

**Ticket to Ride:
Reducing social isolation for seniors through better
access to public transportation**

**by
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Abstract

Social isolation is one of the top issues facing seniors in Canada. Most seniors get around by personal vehicle and may experience social isolation when they lose the ability to drive due to the loss of access to services and opportunities to socialize. With the region's aging population, the transportation needs of this demographic will become increasingly important over the coming decade. This study examines one role that TransLink, the regional transportation authority, can take in reducing social isolation for seniors in Metro Vancouver by providing or facilitating travel training. A literature review, jurisdictional scan, focus group, and expert interviews help identify and evaluate policies that can increase seniors' access to public transit within TransLink's existing network, budget, and jurisdiction. I recommend a one-on-one travel training program be implemented with a train-the-trainer approach to complement the general travel training program currently being piloted in the region.

Keywords: social isolation; seniors; older adults; travel training; driver cessation; public transit

For my grandparents, who have always had so much drive.

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List of Acronyms

ADA	Americans with Disabilities Act
FTA	Federal Transit Authority (United States)
ICBC	Insurance Corporation of British Columbia
MERCS	Mandatory Employment Related Costs
U.S. DOT	United States Department of Transportation
YRT	York Region Transit

Glossary

Seniors	People aged 65 and older.
Older adults	People that are older in age and may include those under 65.
Social isolation	Low quality and quantity of social contact with others.
Travel training	Short-term training for people to safely use conventional public transit. May include an in-class component and must include an experiential component.
Public transit	Includes conventional transit such as rapid transit, light rail, and buses, as well as paratransit.
Conventional public transit	Rapid transit (ex: subway), light rail, buses, sea buses.
Paratransit	Door-to-door transportation service for those who are unable to use conventional public transit (ex: HandyDART in British Columbia).

Executive Summary

Seniors drive personal vehicles at a much higher rate than other age groups in Canada (Wasfi, Levinson, & El-Geneidy, 2012, p.8). This dependence on personal vehicles can become a major barrier for seniors' mobility when they are no longer able to drive. People who lack access to transportation are at risk of remaining socially isolated for long periods, with negative impact on their mental and physical health (National Seniors Council, 2009, p.16).

It is projected that Metro Vancouver will be a "super-aged" society by 2029, with more than 21% of the population over the age of 65 (Population Projections, British Columbia and Sub-Provincial, n.d.). This project explores what TransLink, Metro Vancouver's transportation authority, can do within its current transportation network, budget, and jurisdiction to address seniors' social isolation by making conventional public transportation more accessible.

A barrier to conventional public transportation for many seniors is that they have either not used it before or have not since they were children (Office of the Seniors Advocate, 2018, p.3). TransLink is considered a leader in North America in its accommodations for people with diverse needs, but even a perfect system will not be used if people do not know how it works. A robust one-on-one travel training program to complement the general travel training program currently being piloted will help remove this barrier for many in Metro Vancouver.

Methodology including a literature review, environmental scan, expert interviews, and a focus group are used to look at how best to implement a one-on-one travel training program in Metro Vancouver. I recommend *Option 1: Train-the-trainer* because it is the most cost-efficient, is easily implemented, and is favoured by potential trainees in focus groups and potential partner organizations in interviews. In addition, this option does not preclude other travel training approaches should TransLink need to expand the program in the future.

The main disadvantage of the train-the-trainer approach is that program evaluation is difficult because of the high number of partner organizations. However, its low cost will relieve some pressure to demonstrate costs avoided. It may also be

possible to measure outcomes at a more detailed level with a sample of partner organizations with which there is a particularly strong relationship.

Chapter 1.

Introduction

Social isolation is one of the top issues facing seniors in Canada (National Seniors Council, 2014, p.1; Raina et al., 2018, p.67). There has been a strong relationship found between social isolation and health for seniors (National Seniors Council, 2014, p.7). While negative impacts to seniors' health can result in preventable costs to health and social care systems (Leigh-Hunt, Bagguley, Bash, Turner, Turnbull, Valtora, & Cann, 2019, p.157), it is important to remember seniors' contributions to society do not end simply because they are not paid employees. When seniors are socially isolated, communities, organizations, and society as a whole, lose out significantly (National Seniors Council, 2014, p.7). This a particularly pressing issue today as the number of people aged 65 or over in Canada could double by 2040 (National Seniors Council, 2014, p.1).

Seniors drive personal vehicles at a much higher rate than other age groups in Canada (Wasfi, Levinson, & El-Geneidy, 2012, p.8). This dependence on personal vehicles can become a barrier for seniors when they are no longer able to drive. Driver cessation, whether voluntary or not, is associated with negative outcomes for seniors (Raina et al., 2018, p.182). People who lack access to transportation are at risk of remaining socially isolated for long periods, with negative impacts on their mental and physical health (National Seniors Council, 2009, p.16).

For seniors who are unable to drive, a BC study has shown the most common ways of getting around are by relying on family and friends or taking conventional public transit (Dobbs, Pidborochynski, & Tassone, 2012, p.v). Unfortunately, many of the factors that make people unable to drive also make taking conventional public transit more difficult, such as physical or cognitive impairment and changes in desired destinations (Wasfi, Levinson, & El-Geneidy, 2012, p.8). As Metro Vancouver's transportation authority, TransLink is responsible for public transit. While TransLink is considered a leader in North America for its accommodations made for people with diverse needs, there is always room for improvement.

This study explores roles TransLink can play to improve access to public transportation for seniors, thereby reducing social isolation. I undertake an extensive literature review and jurisdictional scan of policies and programs across North America in order to explore what policies or programs would be most effective in the Metro Vancouver context. While there are many potential measures that can improve public transit for seniors, seniors will not use even a perfect transit system if no one knows how it works. A comprehensive travel training program is lacking in Metro Vancouver and works well within the existing transit system. The focus on travel training is pragmatic, does not require legislative changes, large amounts of funding, or much time to implement.

