webarticles/articlefiles/senior\_toolkit\_color1.pdf
 <sup>166</sup> Ibid.

and the Brookings Institution notes that only 14 percent of rural seniors and 43 percent of suburban seniors "report having any kind of transit services within a half mile" of their homes.<sup>167</sup>

#### 4.5.2 Provide transit services for drivers and non-drivers

Older adults who use or would benefit from transit services are not necessarily non-drivers. A Brookings Institution report notes that, contrary to common perceptions, "driving is often the easiest physical task for older people. Long before they lose the ability to drive, older people may be unable to board or ride public transit, or walk to a bus stop or rail station."<sup>168</sup> Many elderly drivers reduce or adjust their driving-avoiding driving at night or in heavy traffic, for example—in response to declining visual, physical, and cognitive capabilities; although they continue to drive, this response still reduces their mobility.

Similarly, the assumption that elderly drivers will not use public transit until they give up their keys for good is false: older people with mobility issues may be able to use public transportation on some days or in some seasons but not others. Experience in "Australia, Europe, and Canada [shows that] elderly car drivers make up a meaningful percentage of transit riders," indicating that a variety of accessible modal options can improve mobility for older people, whether or not they can drive. Targeting transportation programs to both audiences can increase familiarity with and use of a service, bolstering its role within a community.

#### 4.5.3 Design public transportation services that are convenient for older riders

Where fixed-route public transportation service (buses, subways, and light and commuter rail, etc.) exists, many seniors can successfully reach some or all of their destinations. However, a number of obstacles prevent elderly riders from using these services. The routes and schedules of fixed-route bus and rail systems are often organized to prioritize the needs of morning and evening commuters. These routes and schedules fit poorly the needs of seniors, who may want to take off-peak or weekend trips and whose homes or destinations may lie far from transit stops.

While feeder routes linking bus stops to residential neighborhoods, retirement communities, senior centers, and medical facilities may be a solution to this problem, the transfer they necessitate represents both a physical obstacle (to frail seniors) and an administrative one (where program funding might cover one leg of the trip but not another).<sup>169</sup> Fixed-route transportation can also be made more accessible and useful to seniors by adopting a "hybrid service" strategy. "Deviated-fixed route," "point deviation," and "service route" setups all provide additional flexibility for riders by allowing a bus or van to pick up and/or drop off riders at more convenient locations than a fixed set of stops, and the CTAA notes that a hybrid approach may be more cost-effective than operating both fixed-route and demand-response systems.<sup>170</sup>

<sup>&</sup>lt;sup>167</sup> Rosenbloom, S. (2003, July). The Mobility Needs of Older Americans: Implications for Transportation Reauthorization. The Brookings Institution. Accessed:

http://www.aginginplaceinitiative.org/storage/aipi/documents/Articles%20and%20Reports/the%20mobility%20needs% 20of%20older%20americans.pdf <sup>168</sup> Rosenbloom, S. (2003, July). The Mobility Needs of Older Americans: Implications for Transportation

Reauthorization. The Brookings Institution. Accessed:

http://www.aginginplaceinitiative.org/storage/aipi/documents/Articles%20and%20Reports/the%20mobility%20needs% 20of%20older%20americans.pdf <sup>169</sup> Community Transportation Association of America (2003, May). Senior Transportation Toolkit and Best Practices.

Accessed: http://www.ctaa.org/webmodules/webarticles/articlefiles/senior\_toolkit\_color1.pdf <sup>170</sup> Community Transportation Association of America (2003, May). Senior Transportation Toolkit and Best Practices.

Accessed: http://www.ctaa.org/webmodules/webarticles/articlefiles/senior toolkit color1.pdf

#### 4.5.4 Make conventional public transportation accessible to older riders

Another obstacle to the use of conventional mass transit modes is the lack of accessible facilities, such as sidewalks, benches, and pedestrian-friendly street crossings near transit stops. These amenities can make a substantial difference in whether an elderly person chooses to use public transportation—the CTAA reports that 32 percent of non-driving seniors who could not access a bus stop would be able to if a place to rest was available along the way.<sup>171</sup>

#### 4.5.5 Establish travel training programs

Lack of familiarity with mass transit is a related problem that can be remedied with measures like "transit mentors" (older volunteers who help new riders) or rider education programs, which may make seniors feel more comfortable navigating the transit system. Mobility managers can take a lead role in these programs.

## 4.5.6 Support high quality demand-response transit and special transportation programs

Agencies should support demand-response or paratransit services to meet mobility needs of older individuals, particularly in geographic areas where fixed-route services cannot be efficiently operated. Defined as services that pick up riders at their homes and transport them to their destinations, demand-response transportation programs generally serve specific populations rather than the general public. (Taxis represent a notable exception.) Human service agencies, senior centers, and community and faith-based organizations often provide demand-response transit targeted specifically towards seniors. This category of transit provides rides to senior programs in terms of cost, rider eligibility, hours of service, responsiveness, types of trips provided, vehicles used, and whether drivers are paid staff or volunteers. As described earlier, demand-response services—particularly shared-ride taxi programs—are popular in many Wisconsin communities and there are a number of state and federal funding programs that support these services.

# 4.5.7 Support door-to-door and door-through-door special transportation programs

Some demand-response services limit rider assistance; others provide "door-to-door" or "doorthrough-door" assistance to their customers, giving help as needed entering and exiting the vehicle, climbing stairs, or (in the latter case) assisting the customer at their destination. These services provide rides with personal assistance while in transit and at destinations to frail seniors who "often could not make that trip without personal, intensive support because [of] their physical and mental limitations."<sup>172</sup> These services require more staff or volunteer time and decrease the number of rides that programs can provide; however, they are frequently an essential service for frail elderly who wish to continue living independently. Providers "indicate that many older persons served by door-through-door transportation would require assisted living or nursing home services if they did not have personal assistance with their transportation." Partnerships with local Area Agencies on Aging, human service and transportation agencies, local governments, and community organizations are an important

<sup>&</sup>lt;sup>171</sup> Ibid.

<sup>&</sup>lt;sup>172</sup> Burkhardt, J. E. and H. Kerschner (2005). How to Establish and Maintain Door-through-door Transportation Services for Seniors. WESTAT. Accessed:

http://www.stpexchange.org/HowToGuide\_DoorThroughDoorTransportation.pdf

element of successful door-through-door programs as well, and may provide significant sources of funding, as well as assistance with technical and equipment issues, volunteer coordination, and establishing legitimacy among potential clients.<sup>173</sup>

#### 4.5.8 Encourage the role of volunteers in special transportation programs

To reduce operating costs, local transit service providers should explore options involving volunteer drivers. In some situations, volunteer drivers also use their own vehicles to transport users to and from their destinations, thereby decreasing capital costs to the program operator. Based on two representative programs, the Beverly Foundation reports that volunteer drivers and vehicles can cut per-ride costs from \$37.94 to \$7.73.<sup>174</sup> The CTAA characterizes volunteerbased transportation as "an example of innovative funding," but notes that unpaid volunteers are still not free, since "they require general administrative support just as paid staff do."<sup>175</sup> Volunteers who give rides with their own vehicles may also need to be reimbursed for mileage. Because of the time-intensive nature of the trips, volunteer drivers could play a particularly important role in door-through-door programs.<sup>176</sup>

Careful screening procedures are important for any operation using volunteer drivers. Potential volunteers should be carefully informed of their responsibilities, the structure of the transit organization and their place in it, and other relevant details. As the CTAA notes, communicating the details of volunteer positions not only allows volunteers to join an organization from a more informed perspective, but also requires the organization to "think through exactly what it wants a volunteer to do."<sup>177</sup> Screening for qualifications is as important as screening for interest; Washington State's Volunteer Drivers Guide advises service providers to check driver's licenses and records, state and national criminal records, insurance, and references.<sup>178</sup> The *Guide* also recommends periodic checks of current volunteers' conduct, especially if any moving violations or collisions occur.

Volunteers may also contribute as advocates and administrators. Case studies compiled by the CTAA show that volunteers (groups and individuals) have been effective at starting and improving transportation programs by performing surveys and needs assessments, doing outreach work, forming partnerships with other public-sector and nonprofit organizations, and fundraising.<sup>179</sup>

Active older people with an interest in community involvement make effective volunteers, and programs can encourage their involvement by compensating volunteers with vouchers for free rides to be used if and when they need transportation services themselves. In addition, a number of state and federal programs allow volunteer reimbursement under program rules.

http://www.beverlyfoundation.org/library/volunteertransportation/factsheet.vol.1.no.6.vol.driver.pdf <sup>5</sup> Community Transportation Association of America (2003, May). Senior Transportation Toolkit and Best Practices.

Accessed: http://www.ctaa.org/webmodules/webarticles/articlefiles/senior\_toolkit\_color1.pdf <sup>176</sup> Burkhardt, J. E. and H. Kerschner (2005). How to Establish and Maintain Door-through-door Transportation Services for Seniors. WESTAT. Accessed:

http://www.stpexchange.org/HowToGuide DoorThroughDoorTransportation.pdf

<sup>&</sup>lt;sup>173</sup> Ibid.

