Transportation Solutions for Rural Seniors A Literature Review



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June 25, 2014

"Geographic location, income, culture health and disability status, job status – not age alone – shape the transportation needs and preferences of older persons. (Hardin, 2003)

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Executive Summary

In rural areas, personal mobility is dependent on adequate transportation options and is an essential component of seniors' well-being (The Institute of Urban Studies, 2006). For the current (and growing number of) rural seniors who don't or cannot drive, access to services will require a higher level of transportation infrastructure to meet their needs.

A number of challenges impact rural seniors' ability to get around. These include challenging rural geography and climate and our reliance on cars as our primary source of transportation. Many rural services have become regionalized to larger centres requiring transportation to access them. Rural communities with shrinking populations are seeing a reduction in the pool of volunteers who are available to support volunteer driving programs, and many families who could offer support live far away from aging parents. Rural transportation is costly to implement and maintain and for many practical reasons, seniors find public transit services difficult to use. Seniors and others with disabilities are also challenged in finding accessible and adaptable transit services. When combined, these factors greatly increase seniors' risk of social exclusion, resulting in isolation, depression and poorer health outcomes.

With the lead of the Beverly Foundation in the US, planning for community-based seniors' transportation has been simplified to the 5A's: Availability, Acceptability, Accessibility, Adaptability and Affordability. If attention is paid to these five criteria when developing senior friendly community-based transportation, there will be a greater likelihood of success.

In order to inform local action, several promising models of rural seniors' transportation have been examined for their benefits, challenges and implications for use within this area. This region has a strong regional transit system, and has community-based programs in place in every community to support seniors' transportation. However, examining the literature has brought forward additional ways in which local programs and initiatives could be strengthened.

Transportation in rural areas is challenging to provide, but it is not impossible. Transportation planners and advocates are urging governments and all types of community organizations to take an innovative approach to developing solutions.

Selected Recommendations:

- Support seniors in taking advantage of as many cost saving benefits as possible.
- Communicate with seniors about transportation options in ways that work best for them.
- Raise awareness of senior drivers' safety programs and encourage seniors who no longer drive to invest money into a "mobility" account for their future transportation needs.
- Though non-emergency medical transportation to appointments is crucial for rural seniors, recognize that transportation to social outings is very good for well-being.
- Increase public awareness about seniors' transportation and the risks of social isolation.
 Offer tangible ways for neighbours to get involved in helping their seniors.

- With growing numbers of seniors remaining in the workforce, encourage employers to provide transportation to work places that are out of town.
- Implement "Transit Training" workshops for seniors and people with disabilities.
- Determine whether safety and security are issues for seniors using public transportation in the West Kootenay region, and if so develop strategies to support solutions.
- Make sure transit staff and volunteer drivers have seniors' "sensitivity training".
- Make sure that seniors have drivers' sensitivity training and understand the true cost of operating a vehicle.
- Ensure that seniors' priority seating on buses is respected and enforced.
- Undertake annual seniors' transit surveys to support continuous service improvement.
- Take advantage of the tools and resources available to help communities improve their local and regional transportation systems.

Introduction

The Age-Friendly Community Initiative (AFC)

The AFC Initiative began in 2013 with funding from the Osprey Community Foundation and Columbia Basin Trust. The goal of the AFC initiative is to enhance seniors' independence and inclusion in community life and improve health and social outcomes. This is a three-year initiative led by the Nelson CARES Society and includes the geography of the City of Nelson and RDCK Areas E and F. Following research and extensive consultation, AFC staff identified three issues that pose the greatest challenges to seniors' independence and well-being. These were

- Communication and information services
- Outreach to isolated rural seniors
- Transportation barriers

This latter issue is the focus of the *Moving Together* project and AFC staff recently secured funding through he Vancouver Foundation to begin local work. In order to help to lay a solid foundation for this project, the AFC staff and stakeholders identified the need for further information to help better understand rural transportation issues. Several questions emerged:

- Are there common transportation challenges among rural seniors in Canada, the US and abroad?
- What are the elements of successful seniors' transportation systems
- What are promising models for rural transportation that could be implemented or expanded upon within this region?

This literature review will attempt to answer these questions and will conclude with recommendations for local action.

The Growing Seniors' Population

Due to the aging of the baby boom generation, demographics are shifting dramatically in Canada, the US and abroad. Nationally, provincially and locally, this shift is becoming apparent.

- By 2050, seniors are projected to comprise nearly 1/3 of the Canadian population (Butler-Jones, 2010).
- The population of seniors in BC (relative to all other age-groups) will continue to grow significantly for the foreseeable future (BC Stats, 2005).
- Between 2011 and 2036, the population of Nelson and area aged 70-79 is projected to increase 128%, seniors aged 80-89 will increase 173%, and those 90+ will increase 136%.

As females have a greater life expectancy than males, they will continue to make up most of the seniors' population. Many experts agree that planning for seniors' transportation is an issue demanding immediate attention.

Rural Seniors' Transportation Challenges

Although we can all agree that "aging" in place" is important for seniors, they must also be able to leave their homes to carry out daily activities, engage in their community and visit friends and family. In rural areas, personal mobility is dependent on adequate transportation options and is recognized as an essential component of seniors' well-being (The Institute of Urban Studies, 2006). For the current (and growing number of) rural seniors who don't or cannot drive, access to services will require a higher level of transportation infrastructure to meet their needs. A review of the literature from rural jurisdictions across Canada, the US, England and Australia, reveal similarities in the types of transportation barriers facing rural seniors.

Everyone needs mobility of some form in order to access basic needs in a rural context. (Marr, 2012)

Challenging geography

Rural residents have the good fortune to live in some of the most beautiful parts of this country. Along with the natural beauty however are the challenges of getting oneself around safely. Seniors and people living with disabilities can be homebound following a heavy snowfall or freezing temperatures, and are understandably fearful of venturing onto slippery roads and sidewalks. Participants in the Lower Columbia "Women Creating Change" project noted that walking to and from bus stops in some neighbourhoods may be a challenge during inclement weather, after nightfall, if streets are steep or slippery, when carrying groceries, other items or small children (Lister, 2012).