My policy problem is: *Seniors' perceived lack of transportation options and unfamiliarity with public transit contribute to an increased risk of social isolation after the loss of a driver's licence.*

My goal is to assess ways TransLink can use travel training to increase seniors' understanding of, and access to, public transportation services, and do so with its current jurisdiction, community networks, services, and budget. I examine the policy problem using a literature review, interviews, a focus group, and thematic analysis to identify best practices and outcomes. This analysis results in my focus on one type of travel training that is one-on-one. I then examine in detail four possible approaches to one-on-one travel training program delivery and present a recommendation for what will work best within TransLink's current network, budget, and jurisdiction.

Chapter 2. Methodology

The methodology includes a jurisdictional scan, focus group, and interviews with experts in the fields of senior support and transportation services.

2.1. Jurisdictional Scan

The jurisdictional scan includes a review of publicly available literature, program assessments, and statistics related to public transportation programs in Metro Vancouver and across Canada and the USA that address access for seniors. A comparison of programs and policies helps identify successful characteristics and challenges. The objective of the jurisdictional scan was to determine what existing programs and policies from other jurisdictions could inform possible policy options that would be applicable in Metro Vancouver. Upon identifying travel training as one crucial aspect that can address the perceived lack of transportation options, improve familiarity with public transit, and reduce fears of using it, the jurisdictional scan focussed on successful programs in North America and used to make a list of potential interviewees.

2.2. Focus Group

One focus group was held at a meeting run through the collective impact project Seniors on the Move with their Seniors Advisory Committee. This committee has had quarterly meetings since 2016. All 10 participants were seniors living in the Metro Vancouver region. The focus group included a 15-minute presentation on the policy options, followed by two breakout groups of five people each to discuss five questions.

Participants received the five questions on worksheets along with prompts to discuss, and then those discussions were shared with the entire group (**see APPENDIX B for worksheets**).

I took notes as both the breakout sessions took place, and as those sessions were shared and discussed with the larger group. A thematic analysis as described by Braun and Clark (2006) made use of the notes and provided feedback from the participants on how stakeholders may react to different policy options.

2.3. Expert Interviews

I conducted ten interviews with academics and professionals with expertise in the fields of elder support and transportation services in order to gather data and information related to the application of policy options in the Metro Vancouver context.

All interviews were semi-structured, allowing me to ask a set of questions, while also giving interviewees the opportunity to present the information they felt was important. Each interview lasted approximately 45 minutes.

Informational interviews helped provide an understanding of the current mobility needs of Metro Vancouver seniors, as well as to identify current policies and perceived policy gaps. These interviews were with professionals at local community centres, non-profit organizations, and TransLink.

I interviewed representatives from organizations across North America over the phone that had travel training programs. Interviewees were program managers and coordinators from travel training programs associated with:

- Ride Connection (Portland)
- King County Metro Transit (Seattle)
- OC Transit (Ottawa)
- Calgary Transit
- BC Transit Victoria
- York Regional Transit

These interviews touched on specific themes (**SEE APPENDIX C FOR INTERVIEW SCHEDULE**):

- The travel training approach (in-house, contracted out, train-the-trainer)
- Travel training instructors' qualities and qualifications
- Travel training curriculum and supporting materials

- Influences of the local infrastructure and environment
- Trainees' qualities and characteristics
- Involvement of trainees' caregivers
- Collaboration with community partners
- Program successes and barriers

Chapter 3.

Background

3.1. Social isolation

Social isolation is one of the top issues facing seniors in Canada and has become a topic of interest within academic and government literature (National Seniors Council, 2014, p.1; Raina et al., 2018, p.67). A senior is defined as a person aged 65 and older in this study (Office of the Seniors Advocate, 2018, p.4). Social isolation is defined as a low quantity and quality of contact with others. This can include few instances of social contact or social roles and a lack of mutually rewarding relationships within family, friendship, and community networks (National Seniors Council, 2014; International Federation of Aging, 2012). Social isolation is different from loneliness, which is an individual's "perception of a lack of interaction or contact with others" (National Seniors Council, 2014, p.1). This means it is possible for a person to feel lonely even when surrounded by others, or not feel lonely even though they do not have many opportunities for social engagement. However, loneliness is one very likely outcome of social isolation.

There are relatively few studies on seniors' social isolation in Canada, but those available can help to understand the seriousness and breadth of the issue (National Seniors Council, 2014, p.1). In a 2012 Statistics Canada Health Report, 24% of adults over the age of 65 reported that they would have liked to have participated in more social activities in the past year (National Seniors Council, 2014, p.1). One study finds over 30% of Canadian seniors are categorized as being at high risk of social isolation (Keefe, Andrew, Fancey, & Hall, 2006).

There has been a strong relationship found between social isolation and health for seniors (National Seniors Council, 2014, p.7). For example, seniors who are socially isolated have a higher risk of falls and have a four to five times higher risk of being hospitalized (National Seniors Council, 2014, p.8). Reduced social skills can also be a result of social isolation, especially in seniors who may be struggling with their mental health (National Seniors Council, 2014, p.7). Social isolation is often self-perpetuating because of the associated reduction of mental health, physical health, and social skills.

The self-reinforcing nature of social isolation means that prevention is key (National Seniors Council, 2014, p.8).

Access to transportation is an important part of reducing and preventing social isolation. Most 85-year-old British Columbians live independently (82%), do not need a wheelchair (96%), and do not suffer from dementia (80%), but no longer have a driver's licence (56%) (Office of the Seniors Advocate, 2018, p.2). Driver cessation is associated with negative outcomes for seniors whether voluntary or not. Negative outcomes include reduced out-of-home activity levels, decreased health, increased rates of depression, an increase in long-term care admissions, and even death (Raina et al., 2018, p.182).

If a senior is unable to access other transportation options after losing their licence, one consequence is that family and friends are increasingly providing support (Cloutier-Fisher & Kobayashi, 2009). Another is that governments may face preventable medical problems with costly interventions (Office of the Seniors Advocate, 2018, p.7; Leigh-Hunt, Bagguley, Bash, Turner, Turnbull, Valtorta, & Caan, 2017, p.157), especially for those who lack support from family and friends. Canadian society incurs a loss when seniors are socially isolated due to increased medical costs, but even more so because seniors are a diverse group who have much to offer their communities (National Seniors Council, 2014, p.7).