<sup>&</sup>lt;sup>174</sup> The Beverly Foundation (2008). Volunteer Driver Programs. Accessed:

 <sup>&</sup>lt;sup>177</sup> Ibid.
 <sup>178</sup> Washington State Department of Transportation (2010). Volunteer Drivers Guide – A Guide to Best Practices.
 (178) Washington State Department of Transportation (2010). Volunteer Drivers Guide – A Guide to Best Practices. Accessed: http://www.wsdot.wa.gov/transit/training/vdg/default.htm#Section%201 <sup>179</sup> Community Transportation Association of America. Volunteers as Transportation Advocates, Planners, and

Organizers. Accessed: http://web1.ctaa.org/webmodules/webarticles/articlefiles/non-driver volunteers.pdf

#### 4.5.9 Consider liability issues with respect to transit services

Although liability and risk management issues are more prominent for programs that use volunteer drivers and escorts, all providers must consider these issues to protect themselves and their drivers. Liability issues can also be a factor in what services—such as door-through-door assistance—an organization can permit its employees and volunteers to provide, and, as noted by the National Conference of State Legislatures, "volunteers might be deterred by liability concerns" if service providers have not adequately dealt with these questions. This is of particular importance in states like Wisconsin, where civil immunity statutes specifically exclude drivers from protections for volunteers.<sup>180</sup>

In general, operators require general and commercial liability, personal property, and directors insurance policies, and may also need "excess auto liability, accidental driver insurance, and volunteer liability insurance," depending on their service model.<sup>181</sup> Unfortunately, transportation services may be unfamiliar to insurers, who may be unwilling or uncomfortable writing a policy for providers. This means that "there is generally not much room to negotiate [...] condition[s], terms or limitations."<sup>182</sup> In addition, more personal and involved levels of assistance (such as door-through-door transportation) will increase the program's exposure to risk. In the face of rising insurance rates, a group of transit systems in Iowa coordinated to obtain fleet insurance through an insurance consortium. More than 300 vehicles were insured through an independent broker, who negotiated with a variety of insurance companies on behalf of the consortium.<sup>183</sup>

If the organization owns vehicles, they must be covered by a commercial auto insurance policy and will be covered under that policy regardless of whether their drivers are employees or volunteers. If volunteers use their own cars, however, they will be covered primarily by their own personal auto insurance. According to the Non-Profit Risk Management Center, this means that volunteers driving their own vehicles be held liable for accidents, but this does not necessarily preclude the operator from exposure to risk in a catastrophic accident. To avoid such risk, transportation providers can purchase non-owned auto liability insurance, which will protect the organization from "liability for accidents caused by an employee or volunteer driving their own vehicle." This coverage can also be expanded to protect volunteers from excess liability by adding an endorsement to the policy.<sup>184</sup>

#### 4.5.10 Adopt a mobility management perspective

Groups such as the CTAA and the interagency National Resource Center on Human Service Transportation have advocated the "mobility management" paradigm, which emphasizes service coordination rather than provision and focuses on finding individualized transportation solutions for specific customers.<sup>185</sup> As mobility managers, transportation agencies adopt a brokerage or coordination role: they assess each customer's needs, resources, and eligibility for aid, and then

http://www.coordinatemntransit.org/reports/mncoordstudy/documents/0-FullCoordinationStudy.pdf

<sup>&</sup>lt;sup>180</sup> Sundeen, M and Farber, N. Volunteer Driver Liability and Immunity: A 50 State Survey. National Conference of State Legislatures. Accessed: http://ncsl.org/print/transportation/vol\_driverliabl06.pdf

<sup>&</sup>lt;sup>181</sup> Beverly Foundation (2007). Risk and Risk Management Strategies: Important Considerations for Volunteer Driver Programs and Volunteer Drivers. Accessed:

http://www.beverlyfoundation.org/library/volunteertransportation/Risk\_Management\_Strategy.pdf

 <sup>&</sup>lt;sup>182</sup> National Resource Center for Human Service Transportation Coordination. Myths and Realities: Insurance.
 <sup>183</sup> Minnesota Department of Transportation Office of Transit (3/2006). Minnesota Public Transit – Human Services Transportation Coordination Study. p. V-9. Accessed:

<sup>&</sup>lt;sup>184</sup> Non-Profit Risk Management Center. Risk on the Road: Managing Volunteer Driver Exposures. Accessed: http://www.nonprofitrisk.org/library/articles/auto050608.shtml
<sup>185</sup> National Resource Center for Human Service Transportation (2007). Mathematical Management (2007). Mathematical Mathematica

<sup>&</sup>lt;sup>185</sup> National Resource Center for Human Service Transportation (2007). Mobility Management. Accessed: http://www.unitedweride.gov/Mobility\_Management\_Brochure.pdf

refer the customer to the most appropriate and cost-effective service provider. The payoffs can be substantial: coordinating between programs can reduce duplication of services and inefficient use of vehicles and other resources. Largely through funding provided by the New Freedom program, along with state efforts toward coordination, Wisconsin boasts a growing mobility management community dedicated to finding localized and individualized solutions to mobility needs.

#### 4.5.11 Support coordination at state and regional levels

In some areas, legislative, programmatic, and administrative barriers hinder cross-jurisdictional or cross-purpose transit service provision, leading to duplication of efforts or underutilization of services. State agencies should work together in to remove or mitigate such barriers. State-level coordinating councils created by statute exist in twelve states; fourteen other states are home to councils formed through a governor's executive order or initiative.<sup>186</sup> To be effective, these councils should include a broad range of stakeholders including representatives from all state agencies involved in the implementation of transportation programs and representatives from local agencies, service providers, and interested non-governmental groups. Effective councils also have a budget, meet regularly, and have the authority to require cooperation of relevant agencies.<sup>187</sup> In August 2010, the Georgia Governor's Office of Highway Safety held a workshop on rural and human services transportation coordination. The workshop's national perspectives panel identified enabling legislation as the best approach to coordination, as opposed to executive order or initiative. Workshop attendees also recognized the importance of data collection and analysis in working towards coordination at the state level.<sup>188</sup> Comprehensive data is critical in completing inventories of services, conducting needs assessments, and developing recommendations to fill gaps in service.

Since actual coordination between transportation services occurs at the local and regional levels, transit service providers should also coordinate and collaborate with each other to promote effective service delivery and make the best use of limited funds.<sup>189</sup> Program requirements mandating local transportation coordination planning—such as those included in the federal Elderly and Disabled Transportation Capital Assistance, Job Access and Reverse Commute, and New Freedom programs—provide important incentives for collaboration and coordination at local levels. Active mobility managers or state-designated community coordination groups working at the local scale can also work to break down barriers between individual service providers.

#### 4.5.12 Plan for an aging population

Agencies should understand the mobility needs of older individuals and regularly review changes in those needs. As part of existing planning requirements, local and state agencies could distribute surveys and hold focus groups. For example, municipalities should consider the mobility needs of older populations when undertaking housing and land use planning activities.<sup>190</sup> To accomplish this, state bodies may develop and promote materials describing best practice planning guidelines or coordinate with relevant professional associations and local

 <sup>&</sup>lt;sup>186</sup> Farber, Nicholas J. and James B. Reed (4/2010). *State Human Service Transportation Coordinating Councils: An Overview and State Profiles*. National Conference of State Legislatures. Prepared for the Federal Transit Administration. p. 4. Accessed from: http://www.ncsl.org/documents/transportation/HSTCCover.pdf
 <sup>187</sup> ibid. p. 3.

<sup>&</sup>lt;sup>188</sup> Governor's Strategic Highway Safety Plan Older Driver Task Force. pp. 2, 4.

<sup>&</sup>lt;sup>189</sup> Southeast Michigan Council of Governments. pp. 37-38.

<sup>&</sup>lt;sup>190</sup> Governor's Traffic Safety Advisory Commission. p. 7.

government organizations.<sup>191</sup> For their part, licensing agencies could hand out surveys to older drivers at the time of license renewal.<sup>192</sup>

#### 4.5.13 Identify service gaps in alternative transportation needs

Another best practice identified by the Michigan Action Plan relates to the identification of existing gaps in service for alternative transportation needs.<sup>193</sup> Filling these gaps often depends upon the unique local and regional context; however, a state-level understanding of the extent and nature of underserved elderly communities will aid decision makers in directing resources and providing technical assistance to close existing gaps.

#### 4.5.14 Explore innovative funding arrangements for transit

Elderly mobility advocates have identified numerous examples of innovative practices developed by transit providers. The National Center on Senior Transportation (NCST) has recognized the Human Services Council of southwestern Washington State and EZ Ride of New Jersey, which have both developed "sponsorship accounts" that allow friends, family, community members, and businesses to easily contribute to the cost of fee-based transportation services for seniors with limited incomes.<sup>194</sup>

United We Ride suggests that inter-agency cooperation can be assisted by cost-allocation technology, such as cost sharing, billing, and reporting software. These applications enable "human services agencies and transportation providers to calculate shared costs, and automate billing and reporting functions," and are often available as part of dispatching and transportation management software packages. The Oregon Department of Transportation, in conjunction with state human service agencies, has invested in shared call centers with such software, leading to "better access to transportation" for clients and "a significant cost reduction per client trip" for agencies.<sup>195</sup>

<sup>194</sup> National Center on Senior Transportation (2008). Rides Change Lives: Innovations in Senior Transportation.
 Accessed: http://seniortransportation.easterseals.com/site/DocServer/Rides\_Change\_Lives.pdf?docID=103983
 <sup>195</sup> US DOT Volpe National Transportation Systems Center (2004). Using Technologies to Support Cost Allocation

Among Human Services and Transportation Agencies. Accessed: http://www.unitedweride.gov/Cost\_Allocation.pdf

<sup>&</sup>lt;sup>191</sup> Southeast Michigan Council of Governments. pp. 48-49.

<sup>&</sup>lt;sup>192</sup> Vance & Renz, LLC. p. 20.

<sup>&</sup>lt;sup>193</sup> Governor's Traffic Safety Advisory Commission. p. 6.

## 5. Recommendations

Following analysis of survey information and information gathered in focus groups, the research team makes the following 13 recommendations, presented in no particular order. It should be noted that these recommendations are not solely limited to policies only affecting elderly citizens, in some cases these recommendations apply to older and partially disabled citizens.