Rugged terrain, inclement weather, curvy roads, and the long (sometimes lonely) distances between communities make rural travel difficult. Wildlife present unexpected challenges, and rural roads can be in poor condition with unlit sections and blind corners. Rural roads are not necessarily slower roads, and many have speed limits of 80 km/h or more, often without the benefit of sidewalks (Kostiuk, 2009). In addition, rural roads often have big trucks and vehicles moving at different rates of speed. Combine these factors with the health and mobility limitations experienced by many older adults, and it isn't surprising that driving or travelling to essential services and social activities becomes difficult (The Institute of Urban Studies, 2006).





Our reliance on cars

As a result of geographic isolation and the lack of transportation alternatives that characterize rural areas, many residents have come to rely heavily on their automobile. In 2008-2009, researchers with the Canadian Community Health Survey Healthy Aging study interviewed over 16,000 adults aged 65+ from both rural and urban areas¹. According to the survey results, in 2009, three-quarters of all adults aged 65+ had a driver's license and 200,000 senior drivers were aged 85+ (Turcotte, 2012). Of the drivers in the 85+ age-group, two-thirds of men living in private households had a driver's license, compared with just one-quarter of women.

According to the Insurance Corporation of British Columbia, there is a trend towards greater numbers of older aged drivers in BC. The following table details the number of drivers by age group with active BC drivers' licenses²:

Numbers of Licensed Drivers In BC by Age-Group, 2008-2012

Age	2008	2009	2010	2011	2012
65-69	162,000	172,000	178,000	192,000	208,000
70-74	119,000	123,000	128,000	133,000	142,000
75-79	91,000	93,000	94,000	96,000	99,000
80-84	51,000	53,000	55,000	56,000	58,000
85+	27,000	29,000	29,000	30,000	31,000

According to the 2009 Healthy Aging study described above, some 14,000 seniors with very limited sight³ still had a license. As well, 40,000 seniors with a driver's license were very likely to forget things and had considerable difficulty thinking clearly and solving everyday problems. In addition, about 20,000 people with diagnosed Alzheimer's disease or other dementia had a driver's license. Although most senior drivers are careful, people aged 70+ have a higher accident rate per kilometer driven than any other age group except young males (who are still the highest risk category). As well, seniors are more likely than younger people to be killed when involved in a collision (Turcotte, 2012).

In Canada, the yearly ownership costs for an average compact car are about \$9,500, while the average Canadian spends \$5,400 on groceries a year (Canadian Automobile Association, 2013). The majority of seniors who no longer drive their own vehicles do not re-invest this money into their continued mobility. The money that once went into the operation of a vehicle could

² These drivers may not be currently driving as many people keep a driver's license as a form of primary identification. Source: Insurance Corporation of British Columbia, http://www.icbc.com/about-icbc/newsroom/Documents/population.pdf. Downloaded June 4, 2014.

¹ Seniors living in residences and institutions were not included in the study.

³ Very limited eyesight was defined as being unable to read newspapers or recognize a friend on the other side of the street, even with glasses.

purchase thousands of seniors' one-way bus tickets. As well, car passengers are seldom knowledgeable about the actual cost of operating a vehicle. For example, the \$2 or \$5 "senior" ride may actually cost an organization \$10, \$20 or \$40 to provide (Beverly Foundation, 2010).

With aging, there is a general shift from being a car driver to becoming a car passenger, especially for older women (United Way of the Lower Mainland, 2011). Because of the preference for the personal automobile and the lack of adequate and acceptable community mobility options, one strategy of seniors' transportation planning should be to keep older adults driving for as long as they can safely do so (Eby, 2012). These efforts will be discussed in a subsequent section.

Regionalization of rural services

In Canada, the general decline of rural populations⁴ and the tightening of health and social service budgets have caused the regionalization and relocation of services to the larger centres. With the 'movement of medical services, seniors' services, banks, health clinics, and neighbourhood grocers to larger centres, more and more seniors are being left stranded (Kerschner, 2006). Experts feel that this is leaving the aged at a particular disadvantage and may lead them to being institutionalized prematurely



(Bryant & Joseph, 2001). In the United Kingdom, the *Social Exclusion Unit*⁵ made a connection between the centralizing of food retailers, the lack of transportation, and a resulting poor access to healthy and affordable food (SEU, 2003 in Marr, 2012). Rather than facing longer driving times to larger centres, or reliance on transportation services, some older residents choose to (or are forced to) leave rural communities for larger centres (Stevens, 2012).

Volunteer capacity is shrinking

Due to declining populations in many rural jurisdictions, the challenges being faced by the "sandwich generation" who are simultaneously caring for children and parents, and children living far from their aging parents, there is concern that the pool of volunteers able to support rural seniors is shrinking. Caregivers in rural Manitoba consistently reported more stress, more

⁴ The population of the Regional District of Central Kootenay and the Regional District of Kootenay Boundary both increased between the 2006 and 2011 Census. Source: Statistics Canada, 2012.

⁵ The Social Exclusion Unit was formed in 1997 as part of the Cabinet Office that provides the UK Government with strategic advice and policy analysis in its drive against social exclusion. It later became the Social Exclusion Task Force and has since been absorbed into the Office for Civil Society (http://en.wikipedia.org/wiki/Social Exclusion Task Force)

caring commitments, and less external assistance than urban caregivers (The Institute of Urban Studies, 2006). According to Manitoba researchers, the provision of rural seniors' transportation by informal networks of family and friends is jeopardized for three reasons:

- **Seniors drive seniors.** While there is still a relatively large pool of younger seniors who provide rides, what will happen when fewer and fewer seniors are able to drive?
- Families are spread out with many seniors living far from their adult children, while others cannot rely on family because they are too busy.
- Our sense of community and social cohesion isn't what it used to be (The Institute of Urban Studies, 2006).

Rural transportation is costly

As population density decreases, transportation systems move from transporting large numbers of people for short distances to transporting small numbers of people for great distances.