3.2. Changing demographics

Social isolation of seniors is a growing concern. The number of people aged 65 or over in Canada could double by 2040 (National Seniors Council, 2014, p.1). In Metro Vancouver, seniors represent 15.8% of the total population (Population Estimates, British Columbia and Sub-Provincial, n.d.). By 2029, it is projected that Metro Vancouver will be a "super-aged" society, with more than 21% of the population over the age of 65 (Population Projections, British Columbia and Sub-Provincial, n.d.).

While today's older adults are, on average, more active, financially secure, and healthier than past generations, there is also a concern that families are becoming smaller and more dispersed geographically, negatively impacting seniors' support networks (National Seniors Council, 2014, p.1). The baby boomer cohort grew up with

driving as their main mode of transportation, and this could affect their attitudes towards and experience with other modes of transportation (Raina et al., 2018, p.182).

3.3. Transportation and social isolation

Access to transportation alone will not solve the issue of social isolation for seniors, but transportation is necessary for all people to be able to participate in their communities (Jansuwan, Christensen, & Chen, 2013; National Seniors Council, 2014, p.9; Saltman, 2011). In a study by the National Seniors Council, a lack of accessible and affordable transportation options was mentioned at all regional roundtables as one of the most important social isolation risk factors (2014, p.9).

Seniors are a very diverse population. Subgroups that will be at a higher risk of social isolation and face additional barriers to transportation are seniors with lower incomes and seniors with disabilities. In Metro Vancouver it will also be important to consider that there are many seniors for whom language may be a barrier (INTERVIEW 1).

A report by the National Seniors Council found that while Canada's retirement income system has helped reduce the number of seniors living with a low income, groups such as the unattached, recent immigrants, those with fewer than ten years in the labour force, and Indigenous seniors are more likely than others to have low incomes (2009, p.9). Seniors who live with low incomes spend the majority of their money on housing, food, transportation, and health-related costs (National Seniors Council, 2009, p.9).

People with disabilities face additional barriers to transportation. A study in the United States found that approximately 40% of people without access to transportation were people with disabilities, and many did not even leave their homes because of the difficulty in accessing transportation (Bezyak, Sabella, & Gattis, 2017, p.52). For people aged 75 and older, a sharp increase is seen in medical conditions, especially pain and mobility related disabilities (Office of the Seniors Advocate, 2018, p.4).

3.4. Seniors' transportation habits

Understanding more about seniors' transportation habits is crucial to understanding the context of social isolation caused by a lack of transportation options after the loss of a licence. This includes habits before and after the loss of a driver's licence.

In Canada, most people aged 65 and over prefer to drive their own vehicle as their main mode of transportation (see **Figure 1**), and do so at a higher level than other age groups (Wasfi, Levinson, & El-Geneidy, 2012, p.8; Office of the Seniors Advocate, 2018, p.4; Raina et al., 2018, p.186). Most seniors in one study report "although they are currently independent they do know that such independence is not permanent and they have to learn more about alternatives available to them" (Wasfi, Levinson, & El-Geneidy, 2012, p.8). Seniors are thus aware that driving may not always be an option, so many are likely to be open to exploring other options before they stop driving.

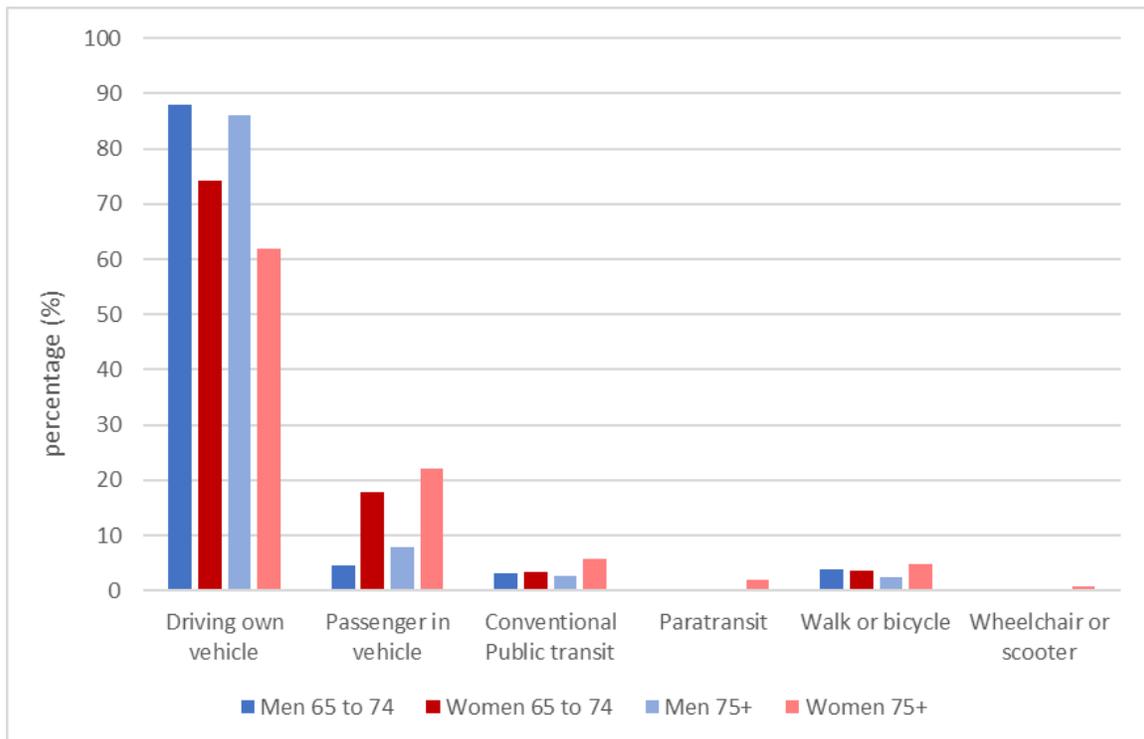


Figure 1: Main mode of transportation for older adults in Canada, 2010-2015 (Raina et al., 2018, p.186)

The second most common way for seniors to get around is as a passenger in a personal vehicle (Raina et al., 2018, p.186). For seniors who are not driving, getting

around as a passenger with family and friends is the most common transportation option (Dobbs, Pidborochynski, & Tassone, 2012, p.v; Office of the Seniors Advocate, 2018, p.9). Of the seniors between ages 65 and 74 that do not drive, 38% report that their primary mode of transportation is as a passenger in a vehicle. Over the age of 85, this increases to 60% (Office of the Seniors Advocate, 2018, p.9). People that rely on others for transportation could be at a higher risk for social isolation; however, becoming comfortable with other modes of transportation could allow for much more independence and social engagement.