- 1. Explore the initiation of a Medical Advisory Board to guide state policies with respect to medical fitness to drive and to provide a conduit between WisDOT and the state's medical community. Encourage broad participation from members of the medical community from across the state.
- 2. Review the vacant nurse practitioner position in the Medical Review Unit to improve program outreach regarding reporting requirements and state processes for license cancellation. This position could also help develop informational resources, participate in data collection and program evaluation, and expand computer-based reporting to medical professionals. With more older drivers on the road, awareness and implementation of state policies relating to reporting at-risk drivers will become more critical in future years.
- 3. When mailing license cancellation notices, always send contact information and resources about local transportation alternatives. Increase communication between ADRCs, mobility managers, etc. and the Medical Review Unit on this issue. Support individual mobility planning as a part of mobility manager activities. In general, support a smoother transition from driving to other alternatives.
- 4. Develop high-quality informational resources and self-assessment tools and make them available online and in print at regional locations such as senior centers. Include information about the impacts of the aging process upon driving, local transportation alternatives, and relevant state policies. Resources can help assist mobility managers and support awareness of existing services and guidelines.
- 5. Analyze crash trends involving elderly individuals and use the results to help guide installation of engineering countermeasures and state licensing policies. The state should also adopt appropriate recommendations from the forthcoming FHWA Highway Design Handbook for Older Drivers and Pedestrians and disseminate standards to local agencies and private partners.
- 6. Enhance roundabout education materials and activities specifically targeted towards older drivers. New design practices, and especially roundabouts, are a chief concern for elderly drivers. WisDOT should consider holding outreach sessions and developing educational materials geared towards an older audience.
- 7. Work with the Officer of the Commissioner of Insurance and other parties to explore requiring insurance companies operating within the state to provide discounts to individuals who complete a state-approved driver-improvement course like AARP's Driver Safety Program course. Additionally, work with insurance companies on issues related to coverage for volunteer transit drivers and research the expansion of coverage for occupational therapy services related to driving skills.
- 8. Utilize Rural Transit Assistance Program funds to help build technical expertise regarding budgeting, data collection, and program application processes. WisDOT program managers expressed some concerns about the level of local technical expertise

with regards to these critical elements of managing successful local transit services. RTAP courses or webinars focusing on these subjects could help inexperienced program applicants gain a clearer understanding of how best to leverage limited resources and collect data to support state-level evaluation and technical assistance activities.

- 9. Prioritize highway improvement or maintenance projects that will support elderly mobility in competitive application processes and include Aging Agency representatives on project selection committees. For competitive transportation programs, applications should include questions and/or award points for projects that will significantly improve elderly mobility in an area. Examples could include the creation of a channelized left-turn lane, the installation of pedestrian countdown timers at intersections, or expanding the hours of a transit service heavily used by older individuals.
- 10. Continue efforts toward coordination at both state and local/regional levels. At the state level, make the case for a stronger ICTC by recognizing and publicizing the potential efficiency gains associated with closely coordinated transit services. Continue supporting the mobility management perspective and nurturing the state's growing mobility management community. At the local and regional levels, explore opportunities for joint marketing and advertising, including partnerships with other transportation programs or other non-transportation services for the elderly. Explore innovative approaches to advertising and marketing; for instance, an agency could install distinctive vehicle wraps as a relatively low-cost way to utilize existing capital.
- 11. Work with the Department of Health Services to evaluate Medicaid non-emergency medical transportation (NEMT) broker performance based upon reimbursement levels, customer satisfaction, and coordination with existing local services. As noted, the transition to Logisticare as a statewide broker of NEMT services holds potential in terms of augmenting the state's reimbursement rate; however, the move has sparked controversy for its potential impacts upon customer satisfaction and upon existing service providers. In seeking an NEMT broker, the Department of Health Services issued a Request for Proposals that included a paragraph indicating that the Department hoped that the broker would participate in a mobility management pilot project funded through the Community Transportation Association of America. Beyond this text, there was no requirement that the broker participate in the ICTC or any other coordination activities. In any renewal or renegotiation of this contract, coordination mandates should be included. Additionally, the state should evaluate the effects of a statewide broker upon customer satisfaction and local service providers.
- 12. Continue to identify and respond to transit service gaps for elderly riders. In particular, consider expanding evening and weekend options for older riders. This could be accomplished via mandates or incentives to provide such service.
- 13. Continue gathering information about the needs of older individuals; encourage local governmental units to incorporate findings in plans for land use and housing. Demographic, social, and economic trends will continue to shape the dimensions surrounding the mobility needs of Wisconsin's older populations. The state should continue to evaluate these needs and prioritize methods to address them. State agencies should also encourage municipalities to consider elderly transportation needs when thinking about future land use and housing patterns in their communities.

## Appendix A: Wisconsin Department of Transportation Webbased Resources

WisDOT provides some informational and educational resources through its website. Some of these resources are located in the 'Safety' section of the site, while others can be found in the 'Drivers & Vehicles' area. The Safety section offers specific tips for left turn procedures, links to driver improvement courses, information about alternatives to driving, a sample of highway design features for older drivers, general safe driving tips, information about transportation laws related to older drivers, and a page with links to other resources.<sup>196</sup>

The resources in the 'Drivers & Vehicles' area include pages that describe changes in the body that can compromise driver safety, information about adaptive vehicle equipment, departmental policies regarding medical fitness to drive, and the department's process for identifying and assessing at-risk drivers. This page also includes a number of links to external resources on the topic.<sup>197</sup>

<sup>&</sup>lt;sup>196</sup> Wisconsin Department of Transportation (2005). *Older driver safety*. Accessed: http://www.dot.wisconsin.gov/safety/motorist/olderdrivers/indexs.htm

<sup>&</sup>lt;sup>197</sup> Wisconsin Department of Transportation (2008). *Aging or impaired drivers.* Accessed: http://www.dot.wisconsin.gov/drivers/drivers/aging/index.htm

## Appendix B: Chart of Wisconsin Transit Programs

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
Specialized Transportation Assistance Program (s. 85.21)	WisDOT	Counties	Directly provide service; purchase transportation service from any public or private organization; directly reimburse elderly or disabled passengers for their use of transportation service; volunteer driver escort reimbursement: reimburse transportation service; perform or purchase planning or management studies on transportation; coordinate transportation services; perform or purchase in- service training relating to transportation service; purchase capital equipment for transportation service.	\$13,600,000	State	Allocation set by proportion of state's elderly and disabled population in each county. No county can receive less than 1/2% of the total annual appropriation (\$65,980 in 2010). Also an option to put towards capital trust fund.

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
Tribal Transportation for Elders (s. 85.215)	WisDOT	Federally recognized tribes in Wisconsin	Directly provide service; purchase transportation service from any public or private organization; directly reimburse elderly passengers for their use of transportation service; volunteer driver escort reimbursement; reimburse elderly persons for use of their personal means of transportation under certain conditions; perform or purchase planning or management studies on transportation; coordinate transportation services; perform or purchase in- service training relating to transportation service	\$247,500	State	All eleven tribes receive an equal share
Elderly and Disabled Transportation Capital Assistance Program (Section 5310/s. 85.22)	WisDOT	Private non- profit organizations; local body if no available private non- profit	Capital projects (specialized transit vehicles for elderly and disabled)	\$3,100,000	State/Federal	WisDOT applies for and receives funds based upon state's population of elderly and disabled individuals. Local bodies apply to WisDOT for combined state and federal funds and WisDOT distributes based upon application score, available funds.

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
New Freedom Initiative (Section 5317)	WisDOT	Private non- profit organiations; local public bodies; operators of public transportation services, including private operators	Supporting new mobility management and coordination programs among public transportation providers and other human service agencies providing transportation; purchasing vehicles to support new accessible taxi, ride sharing, and/or vanpooling programs; supporting the administration and expenses related to new voucher programs for transportation services offered by human service providers; supporting new volunteer driver and aide programs; travel training; enhancing paratransit beyond minimum requirements of the ADA; feeder services	\$2,400,000	State/Federal	60% of funding for large urbanized areas (>200,000); 20% for small urbanized areas (50,000 - 200,000); 20% for non-urbanized areas (<50,000)
Medicaid (Non- Emergency Medical Transportation)	DHS	Counties; services provided by certified Medicaid carriers	Medicaid pays for transportation costs for clients traveling to/from medical treatments and appointments	\$60,000,000	State/Federal	Services brokered by Logisticare, who contracts locally to provide NEMT services

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
Medicaid (Specialized Medical Vehicle)	DHS	Counties; services provided by certified Medicaid carriers	Available for medical appointment transportation services needed for clients with disabilities, such that the client requires a wheelchair, stretcher, or has other special transportation needs	\$21,000,000	State/Federal	DHS reimburses Medicaid users for individual trips
Medicaid Infrastructure Grants/Pathways to Independence	DHS	Any local public body	WisTech and WisLoan technology assistance programs (Pathways) provide demonstrations and loans for assistive technologies including wheelchair lifts for vehicles, etc.	\$100,000	State/Federal	Transportation component of Pathways is not separated; DHS oversees programs; Wisconsin Independent Living Centers administer programs
Older Americans Act (Title IIIB)	DHS	Counties; local aging units determine services	Programs used to remove barriers to independent living for the elderly through a variety of long-term care services in communities; client transportation is included	Approximately \$200,000 (of \$2 million total Title IIIB funds)	Federal	DHS allocates funds to local aging units through formula; local units determine use of funds

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
Senior Community Service Employment Program (SCSEP)/ Wisconsin Senior Employment Program (WISE)	DHS	Counties	Participants receive an assessment to determine individual needs for training, supportive services, and potential for employment; supportive services may include transportation	\$300,000	State/Federal	DHS determines needs for individuals; supportive services may include transportation
County Transportation Grant (CTG)	Department of Veterans Affairs	Counties	Financial assistance to counties to provide transportation to Veterans Affairs (VA) medical appointments; may be used for capital or operating expenditures	\$100,000	State	DAV distributes funds to counties without DAV van service
Disabled American Veterans	Department of Veterans Affairs	Non-profit organization	Vans around the state that stop at predetermined locations and transport veterans to various medical centers across the state	\$100,000	State	Disabled American Veterans receives funds from Department of Veterans Affairs
Federal Formula Grant Program for Urbanized Areas (Section 5307/s. 85.20)	WisDOT	Public transit services	Capital expenditures	\$38,000,000	State/Federal	Large communities (populations over 200,000) are eligible