Road Maintenance and Vehicle Operation:

Road construction through rough terrain is expensive, as is road maintenance during inclement weather (Kidder, 2006). The cost of running a car is high, as high as \$9500 per year for a compact car in Canada (Canadian Automobile Association, 2013). As well, vehicle operating costs may be higher in rural areas owing to the longer distances people have to travel to access services, the higher cost of fuel, and higher costs of vehicle maintenance when there are fewer competitors in the marketplace (Social Exclusion Unit, 2003). At the time of writing, there was great variation in fuel prices between rural and urban areas. For example, the cost of one litre of regular gasoline was priced as follows⁶:



- Nakusp @\$144
- Vancouver @ \$142.4
- Castlegar and Grand Forks @ \$139.9
- Nelson, Fruitvale and Trail @ \$138.9
- Toronto @\$130.9
- Calgary @ \$122.9
- Edmonton @ \$115.9

Funding for larger and more expensive age-friendly projects such as housing and transportation, remains a challenge (Age-Friendly Manitoba, 2012). Due to the costs involved in providing rural transportation, one US researcher commented "In many instances political decision makers are not supportive of providing transportation for non essential purposes" (Kerschner, 2006).

⁶ Source: http://www.bcgasprices.com/GasPriceSearch.aspx. Downloaded June 2, 2014.

Emergency travel:

According to a consultation with rural BC seniors in 2004, emergency travel often requires making travel arrangements on a short notice, which can be very expensive (Government of Canada, 2004). Though often overlooked as a cost of doing business, service providers frequently transport their clients when no other options exist. A study out of rural Ontario revealed that service providers (health services, community services, education, etc.) were already committing significant financial and human resources in transporting their clients without considering themselves transportation providers (Marr, 2012).

Medical travel:

Transportation studies in rural and urban England revealed that around one-third of residents without access to a car found it difficult to travel to hospital. Without adequate and reliable transportation, people miss health appointments or suffer delays in being discharged from hospital – both of which incur significant costs to the health system (Social Exclusion Unit, 2003). In British Columbia, rural patients needing medical care in larger centres can be challenged with the transportation costs involved in returning home. And these costs will vary depending upon the level of medical supervision required. Fortunately, these fees can be waived if patients are receiving Income Assistance or MSP Premium Assistance.

Public transportation barriers

In 2009, only 7% of Canadian seniors aged 75 to 84 used public transit. As seniors aged beyond 85 years however, accessible transit or taxis became the main forms of transportation for 9% of women and 4% of men (Turcotte, 2012).

In their study of nearly 600 rural seniors, Michigan researchers found that older adults didn't know about the public and community transportation services available to them and had physical and financial limitations in using the services. In this study, 82% of rural adults were not aware of how to use buses and half were unsure about how to use volunteer driver programs. Seniors reported not liking buses or senior vans/dial-a-ride services, felt that volunteer driver services took too long or were inconvenient, and felt that taxis were too expensive and took too long (Eby, 2012).

As part of this Michigan study, service providers were asked to voice the challenges they experienced in providing transportation services to older clients. Their responses included:

- Inadequate funding to expand or provide services
- Lack of public awareness about the transportation services available
- Difficulty recruiting and maintaining volunteer drivers
- Regulatory issues in transporting older adults out of the city and/or county
- Disabled and frail passengers require additional assistance
- Transportation of mobility aids (wheelchairs, walkers) is challenging

- Lack of coordination and/or knowledge between transportation service providers
- Physical barriers prevent seniors from getting onto or riding public transit
- Social outings are not prioritized for transportation services
- Financial barriers impact seniors' use of public transit

There are a number of factors that impact the ability of public transportation services to be more available and adaptable to meeting seniors' needs. According to the Beverly Foundation, transit services are challenged with:

- Providing demand responsive services
- Meeting requests for multiple stops
- Public awareness of services
- Providing door to door service
- Crossing jurisdictional boundaries
- Traveling to desired destinations
- Offering service evenings and weekends

- Providing on time service
- Providing assistance to passengers
- Providing door-through-door services
- Offering transportation escorts
- Accommodating assistive devices
- Accommodating passengers' pets (Beverly Foundation, 2010)

In the Regional Districts of Central Kootenay and Kootenay Boundary, fixed-route bus service is not available before 6 am and after 9 pm from Monday to Friday, and is not available before 10 am and after 6 pm on Saturdays. There is no bus service on Sunday. Results from the BC Transit Public Consultation process in Nelson held in 2012 revealed that the "Sunday and statutory holiday service was cited as the top priority for service improvement across all routes" (BC Transit, 2012, p. 4). In the Lower Columbia, sections of Area A (the outskirts of Fruitvale and Montrose, and along the Waneta Highway towards the Waneta Dam) and Area B (the outskirts of Rossland) do not have access to bus services.⁷

Transportation can be a barrier to employment. Within North America, the rising cost of living and the stock market decline of the past few years means that many seniors must delay retirement and continue working (Hardin, 2003). In addition, BC's highest in Canada poverty rate means that many seniors are strained to make ends meet and many must continue working. If prospective employees cannot attend job interviews, must narrow their search to employers on bus routes, and are unable to travel to work outside of public transportation hours, then transportation challenges impact one's employability (Social Exclusion Unit, 2003).

The increasing number of older adults, especially those age 85+, and their growing demand for specialized services because of frailty is viewed as one of the major challenges that must be met by transportation providers (Kerschner, 2006).

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⁷ Independent Research, Tara Howse, Coordinator, Women Creating Change.

Transportation accessibility

The issues that end a personal driving career such as changes in eyesight, hearing, reduced mobility or lack of concentration will also impact one's ability to utilize public transportation. The accessibility of public transport information can also be problematic for people with learning disabilities. Though information about the West Kootenay Transit service is available on the Internet, the "Riders' Guide" is 22 pages long and does overwhelm many users, including seniors. Timetable information may be in small print and route maps can be complicated and difficult to understand. Furthermore, bus drivers may be unaware of the needs of disabled people and may not be available to provide assistance. As well, security fears can be acute for women and older people, and for people travelling after dark or early morning (Social Exclusion Unit, 2003).

Lengthy travel times and rural distances are a limiting factor for passengers who are elderly or have disabilities. If passengers are not confident they can make both the outward and homebound journey, then they won't travel. As well, discomfort in travelling to unfamiliar places and lack of knowledge of how to use transportation networks will limit use of public transportation services. Frequent changes to bus routes and timetables, and out-of-date information can exacerbate all of the above (Social Exclusion Unit, 2003). Walking distances to bus stop will be more of an issue for older people, people with disabilities and people walking with children. According to several sources, the North American standard that transit planners consider acceptable to walk to transit stops is 400 m (Walker, 2011) (Ontario Ministry of Transportation, 2011) (El-Geneidy, 2013).