The third most common way to get around is by conventional public transportation. Public transportation includes conventional transit such as rapid transit, light rail, and buses, as well as paratransit such as HandyDART. Across Canada, this makes up only 6% of the mode share for people over 65 (Dobbs, Pidborochynski, & Tassone, 2012, p.v). Metro Vancouver has a high transit mode share for people over 65 at 15% (TransLink, 2013).

3.5. Driver cessation

In British Columbia, 77% of seniors have an active driver's licence. For those between 65 and 74 years of age, 90% still have a licence, but starting at 75 there is a consistent decrease in people with a driver's licence, and by the age of 85 the majority of people have stopped driving (Office of the Seniors Advocate, 2018, p.4 & p.1). It is at age 75 where seniors' transportation needs change significantly (Office of the Seniors Advocate, 2018, p.1).

When looking at the types of trips that people make, there is also a distinction to be made between physical needs such as medical, grocery, and errand trips, and social needs such as trips to participate in community events or visits to friends and family. For people who struggle with access to transportation, physical needs trips will be deemed more important while social needs trips are more likely to be seen as unnecessary, and so the social trips are less likely to be made (Bryanton, Weeks, & Lees, 2010, p.187). However, both types of trips are very important to reducing social isolation and improving health (Council of Canadian Academies, 2017, p.xiv).

Understanding the reasons for driver cessation is important to understanding travel choices among seniors. A study by the Office of the Seniors Advocate had similar findings which can be seen in **Figure 2** (2018). The largest category of people, or 37%, stop driving due to deteriorating vision or a physical condition, 20% stop because they no longer enjoy driving, 15% because they feel it is no longer safe, 13% because it is too expensive, and 12% because a doctor or another individual advised them to stop (Office of the Seniors Advocate, 2018, p.5).

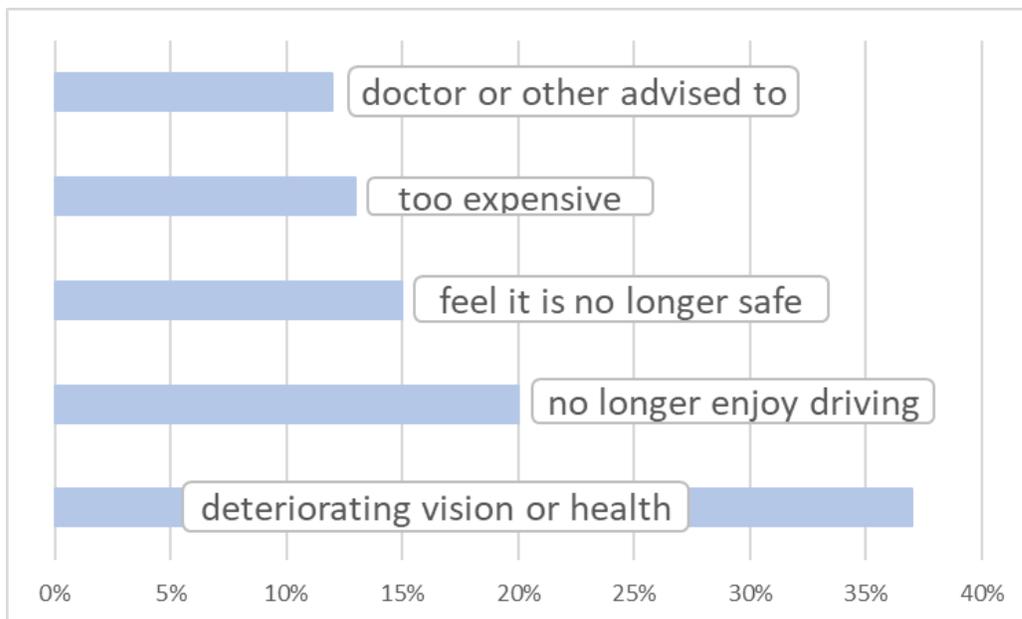


Figure 2: Reasons for driver cessation in Canada
(Office of the Seniors Advocate, 2018, p.5)

Results from the Canadian Survey on Disability show that more than one third of Canadian seniors live with a disability (Statistics Canada, 2013). For those aged 65 to 74, 26.3% live with a disability. For those aged 75 and older, this rises to 42.5% (Statistics Canada, 2013). Looking more specifically at medical conditions by age range in **Table 1**, there is a sharp increase for people over 75 in all categories, with pain and mobility related disabilities being the most frequent condition in all age groups (Office of the Seniors Advocate, 2018, p.4). People with disabilities are more likely to rely on public transportation and travel less frequently, with many not leaving the home at all (Bezyak, Sabella, & Gattis, 2017, p.52). Any barriers to public transportation affect people with disabilities disproportionately, a factor that needs consideration when creating new policies and programs (Bezyak, Sabella, & Gattis, 2017, p.52).

Table 1: Disabilities by age group in Canada

Disability Type	% of population	% of population	% of population
	15-64	65-74	75 and older
Mobility	5%	16%	27%
Sight-related	2%	4%	9%
Memory-related	2%	3%	8%
Pain-related	7%	18%	27%
Learning-related	2%	2%	4%
Use a wheelchair and/or scooter	<1%	0.20%	4.20%

(Office of the Seniors Advocate, 2018, p.4)

3.6. Options for seniors in Metro Vancouver after the loss of a driver's licence

Seniors who live in Metro Vancouver have many mobility options for people who do not wish to or who are unable to drive. Along with relying on friends and family or active transportation options such as walking and cycling, a number of public, private, and not-for-profit services are available. The level of service can vary within the region a great deal. However, simply having services available does not mean that seniors will use them. In addition, there is no single transportation option that will be a practical replacement for all seniors' transportation needs (Office of the Seniors Advocate, 2018, p.7; Munro, 2016).