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
Federal Discretionary Capital Assistance Program (Section 5309)	WisDOT	States; local public bodies; federally recognized Indian tribes	Capital expenditures	Varies	Federal	Discretionary program (funding level changes from year to year)
Rural and Small Urban Area Public Transportation Assistance Program (Section 5311)	WisDOT	Public transit services	Capital and operating expenditures	\$13,400,000	Federal	Services operating in non-urbanized areas are eligible (populations between 2,500 and 50,000)
Rural Transit Assistance Program (RTAP)	WisDOT	Individuals	Development of skills and abilities for persons involved in providing transit services to rural and small urban areas	\$200,000	Federal	WisDOT contracts with consultant to administer program; program develops training sessions and provides scholarships for other educational opportunities
State Urban Mass Transit Operating Assistance Program (s. 85.20)	WisDOT	Public transit services	Operating expenditures	\$106,000,000	State	Services operating in areas with populations greater than 2,500 are eligible

Program	Administering Agency or Agencies	Eligible Applicants	Eligible Expenditures	Funding Level	Funding Source(s)	Award Process
Wisconsin Employment Transportation Assistance Program (WETAP); (Section 5316, s. 85.24, s. 106.26)	WisDOT	Local public bodies; public transit agencies; tribal organizations; non-profit agencies	Services supporting access to employment	\$3,300,000	Local/State/Federal	Integrates Job Access Reverse Commute, Transportation Employment and Mobility, and Employment Transit Aids programs into single process

## Appendix C: Other Key Survey Results, All Respondents

1. Do you currently have a valid driver's license?

Answer	%
Yes	76.05%
No	23.95%

#### 2. In the past two years, have you had any accidents or injuries while personally driving?

Answer	%
Yes	6.02%
No	93.98%

#### 3. Do you have any adaptive equipment on the vehicle(s) you drive?

Answer	%
Yes, please describe:	3.13%
No	96.87%

#### 4. In the past two years, have you renewed your driver's license?

Answer	%
Yes	42.15%
No	57.85%

#### 5. Did you have any difficulties when you last renewed your driver's license?

Answer	%
Yes, please describe:	3.81%
No	96.19%



## Appendix D: Key Survey Results by Income

Under \$9,999							
Question	Strongly Disagree	Disagree	Agree	Strongl y Agree	N/A		
It is cheaper	12.01%	22.61%	28.62%	28.27%	8.48%		
It is physically easier to board/operate	5.40%	7.91%	35.61%	40.65%	10.43%		
It is more convenient	5.76%	1.69%	32.88%	57.63%	2.03%		
It is faster	6.38%	12.06%	27.66%	50.35%	3.55%		
It is more reliably on time	6.62%	5.57%	32.40%	51.92%	3.48%		
It allows me to go to a wider variety of destinations	5.63%	9.86%	27.82%	54.93%	1.76%		
It allows me go to more destinations in one trip	8.71%	6.97%	26.13%	55.40%	2.79%		
It is safer	7.91%	17.99%	31.65%	35.25%	7.19%		
It is the only kind of transportation available	17.61%	27.11%	16.20%	29.93%	9.15%		

\$10,000 to 24,999								
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A			
It is cheaper	10.68%	23.30%	34.30%	17.80%	13.92%			
It is physically easier to board/operate	3.97%	7.95%	39.40%	32.12%	16.56%			
It is more convenient	4.59%	2.45%	34.25%	54.74%	3.98%			
It is faster	5.52%	5.84%	33.12%	48.70%	6.82%			
It is more reliably on time	4.53%	4.53%	33.66%	49.19%	8.09%			
It allows me to go to various destinations	5.00%	4.06%	28.75%	55.63%	6.56%			
It allows me go to more destinations in one trip	5.33%	4.70%	30.41%	52.35%	7.21%			
It is safer	5.67%	16.00%	39.00%	23.67%	15.67%			
It is the only kind available	12.34%	27.60%	24.03%	20.78%	15.26%			
\$25,000 to \$49,999								
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A			
It is cheaper	9.66%	21.89%	31.90%	21.77%	14.78%			
It is physically easier to board/operate	5.29%	6.35%	39.01%	32.55%	16.80%			
It is more convenient	5.63%	1.91%	32.62%	54.94%	4.89%			
It is faster	5.08%	5.54%	33.11%	49.27%	7.01%			
It is more reliably on time	3.70%	4.49%	33.67%	48.93%	9.20%			
It allows me to go to a wider variety of destinations	5.09%	3.90%	31.31%	54.50%	5.20%			
It allows me go to more destinations in one trip	6.03%	4.28%	30.92%	52.52%	6.25%			
It is safer	4.64%	14.05%	38.45%	26.43%	16.43%			
It is the only kind of transportation available	11.97%	23.59%	22.32%	26.70%	15.42%			
\$50,000 to 74,999								
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Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A			
It is cheaper	10.16%	17.82%	35.88%	19.95%	16.19%			
It is physically easier to board/operate	3.09%	6.57%	49.10%	26.42%	14.82%			
It is more convenient	4.65%	1.52%	45.45%	43.29%	5.09%			
It is faster	4.08%	4.20%	44.24%	38.61%	8.87%			
It is more reliably on time	3.51%	3.14%	45.71%	38.09%	9.55%			
It allows me to go to a wider variety of destinations	4.32%	3.65%	42.41%	42.97%	6.64%			
It allows me go to more destinations in one trip	5.03%	4.58%	42.12%	41.34%	6.93%			
It is safer	4.34%	14.03%	42.22%	22.07%	17.35%			
It is the only kind of transportation available	9.73%	19.34%	30.66%	22.63%	17.64%			

\$75,000 to \$99,999						
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	
It is cheaper	6.70%	14.14%	39.21%	17.12%	22.83%	
It is physically easier to board/operate	3.40%	2.91%	47.57%	32.77%	13.35%	
It is more convenient	4.85%	0.63%	45.36%	41.77%	7.38%	
It is faster	3.61%	5.29%	42.79%	35.58%	12.74%	
It is more reliably on time	3.70%	3.46%	45.27%	36.03%	11.55%	
It allows me to go to a wider variety of destinations	5.25%	2.84%	42.67%	39.82%	9.41%	
It allows me go to more destinations in one trip	4.79%	3.49%	42.27%	39.43%	10.02%	









Under \$9,999								
Question	Not Important	Slightly Important	Somewhat Important	Very Important				
Fares are affordable	2.94%	3.53%	22.94%	70.59%				
Transit stops are near or at my home	3.55%	2.96%	14.20%	79.29%				
Transit stops are near or at places I want to go	3.03%	1.82%	12.73%	82.42%				
I can reach my destination without a transfer	6.71%	12.20%	23.17%	57.93%				
Wait times are short	3.01%	10.24%	30.72%	56.02%				
Transit is available on short notice	9.15%	15.24%	28.05%	47.56%				
Transit reliably arrives on time	2.41%	6.63%	29.52%	61.45%				
Vehicles are easy to board	5.42%	7.23%	24.10%	63.25%				
Transit is safe and secure	2.42%	7.27%	18.18%	72.12%				
Transit system can work around language barriers	36.65%	21.12%	16.15%	26.09%				
Someone helps me use the service	35.80%	14.20%	19.14%	30.86%				

\$10,000 to 24,999							
Question	Not Important	Slightly Important	Somewhat Important	Very Important			
Fares are affordable	6.59%	5.39%	22.75%	65.27%			
Transit stops are near or at my home	7.83%	4.22%	15.66%	72.29%			
Transit stops are near or at places I want to go	7.27%	1.21%	16.97%	74.55%			
I can reach my destination without a transfer	11.38%	9.58%	25.75%	53.29%			
Wait times are short	7.14%	6.55%	25.60%	60.71%			

Transit is available on short notice	8.59%	14.11%	22.70%	54.60%
Transit reliably arrives on time	3.57%	1.19%	21.43%	73.81%
Vehicles are easy to board	5.92%	8.88%	19.53%	65.68%
Transit is safe and secure	2.40%	1.80%	17.96%	77.84%
Transit system can work around language barriers	39.62%	12.58%	22.01%	25.79%
Someone helps me use the service	34.13%	11.98%	18.56%	35.33%

\$25,000 to \$49,999						
Question	Not Important	Slightly Important	Somewhat Important	Very Important		
Fares are affordable	6.59%	7.78%	23.95%	61.68%		
Transit stops are near or at my home	9.72%	3.45%	14.73%	72.10%		
Transit stops are near or at places I want to go	8.22%	2.63%	15.46%	73.68%		
I can reach my destination without a transfer	12.70%	8.47%	20.85%	57.98%		
Wait times are short	10.49%	5.57%	26.56%	57.38%		
Transit is available on short notice	14.85%	8.91%	29.04%	47.19%		
Transit reliably arrives on time	8.33%	3.85%	17.31%	70.51%		
Vehicles are easy to board	7.45%	5.90%	23.60%	63.04%		
Transit is safe and secure	6.83%	3.11%	17.08%	72.98%		
Transit system can work around language barriers	45.92%	12.93%	16.67%	24.49%		
Someone helps me use the service	35.20%	9.54%	16.78%	38.49%		

\$50,000 to 74,999							
Question	Not Important	Slightly Important	Somewhat Important	Very Important			
Fares are affordable	8.93%	8.33%	24.70%	58.04%			
Transit stops are near or at my home	11.36%	4.10%	13.88%	70.66%			
Transit stops are near or at places I want to go	11.18%	4.28%	13.16%	71.38%			
I can reach my destination without a transfer	15.51%	5.70%	17.09%	61.71%			
Wait times are short	12.09%	5.23%	28.10%	54.58%			
Transit is available on short notice	13.91%	7.95%	25.17%	52.98%			
Transit reliably arrives on time	9.15%	2.74%	23.78%	64.33%			
Vehicles are easy to board	8.31%	5.34%	19.58%	66.77%			
Transit is safe and secure	7.21%	3.30%	17.12%	72.37%			
Transit system can work around language barriers	45.36%	12.86%	14.29%	27.50%			
Someone helps me use the service	26.64%	8.88%	22.04%	42.43%			