Handy-Van type services such as West Kootenay Transit's handyDART are a beneficial addition to rural transportation networks. Some rural seniors however, may experience challenges with this mode of transit:

- Vulnerable passengers without escorts may have to fend for themselves.
- Defining priority users can be challenging in cases where demand exceeds capacity.
- Transportation to social outings may not be prioritized.
- Booking the service can be complex and confusing for users. In one rural Manitoba community, the five part-time drivers changed daily and clients had to refer to the local paper to identify which driver to call for a ride (The Institute of Urban Studies, 2006).
- The necessity of advanced bookings eliminates spontaneous trips that most drivers with personal vehicles take for granted.
- Week-end, evening and holiday services are unavailable in the West Kootenay
- Increasing operating costs (fuel, inspections, salary, maintenance) can result in excessive fess for the user. In the long-term, maintenance costs can increase making the van too expensive to maintain.

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⁸ Personal communication, Corrine Younie. June 11 2014.

⁹ According to the BC Transit website, drivers are trained to assist users.

The perception of competition with local taxi services in some communities.

The results of BC Transit's public consultation process held in Nelson in 2012 revealed several ideas to improve accessibility. These included improved infrastructure at some bus stops to provide seating and shelter, and to include sidewalk pads or curbs at bus stops for people with mobility issues (BC Transit, 2012).

According to the Council of Canadians with Disabilities, air travel can be challenging for people with disabilities and ticket dispensers are not accessible nor available in Braille or large-print (Council of Canadian with Disabilities, 2011). The West Kootenay Regional Airport is wheelchair accessible, and there is a process with major airline carriers to make accommodations for people with disabilities.

Social exclusion and isolation

According to the Canadian Centre for Policy Alternatives, social exclusion (also known as social disadvantage or marginalization) includes such dimensions as health, education, access to services, housing, debt, quality of life, dignity and autonomy (McKinnon, 2008). Affected individuals are prevented from participating fully in the economic, social, and political life of their community (Wikipedia, 2014). Communities without transportation options for all residents place some at greater risk for social exclusion and poorer health outcomes.

In a study of small towns and cities in BC, socially isolated persons tended to share similar characteristics, including a greater likelihood of being older, being female, living alone (36% of senior women and 17% of senior men), being low-income, and having poor health status (Cloutier-Fisher, 2006). Other research from BC adds the following characteristics of seniors who are most likely to be socially isolated:

- Mobility challenges
- Recent immigrants or seniors with language challenges
- Recently unemployed or retired
- Recent loss of a friend or spouse
- Cannot drive or access transportation (Farrell, 2013).

A study of rural seniors from three counties in Ontario found that "the isolation caused by the lack of transportation and inability to access needed services has a direct impact on women's mental health" (Purdon, 2002 in Marr, 2012, p. 14). Seniors lacking social support networks can experience feelings of loneliness and isolation and lack a sense of belonging (Butler-Jones, 2010). While many seniors live within small rural communities, others live outside of small towns resulting in the possibility of further isolation. British research has shown the importance to older people of simply getting out of the house and that transportation is a particular barrier to older people's participation in activities such as leisure, day centres, and volunteering (Social

Exclusion Unit, 2003).

Six transportation barriers increase one's risk (or experience) of social exclusion:

- Unavailability of transport: Public transportation may not go where people want it to go.
- Physical inaccessibility: Public transportation may be physically difficult to use.
- Unsafe or insecure: Crime and the fear of crime can deter walking, cycling and the use of public transport.
- **Cost:** People cannot afford the cost of vehicles, buses, taxis, etc.
- Limited travel horizons: People may be reluctant to make journeys that require longer distances, travel times, or transfers.
- Inaccessible location of services: Some facilities are located in inaccessible places or are open at inconvenient hours (Social Exclusion Unit, 2003).

Elements of Success

What factors contribute to successful seniors' rural transportation?

No two rural communities are the same. They differ in terms of demographics, geographic location, economic base, community resources and leadership, social interaction and cultural patterns. In addition, the rural older adult population is considered to be the most heterogeneous of all age groups (Atlantic Health Promotion Research Centre, 2001). Rural transportation solutions require approaches that incorporate the rural context and the input of seniors.

Developed in 2001, the 5A's of Senior-Friendly Transportation is a set of criteria that can be used by transportation services judge their senior friendliness (Beverly Foundation, 2010). These five criteria, Availability, Acceptability, Accessibility, Adaptability and Affordability are discussed in the following sections.

Availability of Services

According to the Beverly Foundation, having a transportation service *available* is not the full solution for seniors. Certain criteria related to availability can help to make transportation systems as useful to seniors as possible. For example, the transportation service should:

- Meet the needs of a majority of seniors in a community
- Provide service anytime (day, evenings, and week-ends)
- Take riders to desirable destinations beyond city and county boundaries
- Maintain strong organizational relationships with community and social service organizations

Acceptability of Services

Seniors who have driven their own car for many years are used to the comfort, reliability and convenience of getting where they need to go. Transportation needs to be acceptable to seniors or they won't use it. The Beverly Foundation offers the following criteria to help judge the acceptability of seniors' transportation:



- Easily accessed vehicles
- Clean and well maintained vehicles
- Minimal advanced booking requirements
- Demand responsive services as much as possible
- On schedule services for pick up and drop off
- Well trained drivers who are "senior" sensitive

The World Health Organization created a list of factors that are critical in age-friendly cities. The transportation elements that relate to rural seniors are listed here:

- Costs are consistent, clearly displayed and affordable.
- Reliable and frequent public transportation, nights, weekends and holidays.
- No overcrowding and seniors have priority seating.
- Accessible transportation is available for disabled people.
- Drivers stop and start safely to facilitate boarding and exiting.
- Conveniently located bus stops, accessible, safe, clean, well lit and well marked, with adequate seating and shelter.
- Complete and accessible transit information is provided to users about routes, schedules and special needs facilities.
- Voluntary transport services are available where public transportation is too limited.
- Taxis are accessible and affordable, and drivers are courteous and helpful.
- Roads are well-maintained, with covered drains and good lighting.
- Roadways are free of obstructions that block drivers' vision.
- Traffic signs and intersections are visible and well situated.
- Driver education and safety is promoted for all drivers.
- Parking and drop-off areas are safe, sufficient in number and conveniently located.
- Accessible, priority parking and drop-off spots are available and respected (World Health Organization, 2007).