3.6.1. Aging in place

Finding feasible transportation options for seniors is complex because so many prefer to age in place, or stay within their own homes for as long as possible. The National Seniors Council found that 85% of adults over 55 shared this desire (National Seniors Council, 2014, p.15). The policy challenge is even more complex for the growing population of those 85 and older. Many are no longer able to drive, but wish to remain as independent as possible and engaged with their communities (Office of the Seniors Advocate, 2018, p.2).

3.6.2. Transportation options in Metro Vancouver provided by TransLink

TransLink was created in 1999 in order to unite the 23 municipalities across Metro Vancouver under one transportation authority (TransLink, 2018). In contrast to many transit providers, TransLink plans and manages the region's transportation as whole, including not only public transportation and paratransit, but also several bridges and all 600km of the Major Road Network (TransLink, 2018).

Conventional public transit in Metro Vancouver, includes buses, the West Coast Express, SkyTrain, Canada Line, and the SeaBus. TransLink is a leader in providing accessible transit options in North America, with an Access Transit Strategy that includes a Users Advisory Committee (TransLink, 2018). TransLink's 2011 Trip Diary showed a high transit mode-share for Vancouver seniors at 15% (2013).

HandyDART is the paratransit option in British Columbia, including Metro Vancouver, for people with unique transportation needs not met by conventional public transit. The shared ride service offers door-to-door trips for a flat rate and provides assistance boarding and exiting the vehicle. In BC, approximately 75% of HandyDART users are seniors and approximately 5% of all BC seniors use HandyDART (Office of the Seniors Advocate, 2018, p.15). Overall HandyDART users are satisfied with the service, but there are some areas for improvement, especially the availability of rides (Office of the Seniors Advocate, 2017, p.1).

In 2017, over 3 million HandyDART rides were requested in all of BC, and 1.46% went unfilled, showing the high demand for the service (Office of the Seniors Advocate, 2018, p.15). In 2018, for just TransLink, year-to-date trips as of October 2018 were at 344 unfilled trips out of 443,818 trips requested (INTERVIEW 1). Survey results show that almost one-third of HandyDART riders feel the service is either not meeting or only moderately meeting their transportation needs (Office of the Seniors Advocate, 2017, p.1). HandyDART users note the need for advance notice is a struggle (Office of the Seniors Advocate, 2017, p.5 & 19). While TransLink tries to accommodate same-day requests, the policy is that trips should be booked by 4pm the day before due to the scheduled nature of the on-demand service (TransLink, 2018).

Another important consideration is the high degree of public subsidization of HandyDART. Each HandyDART round-trip costs on average \$78 to the public in the TransLink service area (Office of the Seniors Advocate, 2018, p.9). Supporting the transition to other modes of transportation is in the public interest, especially towards conventional transit. Up to 26% of HandyDART riders also use conventional public transit for some trips (Office of the Seniors Advocate, 2018, p.14). Exploring ways to make the use of conventional public transit better for more HandyDART users, and for more trips, will be important to increase the independence, mobility, and trip spontaneity for these riders in their communities.

Taxi Savers are another option for people who are eligible for HandyDART. These discounted taxi vouchers can be used for any taxi service that accepts them, and each customer can get \$80-\$100 per month of taxi fares at 50% off (TransLink, 2018). This can allow more ad hoc trips and flexibility for users. However, relying on taxis for many trips is not financially viable for people with low incomes (Office of the Seniors Advocate, 2018, p.10). Within Metro Vancouver, 23% of HandyDART clients use Taxi Saver vouchers (Office of the Seniors Advocate, 2018, p.10).

3.6.3. Transportation options in Metro Vancouver outside of TransLink

Outside of public transit and taxis, several other services are available, often referred to as alternate transportation for seniors. These personalized, door-through-door services are important in ensuring more seniors are able to stay active within their communities and can be for profit or not-for-profit. However, there is a lack of coordination between services and there are underserved areas (Dobbs, Pidborochynski, & Tassone, 2012, p.v). In addition, the majority of the providers in BC are for-profit (54%), while only 26% do not charge a fee (Dobbs, Pidborochynski, & Tassone, 2012, p.vi). For seniors with sufficient income, a reasonable fee for transportation is unlikely to be a barrier since they no longer need to pay to run and maintain a personal vehicle. For seniors who did not own a vehicle previously or who have lower incomes, this could be a major barrier (Dobbs, Pidborochynski, & Tassone, 2012, p.vii).

For services that do not charge a fee, availability can also be a problem since it is very difficult to find volunteer drivers (National Seniors Council, 2009, p.16; Dobbs, Pidborochynski, & Tassone, 2012). In addition, many of these services are geared towards supporting medical trips only (Available Ride Programs, n.d.), and so the need for social trips is unlikely to be met for low-income seniors in this way.

As previously discussed, the majority of seniors who are unable to drive rely primarily on rides from family and friends (Raina et al., 2018, p.186). Some may point out that every round trip diverted from HandyDART to a friend or family member saves the public money (Office of the Seniors Advocate, 2018, p.9), but it's important to consider this reliance on others for transportation can result in less social engagement not only for those receiving the rides, but for those giving rides too. There has been a rise in the number of seniors who are informal caregivers that assist friends and family (National Seniors Council, 2014, p.1). Informal, unpaid caregivers are at risk of poorer health and economic hardship, and more than 90% provide rides (Burkhardt, Bernstein, & Kulbicki, 2014a, p.14-15). Ensuring seniors can access public transportation will certainly improve the quality of life for those unable to drive, but also for many who can drive.

3.7. Removing barriers to conventional public transportation

In looking at how to relieve pressure on HandyDART and better serve those with disabilities and low incomes in Metro Vancouver, one promising solution is to make conventional public transit a better option for seniors. This section explores conditions that are conducive to use by seniors, as well as TransLink's initiatives. While not an exhaustive list, it illustrates some possible solutions that are feasible within the existing network, budget, and jurisdiction of TransLink.