\$75,000 to \$99,999							
Question	Not Important	Slightly Important	Somewhat Important	Very Important			
Fares are affordable	10.45%	8.46%	26.37%	54.73%			
Transit stops are near or at my home	10.47%	6.28%	13.61%	69.63%			
Transit stops are near or at places I want to go	10.53%	3.68%	16.32%	69.47%			
I can reach my destination without a transfer	15.26%	2.63%	14.21%	67.89%			
Wait times are short	9.84%	6.01%	25.14%	59.02%			
Transit is available on short notice	7.57%	11.35%	30.27%	50.81%			

Transit reliably arrives on time	4.59%	6.12%	21.94%	67.35%
Vehicles are easy to board	5.91%	4.43%	18.23%	71.43%
Transit is safe and secure	4.04%	2.53%	17.17%	76.26%
Transit system can work around language barriers	47.50%	10.00%	18.13%	24.38%
Someone helps me use the service	12.17%	13.76%	17.99%	56.08%















# Appendix E: Key Survey Results by Age

Under 60							
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A		
It is cheaper	12.01%	22.61%	28.62 %	28.27%	8.48%		
It is physically easier to board/operate	5.40%	7.91%	35.61 %	40.65%	10.43%		

It is more convenient	5.76%	1.69%	32.88 %	57.63%	2.03%
It is faster	6.38%	12.06%	27.66 %	50.35%	3.55%
It is more reliably on time	6.62%	5.57%	32.40 %	51.92%	3.48%
It allows me to go to a wider variety of destinations	5.63%	9.86%	27.82 %	54.93%	1.76%
It allows me go to more destinations in one trip	8.71%	6.97%	26.13 %	55.40%	2.79%
It is safer	7.91%	17.99%	31.65 %	35.25%	7.19%
It is the only kind of transportation available	17.61%	27.11%	16.20 %	29.93%	9.15%

	60-64				
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
It is cheaper	10.68%	23.30%	34.30%	17.80%	13.92%
It is physically easier to board/operate	3.97%	7.95%	39.40%	32.12%	16.56%
It is more convenient	4.59%	2.45%	34.25%	54.74%	3.98%
It is faster	5.52%	5.84%	33.12%	48.70%	6.82%
It is more reliably on time	4.53%	4.53%	33.66%	49.19%	8.09%
It allows me to go to a wider variety of destinations	5.00%	4.06%	28.75%	55.63%	6.56%
It allows me go to more destinations in one trip	5.33%	4.70%	30.41%	52.35%	7.21%
It is safer	5.67%	16.00%	39.00%	23.67%	15.67%
It is the only kind of transportation available	12.34%	27.60%	24.03%	20.78%	15.26%

	65-74				
Question	Strongly Disagree	Disagre e	Agree	Strongly Agree	N/A
It is cheaper	9.66%	21.89%	31.90%	21.77%	14.78%
It is physically easier to board/operate	5.29%	6.35%	39.01%	32.55%	16.80%
It is more convenient	5.63%	1.91%	32.62%	54.94%	4.89%
It is faster	5.08%	5.54%	33.11%	49.27%	7.01%
It is more reliably on time	3.70%	4.49%	33.67%	48.93%	9.20%
It allows me to go to a wider variety of destinations	5.09%	3.90%	31.31%	54.50%	5.20%
It allows me go to more destinations in one trip	6.03%	4.28%	30.92%	52.52%	6.25%
It is safer	4.64%	14.05%	38.45%	26.43%	16.43%
It is the only kind of transportation available	11.97%	23.59%	22.32%	26.70%	15.42%

	75-84	_			
Question	Strongly Disagree	Disagre e	Agree	Strongly Agree	N/A
It is cheaper	10.16%	17.82%	35.88%	19.95%	16.19%
It is physically easier to board/operate	3.09%	6.57%	49.10%	26.42%	14.82%
It is more convenient	4.65%	1.52%	45.45%	43.29%	5.09%
It is faster	4.08%	4.20%	44.24%	38.61%	8.87%
It is more reliably on time	3.51%	3.14%	45.71%	38.09%	9.55%
It allows me to go to a wider variety of destinations	4.32%	3.65%	42.41%	42.97%	6.64%
It allows me go to more destinations in one trip	5.03%	4.58%	42.12%	41.34%	6.93%
It is safer	4.34%	14.03%	42.22%	22.07%	17.35%

It is the only kind of transportation					
available	9.73%	19.34%	30.66%	22.63%	17.64%

	85-94				
Question	Strongly Disagree	Disagre e	Agree	Strongly Agree	N/A
It is cheaper	6.70%	14.14%	39.21%	17.12%	22.83%
It is physically easier to board/operate	3.40%	2.91%	47.57%	32.77%	13.35%
It is more convenient	4.85%	0.63%	45.36%	41.77%	7.38%
It is faster	3.61%	5.29%	42.79%	35.58%	12.74%
It is more reliably on time	3.70%	3.46%	45.27%	36.03%	11.55%
It allows me to go to a wider variety of destinations	5.25%	2.84%	42.67%	39.82%	9.41%
It allows me go to more destinations in one trip	4.79%	3.49%	42.27%	39.43%	10.02%
It is safer	3.23%	11.91%	40.94%	22.33%	21.59%
It is the only kind of transportation available	8.19%	20.84%	29.78%	20.10%	21.09%

95 and Older							
Question	Strongly Disagree	Disagre e	Agree	Strongly Agree	N/A		
It is cheaper	6.06%	15.15%	39.39%	15.15%	24.24%		
It is physically easier to board/operate	3.23%	6.45%	38.71%	29.03%	22.58%		
It is more convenient	2.86%	2.86%	34.29%	45.71%	14.29%		
It is faster	0.00%	13.33%	40.00%	20.00%	26.67%		
It is more reliably on time	2.86%	5.71%	51.43%	25.71%	14.29%		
It allows me to go to a wider variety of destinations	3.03%	12.12%	42.42%	30.30%	12.12%		

It allows me go to more destinations in one trip	2.86%	11.43%	40.00%	28.57%	17.14%
It is safer	0.00%	5.88%	35.29%	32.35%	26.47%
It is the only kind of transportation available	5.71%	20.00%	37.14%	25.71%	11.43%









Under 60						
Question	Not Important	Slightly Important	Somewhat Important	Very Important		
Fares are affordable	2.94%	3.53%	22.94%	70.59%		
Transit stops are near or at my home	3.55%	2.96%	14.20%	79.29%		
Transit stops are near or at places I want to go	3.03%	1.82%	12.73%	82.42%		
I can reach my destination without a transfer	6.71%	12.20%	23.17%	57.93%		
Wait times are short	3.01%	10.24%	30.72%	56.02%		
Transit is available on short notice	9.15%	15.24%	28.05%	47.56%		
Transit reliably arrives on time	2.41%	6.63%	29.52%	61.45%		
Vehicles are easy to board	5.42%	7.23%	24.10%	63.25%		

Transit is safe and secure	2.42%	7.27%	18.18%	72.12%
Transit system can work around language barriers	36.65%	21.12%	16.15%	26.09%
Someone helps me use the service	35.80%	14.20%	19.14%	30.86%

	60-64			
Question	Not Important	Slightly Important	Somewhat Important	Very Important
Fares are affordable	6.59%	5.39%	22.75%	65.27%
Transit stops are near or at my home	7.83%	4.22%	15.66%	72.29%
Transit stops are near or at places I want to go	7.27%	1.21%	16.97%	74.55%
I can reach my destination without a transfer	11.38%	9.58%	25.75%	53.29%
Wait times are short	7.14%	6.55%	25.60%	60.71%
Transit is available on short notice	8.59%	14.11%	22.70%	54.60%
Transit reliably arrives on time	3.57%	1.19%	21.43%	73.81%
Vehicles are easy to board	5.92%	8.88%	19.53%	65.68%
Transit is safe and secure	2.40%	1.80%	17.96%	77.84%
Transit system can work around language barriers	39.62%	12.58%	22.01%	25.79%
Someone helps me use the service	34.13%	11.98%	18.56%	35.33%

65-74						
Question	Not Important	Slightly Important	Somewhat Important	Very Important		
Fares are affordable	6.59%	7.78%	23.95%	61.68%		
Transit stops are near or at my home	9.72%	3.45%	14.73%	72.10%		

Transit stops are near or at places I want to go	8.22%	2.63%	15.46%	73.68%
I can reach my destination without a transfer	12.70%	8.47%	20.85%	57.98%
Wait times are short	10.49%	5.57%	26.56%	57.38%
Transit is available on short notice	14.85%	8.91%	29.04%	47.19%
Transit reliably arrives on time	8.33%	3.85%	17.31%	70.51%
Vehicles are easy to board	7.45%	5.90%	23.60%	63.04%
Transit is safe and secure	6.83%	3.11%	17.08%	72.98%
Transit system can work around language barriers	45.92%	12.93%	16.67%	24.49%
Someone helps me use the service	35.20%	9.54%	16.78%	38.49%

	75-84			
Question	Not Important	Slightly Important	Somewhat Important	Very Important
Fares are affordable	8.93%	8.33%	24.70%	58.04%
Transit stops are near or at my home	11.36%	4.10%	13.88%	70.66%
Transit stops are near or at places I want to go	11.18%	4.28%	13.16%	71.38%
I can reach my destination without a transfer	15.51%	5.70%	17.09%	61.71%
Wait times are short	12.09%	5.23%	28.10%	54.58%
Transit is available on short notice	13.91%	7.95%	25.17%	52.98%
Transit reliably arrives on time	9.15%	2.74%	23.78%	64.33%
Vehicles are easy to board	8.31%	5.34%	19.58%	66.77%
Transit is safe and secure	7.21%	3.30%	17.12%	72.37%
Transit system can work around language barriers	45.36%	12.86%	14.29%	27.50%