Accessibility of Services

In rural and urban areas, the demand for accessible transit service will grow steadily as the number of Canadians with mobility challenges increases. Specially trained staff, adapted vehicles, and a reliable journey with a minimum of vehicles, are all important to meet the needs of older people and more severely disabled passengers (Social Exclusion Unit, 2003). According to the Beverly Foundation, transportation providers can use the following criteria to determine how accessible their service is:



- Majority of seniors' needs are met
- Programs to improve transportation knowledge are in place
- "Door-thru-door" transportation available when needed
- Transit to varied destinations (essential and non-essential activities)
- Links seniors with options for transportation as necessary

In Canada, the *Intercity Bus Code of Practice* (2012) sets out the means by which scheduled intercity bus services will be provided in a safe and dignified manner to travellers with disabilities.¹⁰ The code stipulates numerous features of buses, terminals, reservation systems, ramps, support for attendants, etc. that should be in place to support disabled users.

In British Columbia, BC Transit buses are able to lower their step to make entry and exit easier. The HandyDART and Health Connections bus services are wheelchair accessible for riders with disabilities. With advanced booking, Greyhound bus lines are able to offer passengers a wheelchair accessible coach if they are not able to climb the stairs into the bus. It is common for some volunteer driver programs to have drivers who operate vans that are better able to assist disabled passengers and have room for mobility aids.

An important aspect of accessibility is ensuring that the users fully understand the services, any changes that have been made, and know how to use it. Transit systems rely on a well-informed public to maintain ridership (Gaye, 2013). The *Better At Home* Community Consultation process in Creston was carried out in the Fall of 2014. This process determined that over 100 seniors in the Creston area do not have access to a phone landline and find automated telephone systems frustrating and upsetting to use (Johnson, 2014). These insights are important when trying to communicate to seniors.

¹⁰ Source: https://www.tc.gc.ca/eng/policy/acc-accf-accessintercitybuscode-711.htm#code

When targeting older adults to share transportation or other significant information, the following communications strategies have been shown to be successful:

- Public meetings to share information about a new initiative or service (The Institute of Urban Studies, 2006)
- Flyers in resident's mailboxes (Kostiuk, 2009)
- Maintain current lists of transportation providers by community and have it readily available and searchable (Eby, 2012)
- Have transit timetables and maps widely available at shops, the town hall, libraries, community centres, grocery stores, bus stops, etc. (Social Exclusion Unit, 2003)
- Issue leaflets on transportation services to homes in the area
- Have local telephone help-lines available for transportation assistance
- Use larger sized font in all promotional materials
- Use one-on-one communication with seniors and service providers (such as morning visits to local coffee shops and bakeries) (Johnson, 2014)
- Deliver transportation information packages to non-profits, churches, general stores, banks, drug stores, the library, the hospital, doctors' offices, dentists, town halls, regional district offices, the Fire Hall, RCMP, community centres, and interested individuals (Johnson, 2014)
- Provide public presentations especially if they tie into existing seniors' events.

The West Kootenay Transit Riders' Guide provides comprehensive information on the various routes in the region. The Guide is 22 pages long and is overwhelming for some users. According to the Victoria Transport Policy Institute in British Columbia, navigation tools for users of transportation systems should anticipate users' needs, be easy to use and understand, and should be tailored for specific users such as tourists or people with disabilities (Victoria Transport Policy Institute, 2014). Well-constructed navigation tools such as maps, guidebooks, websites and electronic devices should enable travelers to:

- Find contact information for transportation providers'
- Plan a route from a particular origin to a destination
- Read route maps, schedules, fares and contact information in printed materials and signs
- Find guidance for walking to transit stops
- Determine timing of the next bus or train will arrive
- Navigate within a bus or train station, including finding the correct platform and services such as washrooms, refreshments and telephones

Adaptability of Services

Seniors benefit when community-based transportation services are adaptable in meeting their needs. Though this can be more costly to administer, older riders will not use transportation services if they find them to be inflexible or difficult. According to the Beverly Foundation, the following criteria help to ensure transportation systems are adaptable to seniors needs:

- Transportation escorts will be provided when needed.
- Multiple stop trips for individual passengers can be accommodated.
- **Vehicles are accessible** for passengers with different needs.
- Systems are adapted to meet seniors' needs.
- **Seniors' input is sought** through annual surveys for service improvement.

Informal networks made up of seniors' friends, family and neighbours are the most common sources of transportation support. These networks are key to seniors' independence and are the most common means of transport for people living with disabilities (Social Exclusion Unit, 2003). They are also the most likely to be adaptable and flexible in meeting seniors' needs. Other options that are more easily adaptable to seniors' needs are services run by the Voluntary sector, including Volunteer Driver Programs and Handy-Van services. In British Columbia, the STAR program provides organizations with software and support to help coordinate rides, clients and volunteers for community transportation (Seniors Transportation Access & Resources, 2014).

Affordability of Services

Poverty, rural living and difficulty with transportation are closely linked. In rural areas of the US for example, transportation policy and poverty policy are often one and the same (Kidder, 2006). In Manitoba, a review found general agreement that a reasonable rate of \$3 or less for travel within a community promotes greater ridership (The Institute of Urban Studies, 2006). In the US, all transportation systems that move people are subsidized because they are considered to be vital community services. (Kostiuk, 2009)

According to the Canadian Automobile Association, the yearly ownership costs for an average compact car are about \$9,500, while the average Canadian spends \$5,400 on groceries a year (Canadian Automobile Association, 2013). Seniors' transportation planners recognize that the vast majority of seniors who no longer drive their own vehicles do not re-invest this money into their continued mobility. According to the Beverly Foundation, the money that went into the operation of a vehicle could purchase a senior thousands of one-way bus tickets. As well, passengers are seldom knowledgeable about the actual cost of many community-based transportation services. For example, the \$2 or \$5 "senior" ride may actually cost an organization \$10, \$20 or \$40 to provide (Beverly Foundation, 2010). According to the Beverly Foundation, affordability can be addressed when passengers are offered ticket purchasing options, including monthly passes instead of paying cash and purchasing tickets by mail or the internet.