Some of the biggest predictors of high transit use, regardless of the user, include having conventional public transit that is very frequent, has long hours of operation, and has a finer grain, well-connected network (Brown, Werner, Smith, Tribby, Miller, Jensen, & Sharp, 2016). Frequency and coverage of the region is reliant on already existing land use patterns and population density (Chakraborty & Mishra, 2013), as well as transportation authority budgets. Many seniors live in more suburban areas (Public

Health Agency, 2017), and there can be a trade-off between the goals of having high ridership and expanding coverage areas (Walker, 2008). TransLink is a leader in North America in this respect and has teams that work with municipalities, developers, and other stakeholders that encourage land use plans that will allow for better transportation demand management (TransLink, 2018).

TransLink also advocates for more covered bus stops with benches (Office of the Seniors Advocate, 2018, p.13). Most bus stop amenities are under the jurisdiction of each municipality. A covered bus stop is important in a rainy climate like that of Metro Vancouver, and covered benches and shelters help reduce the perceived wait time for all passengers (Fan, Guthrie, & Levinson, 2016). For many seniors, significant pain or discomfort can be the result of waiting at bus stops with no benches because 36% of seniors over the age of 85 struggle to remain standing for around 15 minutes (Office of the Seniors Advocate, 2018, p.13). Metro Vancouver has 42% of its bus stops covered with benches, in comparison to less than 30% in the rest of British Columbia (Office of the Seniors Advocate, 2018, p.13). This higher percentage of covered bus stops is likely in large part because of TransLink's cost-sharing programs with municipalities (TransLink, 2018). These programs are also important to ensure seniors are able to get to bus stops and train stations. Other improvements conducive to encouraging transit use include wide, maintained sidewalks, frequent crossing intersections, longer crossing light times, curb cuts, frequent benches, and brighter lighting, all of which fall under municipal authority (Office of the Seniors Advocate, 2018, p.8). TransLink's cost-sharing programs provide an incentive to improve these features.

Accessibility of bus stops for people with wheelchairs and mobility aids is also a concern (Seucharan, 2018). Currently, three-quarters of the over 8,000 bus stops are accessible (Seucharan, 2018). Those that lack accessibility are typically due to their location on the side of busy streets or highways, or because there isn't enough space for a wheelchair or other mobility aid to maneuver (Seucharan, 2018). In these cases, municipalities can also take advantage of TransLink's cost sharing programs.

In order to be able to use public transportation, one of the biggest needs for seniors is access to public washrooms, which has repeatedly been called for in the media and by advocacy groups in Metro Vancouver (Office of the Seniors Advocate, 2018, p.8; National Seniors Council, 2014, p.14; Seucharan, 2018). In a survey

completed by TransLink in 2018, the second-biggest priority for customers was increasing the availability of washrooms (Campbell, 2018).¹ While urinary incontinence can affect any age group, older seniors were more likely to report being affected, and more women (14%) than men (9%) (National Seniors Council, 2014, p.14). Urinary incontinence is also strongly associated with loneliness among Canadian seniors (National Seniors Council, 2014, p.14). TransLink has struggled for a long time to move ahead with installing more washrooms and announced in December 2018 that planning will begin soon to increase washrooms at stations (Campbell, 2018).

One of the main barriers to transportation for people with low incomes is cost. Some jurisdictions have explored free public transit for seniors and saw an increase of transit use occurring at least once per week go from 28% of seniors prior to the program up to 39% three years after implementation (Webb, Netuveli, & Millett, 2012). There is a program set up to ensure people with lower incomes have access to conventional public transit in BC. The BC Bus Pass Program for Seniors and Others costs only \$45 per calendar year (British Columbia, n.d.). Those eligible include people 60 years and older receiving income supports from government such as the Guaranteed Income Supplement, income assistance, or the federal spousal allowance (British Columbia, n.d.). Advocates argue that many low-income seniors do not get the help they need. Only seniors with an income of \$17,280 or less annually are eligible for the bus pass, but half of seniors live on an income of \$24,000 or less (Dedyna, 2015). This is an important area to explore but is under the jurisdiction of the Province of British Columbia.

Ensuring there are seats available for seniors, many of whom have valid fears of falling, will make many feel safer on conventional public transit (Burkhardt, 2007). While TransLink has priority seating for people who need it, many seniors report that they often still struggle to find a seat. Singapore offers a possible solution where priority queue areas can be found at bus stops, allowing seniors to board first (Lim, 2015). Another idea may be to increase the number of seats designated for seniors and others with mobility needs, or to make the seats a different, bright colour (Burkhardt, 2003). Advocacy groups identify training for staff as an area for improvement (Office of the Seniors Advocate, 2018, p.8; Office of the Seniors Advocate, 2018, p.14). The Office of

¹ The highest priority was increasing bus service to reduce overcrowding and pass-ups at peak times.

the Seniors Advocate has suggested a uniform training module for all drivers, 30 to 60 minutes in length, to understand hidden barriers that seniors experience on transit (Office of the Seniors Advocate, 2018, p.14). TransLink does periodically run awareness campaigns on priority seating and does provide training for staff, but these interventions have not yet solved these issues.

3.7.1. A policy gap in Metro Vancouver: Travel training for seniors

There are many changes, large and small, that will make any conventional public transit system more senior-friendly. However, if seniors do not know how to use the system, there is a real and perceived barrier (Bryanton, Weeks, & Lees, 2010; McCarthy, Shannon, Lucinda, & Wolf-Branigin, 2010). Many seniors are aware that they are likely to need to learn about other transportation options (Wasfi, Levinson, & El-Genaidy, 2012, p.8), and express a willingness to learn with support (Bryanton et al., 2010). Driver cessation is much more difficult for those who have not used other modes of transportation prior to losing their licence (Liddle et al., 2014). One way of coping is to simply go out less (Liddle et al., 2014), which then contributes to social isolation.

Calls have also been made to ensure the transition to using transit is easier for seniors, including a uniform transit training program across BC (Office of the Seniors Advocate, 2018, p.3, p.13). Many seniors have never taken a bus, or haven't since childhood, and will need some help to learn how and to feel comfortable (Office of the Seniors Advocate, 2018, p.3). Greater levels of independence and opportunities for social engagement can be gained by seniors who don't use conventional public transit yet, as well as those who do already because they will feel comfortable using the mode for more trips and new destinations.