Someone helps me use the service	26.64%	8.88%	22.04%	42.43%
-				

85-94					
Question	Not Important	Slightly Important	Somewhat Important	Very Important	
Fares are affordable	10.45%	8.46%	26.37%	54.73%	
Transit stops are near or at my home	10.47%	6.28%	13.61%	69.63%	
Transit stops are near or at places I want to go	10.53%	3.68%	16.32%	69.47%	
I can reach my destination without a transfer	15.26%	2.63%	14.21%	67.89%	
Wait times are short	9.84%	6.01%	25.14%	59.02%	
Transit is available on short notice	7.57%	11.35%	30.27%	50.81%	
Transit reliably arrives on time	4.59%	6.12%	21.94%	67.35%	
Vehicles are easy to board	5.91%	4.43%	18.23%	71.43%	
Transit is safe and secure	4.04%	2.53%	17.17%	76.26%	
Transit system can work around language barriers	47.50%	10.00%	18.13%	24.38%	
Someone helps me use the service	12.17%	13.76%	17.99%	56.08%	

95 and Older					
Question	Not Important	Slightly Important	Somewhat Important	Very Important	
Fares are affordable	23.53%	11.76%	29.41%	35.29%	
Transit stops are near or at my home	12.50%	6.25%	6.25%	75.00%	
Transit stops are near or at places I want to go	11.76%	11.76%	5.88%	70.59%	
I can reach my destination without a transfer	16.67%	0.00%	11.11%	72.22%	

Wait times are short	18.75%	6.25%	18.75%	56.25%
Transit is available on short notice	25.00%	6.25%	37.50%	31.25%
Transit reliably arrives on time	11.11%	0.00%	22.22%	66.67%
Vehicles are easy to board	10.53%	0.00%	21.05%	68.42%
Transit is safe and secure	10.53%	0.00%	15.79%	73.68%
Transit system can work around language barriers	66.67%	13.33%	13.33%	6.67%
Someone helps me use the service	21.05%	15.79%	10.53%	52.63%



















# Appendix F: Key Survey Results, American Indians and Alaska Natives

1. Do you want to participate in this survey?

Answer	%	Response
Yes	1	214
No	0	0
Total		214

2. How often do you use each of the following types of transportation? (Please select one answer for each type of transportation.)

Question	Rarely or Never	A Few Times Per Month	A Few Times Per Week	Every Day
Private auto (you are the driver)	14.14%	4.19%	15.71%	65.97%
Private auto (you are the passenger)	31.88%	16.88%	35.00%	16.25%
Bus	70.29%	14.49%	8.70%	6.52%
Taxi (you are the only passenger)	93.53%	4.32%	0.72%	1.44%
Taxi (shared ride with other passenger)	95.52%	2.24%	0.75%	1.49%
Mini-bus	75.56%	18.52%	4.44%	1.48%
Paratransit service	92.37%	3.82%	2.29%	1.53%
Biking	87.59%	5.11%	5.11%	2.19%
Personal motorized device	91.11%	3.70%	2.96%	2.22%
Walking	29.09%	23.03%	20.00%	27.88%

3. Which type of transportation do you use most often? (Please select one answer.)

Answer	%
Private auto (driver)	72.73%
Private auto (passenger)	15.79%
Bus	5.74%
Taxi (only passenger)	0.48%
Taxi (shared ride)	0.48%
Mini-bus	1.44%
Paratransit service	0.00%
Biking	0.00%
Personal motorized device	0.00%
Walking	1.91%
Other, please describe:	1.44%

4. Thinking of the type of transportation you use most often, why do you prefer it to other transportation options? (Please select one answer for each reason.)

Question	Strongly Disagree	Disagre e	Agree	Strongly Agree	N/A
It is cheaper	17.22%	15.23%	33.77%	17.88%	15.89%
It is physically easier to board/operate	7.19%	3.92%	44.44%	32.03%	12.42%
It is more convenient	7.78%	1.11%	44.44%	41.11%	5.56%
It is faster	8.54%	4.88%	43.29%	34.76%	8.54%
It is more reliably on time	9.32%	3.11%	42.86%	37.27%	7.45%
It allows me to go to a wider variety of destinations	7.91%	3.39%	39.55%	41.81%	7.34%
It allows me go to more destinations in one trip	7.43%	5.14%	38.29%	42.86%	6.29%

It is safer	7.79%	9.09%	47.40%	24.03%	11.69%
It is the only kind of transportation available	10.32%	29.03%	22.58%	19.35%	18.71%

5. Do you have another reason other than those that are listed in the previous question?

Answer	%
Yes, please describe:	9.72%
No	90.28%

6. In general, how satisfied are you with the type transportation you use most often?

Answer	%
Very Dissatisfied	7.84%
Dissatisfied	3.43%
Satisfied	40.20%
Very Satisfied	48.53%

7. Do you currently have a valid driver's license?

Answer	%
Yes	87.62%
No	12.38%

8. In the past two years, have you had any accidents or injuries while personally driving?

Answer	%
Yes	7.26%
No	92.74%

#### 9. Do you have any adaptive equipment on the vehicle(s) you drive?

Answer	%
Yes, please describe:	3.98%
No	96.02%

#### 10. In the past two years, have you renewed your driver's license?

Answer	%
Yes	38.86%
No	61.14%

## 11. Did you have any difficulties when you last renewed your driver's license?

Answer	%
Yes, please describe:	1.41%
No	98.59%

# 12. In the past two years, have you used public or specialized transportation services?

Answer	%
Yes	46.63%
No	53.37%

13. How often do you use the following types of public or specialized transportation? (Please select one answer for each type of transportation.)

Question	Never Heard of These Services	Never Use These Services	Sometimes Use These Services	Frequently Use These Services
Medical transportation services	11.36%	40.91%	38.64%	9.09%
Employment transportation services	22.97%	59.46%	13.51%	4.05%
Veteran transportation services	28.77%	64.38%	5.48%	1.37%
Local aging office or senior center transportation services	11.24%	30.34%	35.96%	22.47%
Local bus services	8.97%	41.03%	38.46%	11.54%
Local shared taxi services	12.16%	66.22%	18.92%	2.70%
Other public transportation services	18.42%	42.11%	30.26%	9.21%

# 14. Which type of public or specialized transportation service do you use most often?

Answer	%
Medical transportation services	13.98%
Employment transportation services	6.45%
Veteran transportation services	2.15%
Local aging office or senior center services	41.94%
Local bus services	20.43%
Local shared taxi services	4.30%
Other, please describe	10.75%

15. Thinking of the public or specialized transportation service you use most often, what aspects of this service are most important to you? (Please select one answer for each aspect.)

Question	Not Important	Slightly Important	Somewhat Important	Very Important
Fares are affordable	9.64%	8.43%	21.69%	60.24%
Transit stops are near or at my home	10.00%	6.25%	20.00%	63.75%
Transit stops are near or at places I want to go	11.25%	3.75%	25.00%	60.00%
I can reach my destination without a transfer	10.98%	7.32%	31.71%	50.00%
Wait times are short	10.81%	8.11%	22.97%	58.11%
Transit is available on short notice	10.67%	8.00%	32.00%	49.33%
Transit reliably arrives on time	7.69%	3.85%	28.21%	60.26%
Vehicles are easy to board	4.88%	8.54%	28.05%	58.54%
Transit is safe and secure	6.41%	2.56%	21.79%	69.23%
Transit system can work around language barriers	23.68%	11.84%	21.05%	43.42%
Someone helps me use the service	26.58%	5.06%	24.05%	44.30%

16. Is there another important aspect other than those that are listed in the previous question?

Answer	%
Yes, please describe:	4.69%
No	95.31%

17. In general, how satisfied are you with the type of public or specialized transportation service you use most often?

Answer	%
Very Dissatisfied	2.11%
Dissatisfied	8.42%
Satisfied	50.53%
Very Satisfied	38.95%

18. During which times of the week do you encounter difficulties in getting to places you want to go? (Please select all answers that apply.)

Answer	%
Weekday mornings	13.68%
Weekday afternoons	9.47%
Weekday evenings	15.79%
Weekend mornings	10.53%
Weekend afternoons	15.79%
Weekend evenings	17.89%
I do not encounter difficulty getting to places I want to go	60.53%

19. For which of the following activities do you encounter difficulties because of transportation issues? (Please select all answers that apply.)

Answer	%
Going to work or volunteer locations	7.57%
Buying essentials (e.g. food, medicine)	16.22%
Attending community or civic events	18.92%
Going to medical appointments	22.70%

Attending religious events	8.65%
Visiting friends or family	18.38%
Other shopping	21.08%
Other, please describe	4.32%
I do not encounter difficulty with any activities because of transportation issues	60.00%

20. For which of the following reasons do you encounter difficulties in getting to places you want to go? (Please select all features or conditions that apply.)

Answer	%
No or limited access to car	12.00%
No or limited access to public transportation	10.00%
Concerns over safety	3.50%
Vision/hearing challenges	5.50%
Other health challenges	3.00%
Long distances to destinations	17.00%
Cost issues	17.50%
Other, please describe:	6.50%
I do not encounter difficulty getting to places I want to go	61.00%

21. What features or conditions would you need to consider using public or specialized transportation more? (Please select one answer for each feature or condition.)