In Canada, the federal government offers a non-refundable tax credit if you use a bus pass. In

addition to claiming your own cost of transit passes, you can make a claim on behalf of a spouse or common law partner and children under the age of 19.¹¹ In BC, if patients are required to travel at least 80 km (one way) from their home to obtain medical services, they may be able to deduct transportation expenses (vehicle, air, or public transportation), meals and accommodation for both the patient and, when applicable, an accompanying individual (Interior Health Authority, 2014).

In British Columbia, attempts are being made to keep public transit fees manageable for lowincome people. For example, BC Transit fares are exempt from federal and provincial tax. Seniors are charged a lower fare for fixed route bus trips. The BC Bus Pass Program¹² offers an annual, reduced cost (\$45) bus pass for low-income seniors and individuals receiving disability assistance. In order to qualify for this pass, low-income seniors or persons with a disability must be living in a transit area and meet one of the six criteria laid out on the website. All bus passes expire on December 31 and the fee is not prorated for applicants applying part way through the year. The BC Bus Pass can be accessed through a phone call but online requests are preferred, which may challenge some seniors or those with disabilities. Passes are valid in communities serviced by BC Transit or TransLink. The pass is only valid for the eligible rider and is non-transferable. The bus pass provides unlimited access on any scheduled (fixed-route) BC Transit bus but handyDart and Health Connections services are not included in this program. When the handyDART bus cannot accommodate a user's needs, riders can use Taxi Saver¹³ vouchers for one-time trips. These vouchers are available to permanently registered handyDART riders (who hold a handyPASS) and provide a 50% subsidy towards the cost of taxi rides.

There are some options available to help offset the cost of travel for medical services. The BC Ministry of Health's Travel Assistance Program (TAP) can cover some of the transportation costs (air, ground and ferry) facing rural residents. It is a partnership between the Ministry of Health and private transportation providers and there are eligibility and escort criteria for this program. The Interior Health Authority operates the Health Connections bus service linking smaller communities to the regional hospital in Trail. The national charity Hope Air, provides free flights to people who cannot afford the cost of an airline ticket to get to medical expertise or specialized medical technologies that usually exist only in larger urban centres. The services is the service of the cost of th

One important strategy in promoting seniors' transportation is to ensure that seniors are aware of and are supported to take advantage of as many cost saving opportunities, such as reduced fare bus passes, as possible.

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¹¹ Source: www.trans<u>itpass.ca</u>. Downloaded June 2, 2014.

¹² Source: www.buspass.gov.bc.ca. Downloaded June 2, 2014.

¹³ Source: http://www.transitbc.com/regions/wkt/handydart/fares.cfm. Downloaded June 9, 2014.

¹⁴ Source: http://www.health.gov.bc.ca/tapbc/tap_patient.html.

¹⁵ Source: www.hopeair.org.

Ensure senior drivers are safe and well supported

Seniors have a longer overall life expectancy than driver expectancy (Hardin, 2003). The implication is that both men and women will live for a period of time (as many as 6 years for men and 11 years for women) when they will be transportation dependent.



As a group, senior drivers are relatively safe. Most seniors drive conservatively, travel fewer kilometres overall than other drivers and do not deliberately drive unsafely. In March 2014, The BC Automobile Association contracted a firm to conduct an online survey of BC residents. They discovered that 72% of British Columbians are concerned about the safety of senior drivers. Of most concern was the fact that the respondents with a mature driver in their lives, feel anxious whenever their loved one gets behind the wheel (32%) and feel powerless about how to keep their aging driver safe on the road (38%) (BC Automobile Association, 2014).

About 60,000 Canadians over 70 years of age stop driving each year (Hanson, 2009). Many older rural residents are in a vulnerable position regarding mobility since driving is often the only alternative. Findings of a research study in rural Michigan revealed that rural older adults are more likely to continue driving past the point where they can safely do so. This is in part because of the difficulty meeting mobility needs once safe driving becomes more difficult. (Eby, 2012). Because of the preference for the personal automobile and the lack of adequate and acceptable community mobility options, one goal of older adult mobility efforts is to keep older adults driving for as long as they can safely do so (Eby, 2012).

Giving up the car keys can come as a shock if one is unprepared. In Canada and abroad, there are growing numbers of programs to support senior drivers. For example:

- Manitoba's 55 Alive course familiarizes older adults with driving strategies that address the aging process (The Institute of Urban Studies, 2006)
- BCAA and the Canadian Automobile Association (CAA) have developed the Senior Driver Toolkit¹⁶
- BC's Seniors Transportation Access & Resources program has developed a resource called Keep Moving (Seniors Transportation Access & Resources, 2014)
- The US based "Keeping Us Safe" organization supports and informs older drivers, families, geriatric professionals, criminal justice and highway safety communities about issues related to seniors' driving and community safety (Keeping Us Safe, 2014).

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¹⁶ Source: http://seniorsdriving.caa.ca. Downloaded June 3, 2014.

Promising Models for Rural Seniors' Transportation

The population of seniors will grow dramatically over the coming years. Rural communities need transportation solutions that recognize their unique nature, strengths and challenges. Given the relatively small population of this area, and the large distances required for travel, the best approaches to transportation may be to strengthen existing programs and services rather than carving out something new. There is a strong transportation infrastructure in this region and several models currently are highlighted for their benefits, challenges and potential enhancements to further meet rural seniors' needs.

1. Informal support networks

Informal support networks consist of family, friends and neighbours who provide seniors with transportation on a regular basis. They are a key component to help seniors maintain independence.

Benefits

- 1. Informal support networks are an inexpensive transportation option for seniors.
- 2. Drivers most often know the senior, their routines, limitations, etc. and can accommodate them.
- 3. These networks are highly adaptable to seniors' changing needs.
- 4. People providing seniors with rides are eligible to receive tax credits to help offset costs.
- 5. The senior is more likely to feel comfortable receiving rides from family members or friends than from strangers.
- 6. There are social benefits for seniors and drivers.
- 7. Seniors can wait for their pick-up in their own home rather than on a street or at a bus stop.
- 8. These trips can also be efficient as they can schedule activities and stops (i.e. bank, groceries, drug store, etc.) to meet the senior's needs.

Challenges

- 1. The driver might be short on time, especially if taking time off work, school or family.
- 2. These networks work best in neighbourhoods where seniors feel engaged and included.
- 3. Many seniors don't live close to their children, while others cannot rely on family because they are too busy.
- 4. Seniors may not want to burden family, friends or neighbours with their needs.
- 5. Informal caregivers can be stressed with the demands of caring for elder parents or friends.