TransLink has done educational lectures in the past through its TravelSmart initiative (TransLink, 2018), and has more recently began exploring more robust travel training options. These include pilot projects as a partner through Seniors on the Move with multi-level and experiential learning opportunities for seniors more generally, and looking into possible models for helping to train current and prospective HandyDART users (INTERVIEW 1).

3.8. Summary

Most seniors get around by driving, which leaves them at risk of social isolation after the loss of a licence (Wasfi, Levinson, & El-Geneidy, 2012, p.8; Office of the Seniors Advocate, 2018, p.4; Raina et al., 2018, p.186). For those unable to drive, most (13.5%) travel as passengers with family and friends, while less than 4% take conventional public transit and less than 4% walk or bicycle (Raina et al., 2018, p.186). For those who take paratransit in Metro Vancouver, availability of rides will be an increasing concern as the number of people over the age of 65 is expected to double by 2040 (National Seniors Council, 2014, p.1). Removing barriers to conventional public transportation will be key in reducing social isolation and increasing independence for seniors whose main modes of transportation are to rely on rides from others, for those providing rides, and those who get around by paratransit. While there are many different ways that conventional transit could be improved, even a perfect transit system will not be used by those who do not know how it works. Travel training is thus an important tool that can help reach this goal within TransLink's current network, budget, and jurisdiction.

Chapter 4.

Travel Training Background

4.1. Two streams of travel training: General and specialized

While travel training will not solve all travel needs, it is an important tool among the many strategies needed to maintain mobility for seniors (Burkhardt, 2014, p.2). Defining travel training is a challenge. Even in the United States, which has had travel training programs for decades, the programs are not standardized and there is a lot of variation in program context, content, delivery, and outcomes (Park, Welch, & Sriraj, 2016, p.7). Broadly, travel training can be described as “short-term, intensive instructional programs that teach people with disabilities (students in particular), and older people the skills required to independently and safely use fixed-route public transportation” (Park, Welch, & Sriraj, 2016, p.8). Outreach activities such as presentations or information tables at events are also important, but are not included as travel training because they lack an experiential component of using conventional public transit.

Travel training services comprise one or more of three distinct activities. The first activity is instruction on traveling from one specific origin to one specific destination, including an individualized route on the street and on transit vehicles. The second is a general overview of the transit system, including reading schedules, identifying stops, and purchasing fares. The third is instruction on the use of personal mobility devices on public transit, including boarding, riding, and alighting different vehicles (Wolf-Branigin, Wolf-Branigin, Culver, & Welch, 2012, p.37). Each type of transportation user will access and need these training activities in different ways, resulting in a great variety of types of travel training. These types of training can be grouped broadly into two main streams: general and specialized as shown in **Figure 3** (INTERVIEW 1).



Figure 3 Travel training types

General travel training focuses on providing an overview of the conventional public transit system. This includes in-class and on-site training, and it may be appropriate to have peer mentoring for some groups of trainees such as seniors. Most seniors who take general travel training between the ages of 65 and 84 have relatively good health (Babka, Cooper, & Ragland, 2009, p.151). They may be those who are gradually reducing their driving and are considering public transportation within their future transportation options, or those who already take conventional public transit as their primary mode and want to gain more confidence and knowledge (Park, Welch, & Sriraj, 2016, p.9; Babka, Cooper, & Ragland, 2009, p.151). This general training is also a great opportunity to talk more holistically about travel options other than driving and referring people to specialized training if they need it. Studies have shown that drivers who replace driving with alternative transportation as they reduce their driving cope much better when they do decide to stop driving completely (Park, Welch, & Sriraj, 2016, p.9).

General travel training includes:

- **Field trips** to orient trainees to conventional public transportation;
- **Presentation & group trips** to give trainees classroom knowledge and practical experience
- **Bus Buddy programs**, usually for seniors, to allow for peer mentoring

The specialized stream focuses on those who are likely to need additional training and support to use conventional public transit (Park, Welch, & Sriraj, 2016, p.9). This specialized stream is for seniors and other people with disabilities who may or may not have access to paratransit, and who see the value in learning how to use

conventional public transit because of the flexibility and independence it provides, even if just for certain trips. Training may occur for learning how to take a specific route, how to use the entire system and trip plan, or how to safely use mobility devices on conventional public transit. Learning to use conventional public transit may be a challenge and require additional support and repetition for some trainees. People with diverse abilities will have different training needs, and so training must be flexible and trainers themselves will need special skills and knowledge (Park, Welch, & Sriraj, 2016, p.9).

Travel training in this second stream is usually one-on-one, where trainees apply to or are referred to the program. Training plans may be developed along with trainers, trainees, caregivers, and medical professionals, and will include travel plans along specific routes (Park, Welch, & Sriraj, 2016, p.9). Trainers track learning and performance daily, eventually recommending independent travel, further training, or paratransit going forward (Park, Welch, & Sriraj, 2016, p.9).

Specialized travel training includes:

- **Ramp training²** for people who wish to practice using their mobility devices
- **Route training** for people who wish to learn a specific trip they take on a regular basis
- **System training** for people who may be used to a different transit system or for people who have learned several routes, but wish to be able to plan their own trips
- **Route inspection** to ensure a Family of Services trip is safe for the trainee, or to help a trainee gain conditional paratransit eligibility due to barriers on a particular route or in particular conditions (at night or winter weather).

The two types of travel training, general and specialized, are complementary. While the general travel training is able to benefit a greater number of people, the specialized travel training helps those at greatest risk of social isolation. The two types of travel training form a continuum, where younger seniors are more likely to find general

² This is training to use ramps on accessible buses with wheelchairs, walkers, scooters, or canes.

training useful, and some older seniors or those with disabilities may require the specialized training in order to retain independence and mobility. There are also people that will not fit clearly into one training type or the other, and people who may need follow-up training as transportation services or abilities change, and so programs and curricula need to be flexible to allow for different trainees' needs (Burkhardt, 2014, p.5).

4.2. Area of focus: Route and system training

TransLink serves a population of 2.4 million in Metro Vancouver. TransLink provides presentations to people with disabilities, seniors, new immigrants, and school groups through its TravelSmart team, and provides ramp training for people with mobility devices at the Vancouver Transit Centre. TransLink is also a part of the Seniors on the Move collective impact project which is piloting a highly successful general travel training program that has in-class and experiential components, including a peer mentoring aspect, or Bus buddy program. Currently, its funding finishes at the end of 2019.