Question	Not Important	Slightly Important	Somewhat Important	Very Important
Cheaper fares	16.77%	10.32%	13.55%	59.35%
Pick-up points closer to my home	14.29%	10.39%	14.94%	60.39%
Drop-off points closer to the places I want to go	15.48%	5.81%	16.13%	62.58%

Fewer transfers	18.49%	7.53%	12.33%	61.64%
Shorter wait times	13.84%	5.66%	14.47%	66.04%
More polite/helpful drivers or operators	14.84%	9.03%	14.19%	61.94%
More reliably on-time service	14.10%	5.77%	13.46%	66.67%
Vehicles that are easier to board or disembark	14.74%	7.69%	13.46%	64.10%
Safer and more secure transit experiences	16.34%	9.15%	9.80%	64.71%
Transit system that can better work around language barriers	35.63%	11.88%	16.25%	36.25%
More help using the service	24.68%	11.04%	16.88%	47.40%

22. Is there another important feature or condition other than those that are listed in the previous question?

Answer	%
Yes, please describe:	3.38%
No	96.62%

### 23. What is your sex?

Answer	%
Male	27.70%
Female	72.30%

# 24. What is your age?

Answer	%
Under 60 years	17.84%
60-64 years	15.96%

65-74 years	31.46%
75-84 years	29.11%
85-94 years	5.16%
95 years or older	0.47%

# 25. What is your marital status?

Answer	%
Never married	9.86%
Separated or divorced	27.23%
Widowed	28.17%
Married	34.74%

# 26. Which of the following best describes your residence?

Answer	%
Home I own	54.72%
Home I rent	34.91%
Home of adult children or other family	2.36%
Assisted living facility	0.00%
Nursing home	0.00%
Other, please describe:	8.02%

27. Which of the following best describes other occupants of your residence, if any? (Please select all answers that apply.)

Answer	%
No other occupants	35.82%
Adult children	19.90%

Unrelated caretaker	0.50%
Spouse or partner	30.35%
Children or grandchildren under age 18	11.44%
Other unrelated persons	5.47%
Other, please describe:	9.95%

## 29. Which of the following best describes your neighborhood?

Answer	%
Urban	18.36%
Suburban	10.14%
Rural	71.50%

# 30. Are you Spanish/Latino/Hispanic?

Answer	%
Yes	0.48%
No	99.52%

### 31. Which of the following best describes your race?

Answer	%
White	0.00%
American Indian or Alaska Native	100.00%
Black or African American	0.00%
Asian or Pacific Islander	0.00%
Other, please describe:	0.00%

## 32. Do you speak English as a second language?

Answer	%
Yes	29.56%
No	70.44%

#### 33. In general, compared to other people your age, how would you describe your health?

Answer	%
Poor	1.94%
Fair	24.27%
Good	37.38%
Very Good	29.13%
Excellent	7.28%

34. How much difficulty, an average, do you have with he following activities? (Please select one answer per activity.)

Question	Unable to Do	A Lot of Difficulty	Some Difficulty	A Little Difficulty	No Difficulty
Reading ordinary print in newspapers	3.55%	1.02%	15.74%	20.30%	59.39%
Reading street signs or the names of stores	1.03%	2.56%	8.72%	14.36%	73.33%
Hearing things people tell you	2.04%	3.06%	14.29%	30.10%	50.51%
Walking a quarter of a mile	11.50%	12.00%	16.50%	19.00%	41.00%
Lifting, or carrying objects as heavy as 10 pounds	6.90%	12.81%	18.72%	15.76%	45.81%
Handling or grasping small objects	3.54%	5.05%	12.12%	16.16%	63.13%
Losing control of your	1.57%	0.00%	7.85%	14.66%	75.92%
body					
---	-------	-------	--------	--------	--------
Losing consciousness	2.67%	1.07%	0.53%	4.81%	90.91%
Making plans or decisions	1.55%	1.03%	5.15%	15.98%	76.29%
Remembering things people tell you	1.51%	5.03%	15.58%	34.17%	43.72%
Concentrating on one thing at a time	1.02%	3.57%	9.18%	22.45%	63.78%
Losing interest in things you usually enjoy	1.55%	3.09%	6.19%	21.13%	68.04%
Feeling sad, empty, or depressed	2.08%	5.73%	8.33%	18.75%	65.10%

#### 35. Are you retired?

Answer	%
Yes	75.36%
No	24.64%

# 36. How many hours per week, on average, do you do paid or volunteer work outside your home?

Answer	%
Do not do paid or volunteer work	47.24%
1 to 9 hours	18.59%
10 to 19 hours	6.03%
20 to 29 hours	11.06%
30 to 39 hours	6.53%
Greater than 40 hours	10.55%

37. For the past year, what was the total combined income of all members of your household? (Please include money from jobs, net income from business, farm or rent, pensions, dividends, welfare, social security payments and any other money income received.)

Answer	%
Under \$9,999	17.68%
\$10,000-\$24,999	42.42%
\$25,000-\$49,999	28.79%
\$50,000-\$74,999	5.56%
\$75,000-\$99,999	5.56%
Over \$100,000	0.00%

# Appendix G: Key Survey Results by Sex



	Females				
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
It is cheaper	9.12%	18.41%	33.72 %	21.73%	17.03%
It is physically easier to board/operate	4.08%	5.23%	41.87 %	32.97%	15.85%
It is more convenient	5.64%	1.75%	38.55 %	49.23%	4.84%
It is faster	5.22%	5.72%	37.65 %	42.75%	8.66%
It is more reliably on time	4.44%	4.17%	39.13 %	43.20%	9.05%
It allows me to go to a wider variety of destinations	5.43%	4.50%	35.97 %	48.11%	5.99%
It allows me go to more destinations in one trip	6.32%	5.39%	35.20 %	46.19%	6.89%
It is safer	4.01%	12.91%	38.63 %	26.76%	17.68%
It is the only kind of transportation available	10.76%	22.70%	25.43 %	23.76%	17.35%

	Males				
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
It is cheaper	10.48%	22.14%	34.88%	18.90%	13.61%
It is physically easier to board/operate	4.37%	8.29%	44.68%	29.00%	13.66%
It is more convenient	3.99%	1.43%	39.47%	49.49%	5.62%
It is faster	3.92%	6.04%	37.12%	45.39%	7.53%
It is more reliably on time	3.34%	3.88%	39.01%	44.83%	8.94%
It allows me to go to a wider variety of destinations	3.81%	4.01%	36.32%	49.18%	6.69%
It allows me go to more destinations in one trip	4.85%	3.10%	36.53%	48.30%	7.22%
It is safer	6.02%	16.85%	40.37%	22.10%	14.66%
It is the only kind of transportation available	11.85%	22.72%	26.30%	24.89%	14.24%





Types of Public or Specialized Transportation Used Most Often



	Females						
Question	Not Important	Slightly Important	Somewhat Important	Very Important			
Fares are affordable	6.05%	6.05%	21.54%	66.36%			
Transit stops are near or at my home	7.06%	3.41%	11.44%	78.10%			
Transit stops are near or at places I want to go	6.85%	2.24%	12.33%	78.58%			
I can reach my destination without a transfer	10.62%	6.54%	17.16%	65.68%			
Wait times are short	7.46%	5.94%	25.66%	60.94%			
Transit is available on short notice	9.95%	9.69%	25.89%	54.46%			
Transit reliably arrives on time	4.93%	3.25%	19.98%	71.84%			

Vehicles are easy to board	5.02%	4.20%	19.72%	71.06%
Transit is safe and secure	3.90%	2.13%	15.84%	78.13%
Transit system can work around language barriers	42.50%	13.76%	16.51%	27.24%
Someone helps me use the service	24.94%	10.81%	18.70%	45.55%

	Males	i		
Question	Not Important	Slightly Important	Somewhat Important	Very Important
Fares are affordable	11.45%	9.78%	30.17%	48.60%
Transit stops are near or at my home	14.29%	6.00%	20.00%	59.71%
Transit stops are near or at places I want to go	12.84%	5.07%	19.70%	62.39%
I can reach my destination without a transfer	18.21%	9.25%	25.14%	47.40%
Wait times are short	13.66%	7.56%	29.94%	48.84%
Transit is available on short notice	16.18%	12.65%	30.00%	41.18%
Transit reliably arrives on time	10.32%	5.44%	26.07%	58.17%
Vehicles are easy to board	11.97%	10.26%	23.65%	54.13%
Transit is safe and secure	8.83%	6.27%	20.23%	64.67%
Transit system can work around language barriers	47.31%	13.77%	17.66%	21.26%
Someone helps me use the service	37.89%	12.25%	18.52%	31.34%











# **Appendix H: Key Survey Results by Marital Status**

Never Married					
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
It is cheaper	12.03%	13.40%	33.68 %	27.84%	13.06%
It is physically easier to board/operate	6.10%	5.08%	36.61 %	37.63%	14.58%
It is more convenient	5.10%	2.23%	35.35 %	51.91%	5.41%
It is faster	5.44%	8.84%	32.31 %	45.58%	7.82%
It is more reliably on time	4.78%	5.80%	38.23 %	42.32%	8.87%
It allows me to go to a wider variety of destinations	5.67%	7.67%	35.67 %	44.67%	6.33%
It allows me go to more destinations in one trip	8.20%	8.20%	31.48 %	44.26%	7.87%
It is safer	6.74%	12.77%	41.84 %	25.18%	13.48%
It is the only kind of transportation available	11.03%	23.10%	22.07 %	28.62%	15.17%

Sepa	Separated or Divorced						
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A		
It is cheaper	11.14%	16.59%	34.93%	26.20%	11.14%		
It is physically easier to board/operate	3.90%	5.05%	43.35%	33.72%	13.99%		
It is more convenient	4.77%	2.90%	39.21%	50.21%	2.90%		
It is faster	4.52%	9.28%	36.65%	43.21%	6.33%		
It is more reliably on time	4.17%	4.82%	37.72%	45.61%	7.68%		
It allows me to go to a wider variety of destinations	5.23%	6.07%	35.36%	48.74%	4.60%		
It allows me go to more destinations in one trip	6.77%	7.64%	32.53%	47.38%	5.68%		
It is safer	4.61%	10.83%	41.01%	28.11%	15.44%		
It is the only kind of transportation available	12.70%	23.13%	22.90%	26.30%	14.97%		