Implications for this Area

Amongst many community-based organizations in the West Kootenay, there is a growing interest in collective action to "deepen community." Raising awareness about the harmful impacts of seniors' isolation, and the tangible ways that neighbours can help each other

(including transportation) will help to strengthen communities overall.

As noted earlier in this report the aging population will place growing demands on family members for support and assistance. In order to support the caregivers, social service agencies may want to ramp up efforts to provide caregiver support, including:

- 1. Enhancing capacity within seniors' centres and adult day programs
- 2. Providing outreach counseling and therapy services to seniors' homes
- 3. Expanding existing nutrition programs such as Meals on Wheels
- 4. Developing rosters of neighbourhood volunteers
- 5. Implementing programs like Better at Home (www.betterathome.ca)
- 6. Increasing elder abuse services and advocacy services
- 7. Prepare to support greater numbers of disabled seniors with mobility aids and service.

2. Volunteer Driving Programs

Volunteer driving programs (VDPs) have been found to be one of the most effective forms of transportation for older adults. ¹⁷ There are several examples of VDPs operating in the West Kootenay and they are funded through Interior Health.

Benefits

- 1. Offer seniors door to door, and door through door assistance
- 2. Valuable social benefits for seniors
- 3. Less expensive to operate than handy-van services
- 4. Some drivers will use a senior's car upon request
- 5. The service is demand responsive and only operates when there is a need
- 6. There is the provision of tax credits to volunteers

Challenges

- 1. The programs rely heavily on volunteers who can become overextended.
- 2. The volunteer base in some communities is shrinking
- 3. It may be too expensive for some seniors.
- 4. Programs function better in communities with higher levels of social capital
- 5. Most volunteer drivers are seniors themselves
- 6. Younger seniors are busy with family, friends or travel and may be unavailable
- 7. Younger residents can only provide limited assistance because of employment
- 8. Rising gas prices have reduced the ability of some volunteers to provide services.

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¹⁷ www.agefriendlymanitoba.ca

- 9. Rising gas prices affect seniors' ability to pay for services (it is difficult to raise rates once they have been established) and older persons may not fully appreciate the costs of operating a vehicle
- 10. Some seniors lack understanding for the time and effort of volunteer drivers
- 11. It can be intimidating for a senior to accept a ride from someone new.
- 12. With falls being the most common cause of seniors' injury in Canada (Butler-Jones, 2010), safety is a concern if volunteer drivers are unable to give adequate assistance to clients.
- 13. Volunteers may be uneasy about winter driving which limits their availability
- 14. Most programs provide transportation to medical appointments, not social outings.
- 15. Seniors may not know about the program.

Implications for this Area

- 1. There may be opportunities to expand and/or coordinate existing Volunteer Driver Programs in the Kootenay Boundary region.
- 2. Look for subsidies such that trips between Nelson, Castlegar and Trail are more affordable.
- 3. Inform seniors relying on Volunteer Driver Programs that their fare can be subsidized through the province's Transportation Assistance Program.

The **Kootenay Rideshare program** is an online service to match drivers with riders in order to share costs. Rides are available for one-time travel requirements and for regular car-pooling. The program called "Give a Senior a Lift" encourages drivers to provide rides for seniors but there isn't information available regarding the numbers of seniors who use this service. The Rideshare program does not have a budget for staff, but with the addition of some resources there may be opportunities to evaluate, expand or tweak this service to best meet the needs of rural seniors.

3. Rural Transit Partnerships

West Kootenay Transit was launched in 2013, a new partnership between three local governments and nine transit systems. This new network is designed improve passengers' experiences, integrate West Kootenay communities and boost ridership. West Kootenay Transit operates several types of services in this region:

- Fixed-route services within communities
- Para-transit services between Nakusp,
 Hot Springs and Edgewood and from Kaslo to Argenta
- NakusP 2331

Two regional connectors (between Nelson and Castlear and Castlear and Trail)

 handyDART services for riders who have a disability such that they are unable to use conventional transit service without assistance.

Central Kootenay Transit is a partnership between RDCK and BC Transit. This services provides fixed-routes as well as the handyDART services.

The Health Connections service is operated by the Interior Health Authority and provides riders with transportation to other communities for medical appointments.

Benefits

- 1. This is an example of a partnership that works well and is recognized across the country.
- 2. There is local control of the service because decisions on fares, routes and service levels are made by local government.
- 3. Local operating companies run the service, employing local people.
- 4. Fixed route service is eligible for the BC Bus program.
- 5. Buses are clean and well-maintained.
- 6. HandyDART provides door-to-door and accessible service.
- 7. HandyDART offers free travel for attendants.
- 8. HandyDART buses are wheelchair accessible.
- 9. Fares are inexpensive because trips are subsidized.
- 10. HandyDART (and sometimes Health Connections, depending on demand) provides riders with travel to non-medical outings.
- 11. This service can also link riders with taxi services.
- 12. Riders on the Health Connections bus can request a special stop between regular stops.

Challenges

- 1. Sections of RDCK Area A and Area B do not have access to bus services. 18
- 2. Walking to and from bus stops in some neighbourhoods, may be a challenge during inclement weather, after nightfall, if streets are steep or slippery, when carrying groceries or other items.
- 3. Bus service is not available seven days a week and not after 6 PM on Saturdays.
- 4. There is no bus service on Sundays.
- 5. Passengers must carry exact change.
- 6. Travel time estimates between some communities are lengthy, including Rossland-Fruitvale, Warfield-Fruitvale, Rossland-Montrose and Warfield Montrose.
- 7. The Paratransit, handyDART and Health Connections routes are not eligible for the BC Bus Pass program.
- 8. The West Kootenay Riders' Guide is 22 pages long and overwhelms some users.
- 9. Booking the service can be complex, intimidating or confusing for users.

¹⁸ Independent Research, Tara Howse, Coordinator, Women Creating Change.

