



# Personal Transportation

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Kayla Penelton

With an increasing proportion of the world’s population becoming older adults (ages 55+), it is expected that the number of older adults driving will nearly double over the next two decades (McGee & Tuokko, 2002). Access to personal transportation is not only important to older adults for reasons of mobility, but also has a huge impact on them socially, and psychologically. This document will outline why personal transportation is important to older adults, what current statistics reveal about older adults driving, how we can plan for older adults driving in the future, and what alternatives are available when personal transportation is no longer an option.

**Access to personal vehicles enables freedom, independence and mobility in the daily lives of older adults**

## Impacts of Independent Driving

Access to personal vehicles enables freedom, independence, and mobility in the daily lives of older adults. As they begin to experience a decline in their physical and mental well being, driving becomes especially important for older adults because it allows them to maintain control over the quality of their daily lives even if they cannot control the quality of their health (Benner, McGee, Stepaniuk, & Tuokko, 2007).

The use of personal vehicles enables older adults to remain engaged in local activities, and continue to be valuable contributing members in their communities (Seniors Assisted Transportation Society of Greater Edmonton, 2007).

Losing the ability to drive can also be isolating for many older adults (10) who are not comfortable using other public transportation, and do not want to become a burden to others by depending on them for rides (Page, Smahel, & Smiley, 2008). This isolation can lead to anxiety, loneliness, and depression, which makes driving especially important in rural areas (1) where these effects can be magnified by the nature of rural geography (Benner et al., 2007).

## Current Personal Transportation Use

Gaining insight into older adult’s current driving behaviours, as well as barriers they encounter while driving is imperative in creating future age-friendly transportation infrastructure, and enabling them to continue to drive and maintain their desired level of mobility and lifestyle.

According to Nicoletta (2002), older adults drive the most from approximately

Chart 7: Percentage of Kilometres Driven by Time of Day and by Age Group, 2000

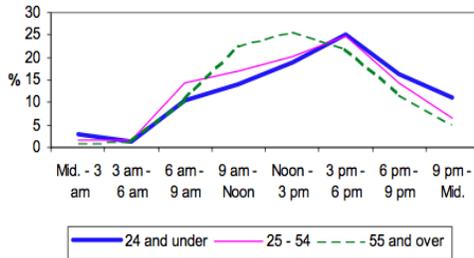


Figure 1: Time of day people are driving (Source: Nicoletta, 2002)

Chart 10: Percentage of Kilometres Driven by Trip Destination and by Age Group, 2000

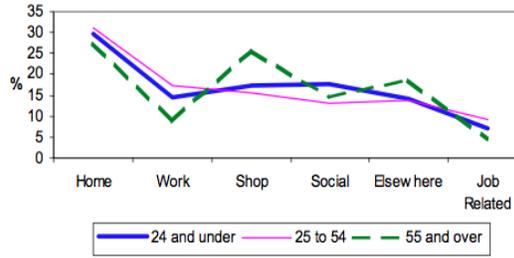


Figure 2: Destination of trip when driving (Source: Nicoletta, 2002)

9am to 3pm during the day (Figure 1). This is also in agreement with McGee & Tuokko (2003), who found that older drivers were uncomfortable and stressed when having to drive at night. As seen in Figure 2, older adults drive the most to get groceries, go shopping, and attend social events and medical appointments (Nicoletta, 2002; McGee & Tuokko, 2003).

The World Health Organization (2007) has identified infrastructural elements that create barriers to driving including: poor road conditions, ineffective traffic calming devices, inadequate lighting, and poorly positioned signage. Heavy traffic and disregard for rules and regulations are also factors that can influence how comfortable older adults are with driving (World Health Organization, 2007).

## Safety and Evaluation

Safety is a primary concern for older adults and their families as they age, and operation of a personal vehicle may at some point become dangerous because of diminished physical and mental health. The ability to drive safely may be impacted by physical health problems such as failing eyesight, arthritis, and slower reaction times (Benner et al., 2007). Dementia, Alzheimer's, and other illnesses also affect the safety of operating personal vehicles (Benner et al., 2007).

McGee & Tuokko (2003) reveal that the current evaluation procedure in Canada lacks information regarding how to evaluate older adults driving capabilities, which are typically assessed using written tests and physical exams (Figure 3) (McGee & Tuokko, 2003). Only the Provinces of Ontario and British Columbia require driver re-testing after the age of 80 (Government of British Columbia; Government of Ontario). There are some who believe that functional measurements, not just diagnostic factors should also be incorporated in the decision-making process regarding licensing, allowing for a more inclusive examination process to ensure the safety of older adult drivers (Blandford, Kagis, & Menec, 2006).

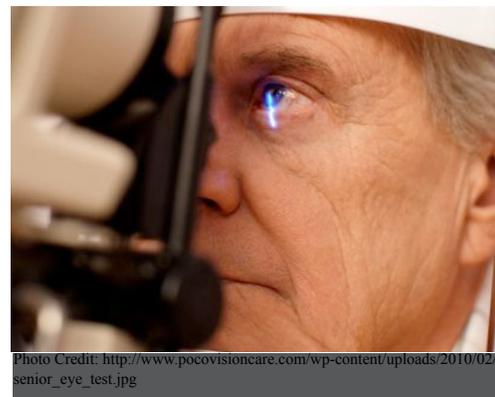


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Figure 3: Eye examinations are currently one method of evaluation

Also, there is responsibility placed on the individuals themselves, as well as family members, to recognize their limitations as they age and educate themselves as to how they can become safer drivers during the process of aging, and when it may be appropriate to use alternative modes of transportation (McGee & Tuokko, 2003).