	Widowed					
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	
It is cheaper	8.36%	16.92%	36.53%	19.40%	18.78%	
It is physically easier to board/operate	4.50%	4.39%	47.38%	29.92%	13.81%	
It is more convenient	5.57%	1.33%	44.30%	42.88%	5.92%	
It is faster	5.67%	4.58%	43.08%	36.22%	10.45%	
It is more reliably on time	4.91%	4.05%	44.99%	36.51%	9.54%	
It allows me to go to a wider variety of destinations	5.63%	4.34%	40.50%	42.53%	7.01%	
It allows me go to more destinations in one trip	6.60%	5.13%	40.15%	40.05%	8.07%	
It is safer	5.10%	10.31%	42.71%	24.48%	17.40%	

It is the only kind of transportation					
available	10.19%	21.59%	29.57%	19.98%	18.67%

Married						
Question	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A	
It is cheaper	9.48%	25.92%	31.51%	17.07%	16.02%	
It is physically easier to board/operate	3.50%	8.81%	40.34%	30.25%	17.09%	
It is more convenient	4.27%	1.14%	33.97%	55.50%	5.12%	
It is faster	3.40%	4.80%	33.80%	50.90%	7.10%	
It is more reliably on time	2.86%	3.06%	34.39%	50.51%	9.18%	
It allows me to go to a wider variety of destinations	3.84%	2.68%	32.12%	55.13%	6.23%	
It allows me go to more destinations in one trip	3.76%	1.83%	33.75%	54.39%	6.27%	
It is safer	3.89%	20.06%	34.66%	24.26%	17.12%	
It is the only kind of transportation available	11.52%	23.34%	24.36%	25.99%	14.78%	





In the past two years, have you had any accidents or injuries when personally driving?





Never Married				
Question	Not Important	Slightly Important	Somewhat Important	Very Important
Fares are affordable	6.05%	6.05%	21.54%	66.36%

Transit stops are near or at my home	7.06%	3.41%	11.44%	78.10%
Transit stops are near or at places I want to go	6.85%	2.24%	12.33%	78.58%
I can reach my destination without a transfer	10.62%	6.54%	17.16%	65.68%
Wait times are short	7.46%	5.94%	25.66%	60.94%
Transit is available on short notice	9.95%	9.69%	25.89%	54.46%
Transit reliably arrives on time	4.93%	3.25%	19.98%	71.84%
Vehicles are easy to board	5.02%	4.20%	19.72%	71.06%
Transit is safe and secure	3.90%	2.13%	15.84%	78.13%
Transit system can work around language barriers	42.50%	13.76%	16.51%	27.24%
Someone helps me use the service	24.94%	10.81%	18.70%	45.55%

Separated or Divorced					
Question	Not Important	Slightly Important	Somewhat Important	Very Important	
Fares are affordable	11.45%	9.78%	30.17%	48.60%	
Transit stops are near or at my home	14.29%	6.00%	20.00%	59.71%	
Transit stops are near or at places I want to go	12.84%	5.07%	19.70%	62.39%	
I can reach my destination without a transfer	18.21%	9.25%	25.14%	47.40%	
Wait times are short	13.66%	7.56%	29.94%	48.84%	
Transit is available on short notice	16.18%	12.65%	30.00%	41.18%	
Transit reliably arrives on time	10.32%	5.44%	26.07%	58.17%	
Vehicles are easy to board	11.97%	10.26%	23.65%	54.13%	

Transit is safe and secure	8.83%	6.27%	20.23%	64.67%
Transit system can work around language barriers	47.31%	13.77%	17.66%	21.26%
Someone helps me use the service	37.89%	12.25%	18.52%	31.34%

Widowed					
Question	Not Important	Slightly Important	Somewhat Important	Very Important	
Fares are affordable	9.75%	6.36%	26.06%	57.84%	
Transit stops are near or at my home	10.41%	5.43%	13.12%	71.04%	
Transit stops are near or at places I want to go	11.01%	4.45%	14.52%	70.02%	
I can reach my destination without a transfer	12.84%	6.31%	16.67%	64.19%	
Wait times are short	9.30%	4.88%	29.07%	56.74%	
Transit is available on short notice	10.54%	7.96%	29.51%	51.99%	
Transit reliably arrives on time	6.28%	3.90%	21.43%	68.40%	
Vehicles are easy to board	5.27%	4.43%	20.68%	69.62%	
Transit is safe and secure	5.42%	2.39%	17.35%	74.84%	
Transit system can work around language barriers	45.71%	11.43%	17.40%	25.45%	
Someone helps me use the service	20.84%	10.54%	20.37%	48.24%	

Married					
Question	Not Important	Slightly Important	Somewhat Important	Very Important	
Fares are affordable	8.33%	9.72%	31.25%	50.69%	
Transit stops are near or at my home	12.10%	4.98%	20.28%	62.63%	

Transit stops are near or at places I want to go	10.70%	3.32%	18.08%	67.90%
I can reach my destination without a transfer	16.19%	8.99%	28.42%	46.40%
Wait times are short	11.68%	9.49%	28.47%	50.36%
Transit is available on short notice	13.50%	16.42%	28.47%	41.61%
Transit reliably arrives on time	9.25%	4.27%	27.76%	58.72%
Vehicles are easy to board	9.86%	10.92%	23.94%	55.28%
Transit is safe and secure	7.09%	5.32%	21.63%	65.96%
Transit system can work around language barriers	46.72%	17.76%	17.76%	17.76%
Someone helps me use the service	39.42%	13.14%	17.15%	30.29%

Satisfaction Level with Public and Specialized Transit Service















# Appendix I: Focus Group Information Sheet and Standard Sequence



# Ensuring Mobility for Wisconsin's Older Citizens



#### Overview

The National Center for Freight and Infrastructure Research and Education (CFIRE), led by the University of Wisconsin–Madison, is conducting research on the transportation and infrastructure issues that will arise from Wisconsin's projected elderly population growth. This research will culminate in recommendations aimed at helping the state's transportation network better meet the mobility needs of older residents. The project is funded by the Wisconsin Department of Transportation (WisDOT).

## **Project Objectives**

This project endeavors to meet the following objectives:

- 1. Identify the strengths and weaknesses of current state programs aiding elderly mobility;
- 2. Analyze demographic data and projections to ascertain the areas of the state with the greatest programmatic needs;
- 3. Obtain input from older residents to identify transportation habits, needs, concerns, and suggestions;
- 4. Examine national and international best practices for transportation alternatives, education, screening, and infrastructure design;
- 5. Issue recommendations designed to improve the effectiveness and efficiency of senior transportation services.

#### **Elderly Mobility Forums and Surveys**

This project is particularly focused on objective 3 obtaining input from older residents. To do so, the research team plans to host forums and distribute surveys throughout the state. The forums will consist of interactive discussions with focus groups composed of 10 to 15 local older residents with diverse transportation needs. The surveys are 10 to 15 minute questionnaires (about 30 questions) concentrating on older residents' transportation habits, priorities, and concerns.

## **Topics of Discussion for Focus Groups**

Advice and assistance from Wisconsin's residents is critical to this project's success. The research team hopes to hear your observations and opinions on the following topics:

#### **Program Awareness**

The Wisconsin DOT administers several programs to help local governments, non-profit organizations, and private businesses provide transportation services in your area. These include bus, mini-bus, para-transit, and taxi services, amongst others.

What programs are you aware of in your county? How did you find out about these programs?

#### **Transportation Habits**

Senior residents in Wisconsin have diverse transportation habits. These may include driving, biking, walking, or using public transportation, amongst others.

How do you get around the area? Why do you prefer the types of transportation you typically use?

#### Transportation System Weaknesses

The Wisconsin DOT is interested in identifying the weaknesses in the state's transportation network.

What difficulties do you encounter in getting around the area?

For what activities and during what times of the week do you encounter these difficulties? Does anybody you know encounter difficulties getting around the area?

#### **Suggestions for Improvement**

The best suggestions for policy improvement often come from users and customers.

What improvements can be made to the transportation services in your area? What would the perfect transportation system for seniors in your county look like?



# Ensuring Mobility for Wisconsin's Older Citizens



## The Elderly Mobility Challenge

In the next 25 years, the number of elderly residents in Wisconsin is projected to grow by 90 percent or nearly three quarters of a million people. The 2003 US DOT National Household Travel Survey found that personal vehicles accounted for more than 90 percent of trips taken by elderly citizens. As such, the overwhelming majority of Wisconsin's older residents will be accustomed to driving. When older drivers stop driving or self-regulate in response to declining abilities or safety concerns, they face increased isolation from social, family, and civic activities and decreased access to medical services.

As shown by Figures 1 and 2, the percentage of residents 65 and over is projected to increase in every county in Wisconsin over the next 25 years. Further, according to the recently published AASHTO report "Connecting Rural and Urban America," the rural elderly population continues to grow and is increasingly electing to "age in place." The transportation network of Wisconsin, specifically its public and specialized transit services, must meet the challenges presented by this demographic shift.

## About CFIRE

The National Center for Freight and Infrastructure Research and Education (CFIRE) at the University of Wisconsin–Madison is one of ten National University Transportation Centers. The CFIRE consortium includes the University of Wisconsin– Milwaukee, University of Illinois–Chicago, University of Toledo, and University of Wisconsin–Superior.

CFIRE's mission is to advance technology, knowledge, and expertise in the planning, design, construction and operation of sustainable freight transportation infrastructure through education, research, outreach, training, and technology transfer.

If you have questions or comments regarding this project, please contact:

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Figure 1: Elderly Population Share in 2010

Figure 2: Elderly Population Share in 2035



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