- 10. HandyDART riders must first apply for a (free) HandyPASS which requires an application package and 2 passport sized photos.
- 11. Bookings for handyDART must be made in advance, eliminating spontaneous trips.
- 12. Trips residents living in Nakusp and Kaslo can be challenging. For example, a passenger from Kaslo needing a medical appointment in Trail must transfer in Balfour, then at Selkirk College in Castlegar. Seniors new to the route may need extra support in understanding this schedule and making the transfer. Nakusp passengers heading to Trail must transfer at Playmor Junction, then Selkirk College in Castlegar.
- 13. The Health Connections bus service runs on Tuesdays and Thursdays only.
- 14. The Nakusp to Nelson and Kaslo to Nelson buses leave early in the morning.
- 15. The Arrow Lakes Hospital bus leaves Nakusp at 7 AM for Vernon and Kelowna and returns at 6 PM, which makes for a long day. It runs one day/week only requiring residents to phone medical service providers requesting coordination of appointments for this day.
- 16. A rider's travel plans may need to be rescheduled if the demand for medical appointment transportation is high.
- 17. Health Connections and HandyDART services are only available Monday through Friday.
- 18. Health Connections and HandyDART services are not eligible for the BC Bus Pass.
- 19. The literature suggests that many rural seniors don't know of these types of services.

Implications for this Area

- 1. To facilitate seniors, have transit tickets available for purchase at major grocery stores and seniors' centres.
- 2. Support eligible seniors in the process of applying for a BC Bus Pass and a handyPASS.
- 3. Determine whether it is feasible to make the handyDART and Health Connections buses eligible for the BC Bus Pass.
- 4. Consider using a debit-card system so that riders don't need to carry exact change.
- 5. Examine the Regional Connector service such that seniors can have access to public washrooms while waiting at Selkirk College in Castlegar.
- 6. Revise the West Kootenay Riders' Guide so that it is shorter and more age-friendly to use.
- 7. Continue to tweak trip booking systems to make processes as possible.
- 8. Determine if it is feasible to offer services in the evening and on week-ends. These evening and week-end services could provide seniors with rides to social outings or a movie.
- 9. Make the registration process for a HandyPASS as easy as possible (are two passport sized photos really necessary?)
- 10. Make sure that people know they can use Taxi Saver vouchers when the handyDART cannot accommodate their travel needs.
- 11. Ensure seniors are informed that if they are required to travel at least 80 km (one way) from their home to obtain medical services, they may be able to deduct transportation expenses (vehicle, air, or public transportation), meals and accommodation for both the patient and, when applicable, an accompanying individual.
- 12. Make sure seniors know which taxi companies accept the Taxi Saver vouchers.
- 13. Make sure there is one wheel-chair accessible taxi available in each community.

14. Seniors new to the route (Nelson to Kaslo) may need extra support in understanding transportation schedules and making the transfer.

Conclusion

Rural transportation services strengthen rural communities. According to research in Nova Scotia, rural bussing programs makes personal travel much easier for seniors and increases the viability of small businesses in these communities (Majkut, 2011). There are costly downsides to not investing in rural transportation. These include:

- Rural communities may be left isolated or unable to attract investment.
- Vulnerable groups may be undermined if they cannot fully participate in important social and cultural services.
- Poor transport is a barrier to employment and may contribute to higher benefit payments, and reduced tax contributions.
- Institutional resources are wasted through missed health appointments, delays in patient discharge from hospital, and course drop-outs in education (Social Exclusion Unit, 2003).

Transportation in rural areas is challenging to provide for everyone who needs it. However it is not impossible. Transportation planners and advocates are urging governments and all types of community organizations to take an innovative approach to developing solutions, to collaborate widely, to invite seniors' input and to consider the rural context of each community and region. They argue that there are new ways of looking at transportation that could open funding possibilities as well as new partnerships. The following recommendations include innovative approaches to solving rural seniors' transportation challenges:

Recommendations

- Evolve thinking beyond traditional transit funding sources (i.e. private/public partnerships)
- Seek out project leaders and nourish innovators
- Support an organizational culture in which transportation innovation can flourish
- Be open to collaboration and relationship exchange with other organizations
- Recognize the rural context and individuality of communities (Kerschner, 2006)
- Support effective communication between service providers, seniors, consumers, municipal government and elected officials.
- Provide "transit travel training" programs and evaluate them
- Offer one free transit day per month so people can try out different options;
- Engage non-profits in collaborating to run a transportation information service
- Require accessibility within new developments by walking, cycling and public transport
- Amend regulations making it easier to run bus services that respond to residents' needs
- Maximize use of community mini-buses during slow times (Social Exclusion Unit, 2003)
- Support safe driving programs and driver transitioning for seniors and family members
- Change travel to health appointments so it is more organized around the patient

- Encourage husbands and wives to volunteer together so that one provides assistance ito a senior and out of the car, and the other parks and retrieves the car
- Engage neighbourhoods in providing volunteer drivers for senior residents
- Promote active transportation such as safe walking paths, wide sidewalks without tripping hazards, benches and public washrooms
- Promote scooter training for riders and vehicle drivers
- **Determine whether safety and security are issues** for seniors using public transportation in the West Kootenay region. If so, take steps to address it.
- Support seniors with cost savings and take advantage of tax breaks and discounts
- Inform seniors about transportation using appropriate communication strategies
- Raise awareness of mobility accounts, where seniors who no longer drive continue to invest money into their future transportation
- Ensure accessible vehicles are available through Volunteer Driver programs
- Increase access to seniors' social events
- Increase funding programs and tax deductions to assist all who are involved in providing mobility options to seniors in rural BC
- Raise public awareness about seniors' transportation and social isolation. Offer tangible ways for the public to get involved.
- Lobby employers to provide transportation to work places that are out of town.
- Develop specialized Ride Share programs for patients discharged from urban hospitals
- Raise awareness about the true costs of transportation
- Train bus and volunteer drivers in being senior sensitive
- Train seniors to be driver sensitive
- Respect and enforce seniors' priority seating on buses
- Conduct annual seniors' surveys for service improvement
- Utilize the tools and resources available to help communities improve their local and regional transportation systems.

Community relationships, outreach activities and partnership arrangements are critical ingredients for any transportation service, but particularly one that provides services to seniors (Kerschner, 2006). Transportation solutions require a long-term perspective, locally relevant solutions, and a range of public services and other organizations to work together (The Institute of Urban Studies, 2006). Good rural transportation provides a service that allows people to live in rural communities and helps contribute to the sustainability of smaller communities.

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