**Further research must be undertaken on the topic of driver evaluation methods**

## **Enabling Personal Transportation Use**

Considering that there will soon be an influx of the population entering the older adult cohort, it will be important to begin to prepare not only the drivers themselves, but also our traffic infrastructure and regulations to ensure that people are able to maintain their independence as they age.

Providing educational opportunities such as refresher courses and self-assessments, such as the one in Figure 4, to inform older adults, families of older adults and doctors of the risks of driving, and alternatives is one way to begin doing this (McGee & Tuokko, 2002).

Upgrading safety and mobility measures (4) by modifying turning lanes, improving lighting, and increasing signage size, begins to address some of the physical and visual issues that affect older drivers' abilities (Page, et al., 2008).

The establishment of legislation supporting a common set of rules and regulations between communities will create a feeling of continuity and will ease the transition when travelling from one place to another, reducing the stress and anxiety often experienced while driving in unknown places (Allan, Dibert, & McGee, 2005).

Finally, further research must be undertaken on the topic of driver evaluation methods to find more comprehensive ways of determining whether a driver is physically and mentally capable to safely operate their own vehicle (Canadian Council of Motor Transport Administrators, 2007; McGee & Tuokko, 2003).

## **Alternatives to Personal Transportation**

When personal vehicle use is no longer a safe option there are several alternatives available to older adults, including:

- Public transportation
- Community initiated shuttle programs
- Carpooling
- Volunteer driving programs
- Private transportation (Taxi or other car services)
- Active transportation

These alternative methods should provide service to an adequate number of locations, be economically priced, and accessible to all levels of mobility (Allan & McGee, 2003).

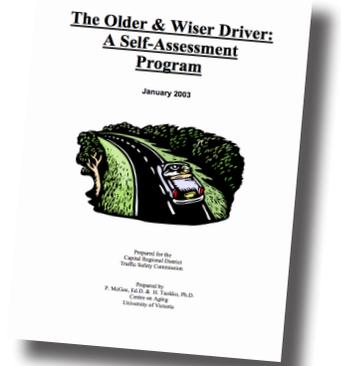


Figure 4: Older adult self-assessment program

## Final Thoughts

Personal transportation is imperative to older adults independence. Improvements made to educational efforts, traffic infrastructure, licensing procedures, and rules and regulations will aid in enabling older adults to maintain healthy and active lifestyles. Therefore, to enable this population to maintain their mobility and safety, these improvements should be considered a priority of institutions involved with older adults and transportation.

## References

1. Rural Transportation
2. Intergenerational Interactions
3. Neighbourhood Safety
4. Urban Design
5. Recreation
6. Personal Transportation
7. Housing
8. Walkability
9. Online Lifestyles
10. Social Isolation

## Sources:

- Allan, D., & McGee, P. (2003). Accessible transportation for all in the Capital Regional District: Where are we now, where should we be going? Retrieved from [http://www.coag.uvic.ca/resources\\_research\\_reports.htm](http://www.coag.uvic.ca/resources_research_reports.htm)
- Allan, D., Dibert, C., and McGee, P. (2005). Coordinated accessible transportation: A vision for the CRD. Retrieved from [http://www.coag.uvic.ca/resources\\_research\\_reports.htm](http://www.coag.uvic.ca/resources_research_reports.htm)
- Benner, E., McGee, P., Stepaniuk, J., & Tuokko, H. (2007). The older wiser rider: An examination of transportation for older drivers. Retrieved from [http://www.coag.uvic.ca/resources\\_research\\_reports.htm](http://www.coag.uvic.ca/resources_research_reports.htm)
- Blandford, A., Kagis, M., & Menec, V. (2006). Manitoba seniors: A companion to the Manitoba fact book on aging. Retrieved from <http://umanitoba.ca/centres/aging/pubs/624.html>
- Canadian Council of Motor Transport Administrators' (CCMTA) Aging Driver Task Force. (2007). Aging driver strategy: 2006- 2010. Retrieved from <http://www.ccmta.ca/english/index.cfm>
- McGee, P., and Tuokko, H.(2002). Improving driving conditions for older adults. Retrieved from [http://www.coag.uvic.ca/resources\\_research\\_reports.htm](http://www.coag.uvic.ca/resources_research_reports.htm)
- McGee, P., and Tuokko, H. (2003). The older & wiser driver: A self-assessment program. Retrieved from [http://www.coag.uvic.ca/resources\\_research\\_reports.htm](http://www.coag.uvic.ca/resources_research_reports.htm)
- Nicoletta, J. (2002). Driving characteristics of the young and aging population. Retrieved from <http://www.publications.gc.ca/Collection/Statcan/53F0007X/53F0007XIE.pdf>
- Page L., Smahel, T., and Smiley, A. (2008). Senior drivers and highway design. Human Factors North Inc. Retrieved from <http://www.caa.ca/working-for-you/safe-driving/older-drivers/>
- Seniors Assisted Transportation Society of Greater Edmonton. (2007). Seniors Drivers Centre Strategic Plan. Retrieved from <http://www.satsofedmonton.org/index.html>
- Government of British Columbia, Ministry of Justice. (2011). Retrieved from <http://www.pssg.gov.bc.ca/osmv/road-safety/seniors.htm>
- Government of Ontario, Ministry of Transportation. (2009). Retrieved from <http://www.mto.gov.on.ca/english/dandv/driver/senior/>
- World Health Organization. (2007). Age-friendly Cities: A Guide. WHO Press: Paris, France.