What TransLink is missing is a one-on-one travel training program that can teach people to travel independently, especially older people and people with disabilities. This gap has been identified at TransLink, and they have started outreach with potential partner organizations in the region. I examine the trade-offs among the types of approaches for a one-on-one travel training program in Metro Vancouver. Many travel training programs do not separate their route one-on-one travel training program from their system one-on-one travel training program (see **Figure 4**), and so both will be explored as “one-on-one travel training” and how best to implement here in Metro Vancouver.

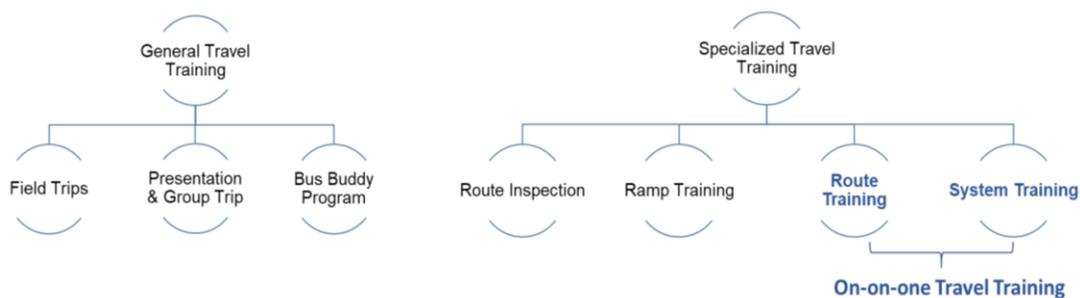


Figure 4: Area of focus: one-on-one travel training

4.3. Benefits of travel training

Many studies have shown the positive outcomes of travel training for trainees, caregivers, travel training providers, medical and social service providers, public transportation providers, and society as a whole. As the number of people who will need support through travel training is expected to grow in the future (Burkhardt, 2014, p.3), understanding the benefits of travel training can help decision makers to support its establishment and continued funding. In this vein, measuring results for individuals and organizations are key.

For the public transportation provider, which is often also the travel training provider, there are many benefits from both streams of travel training. An increase in conventional public transit use can contribute to a “mobility options philosophy”, where more people see the value in providing more transportation options within their community (Burkhardt, 2014, p.3). Travel training also shows transit funders and transit consumers that there is an emphasis on efficiency and cost control along with the effort to improve mobility (Burkhardt, 2014, p.3). The specialized travel training especially can help to enable more paratransit users to use conventional public transit. By allowing more space for those paratransit users who need it most, this can reduce or avoid the costs of operating paratransit while increasing use of conventional public transit (Park, Welch, & Sriraj, 2016, p.14; Burkhardt, 2014, p.3). With the expected increase in seniors in the coming years, it appears more likely that this will be cost avoidance than cost reduction.

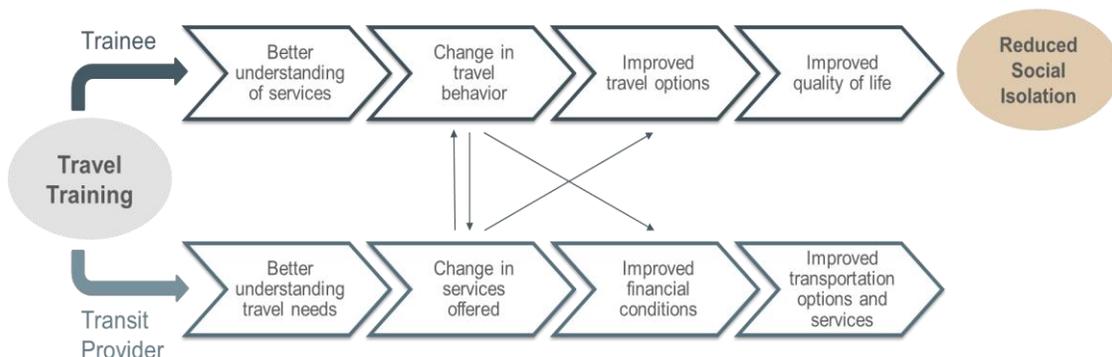


Figure 5: Benefits of Travel Training
 (Burkhardt, Bernstein, & Kulbicki, 2014a, p.8)

Burkhardt et al. use a theory of change model to demonstrate the benefits of a well-implemented travel training program as illustrated in **Figure 5** (Burkhardt, Bernstein, & Kulbicki, 2014a, p.8). In addition to the benefits of travel training to transit providers already discussed, the ability of trainees to give direct feedback to transit providers allows them to improve their own services. These improved services, in turn, encourage even more conventional public transit use by seniors as well as other riders who will benefit through the curb cut effect.

For individuals, travel training outcomes can include changes in attitudes towards conventional public transportation and confidence traveling independently, changes in travel behavior through increased travel by conventional public transit, and positive social, financial, and educational impacts through the increased mobility and independence gained (Burkhardt, 2014, p.3). Independent travel may allow seniors to age in place and remain socially engaged (Park, Welch, & Sriraj, 2016, p.14). Caregivers also benefit from travel training as it reduces the care responsibility of providing transportation. They are then able to partake in other economic, education, leisure, or social activities (Park, Welch, & Sriraj, 2016, p.9).

Those skeptical of transit training may wonder if transportation knowledge does change behavior. One indicator that travel training programs work could be their replication and growth through the world. A study in San Francisco found that knowledge and confidence in taking conventional public transit increased significantly for trainees, including trainees who primarily drive and those who already take public transportation as their primary mode of transportation (Babka, Cooper, & Ragland, 2009). The NJTIP program in New Jersey reported that 75% of trainees continued to use conventional public transit in the year after graduation and took conventional transit three times more often than they had taken paratransit (Burkhardt, Bernstein, & Kulbicki, 2014a, p.13). The Paratransit Mobility Travel Training Program in California found that 80% to 92% of trainees continued to use conventional public transit (Burkhardt, Bernstein, & Kulbicki, 2014a, p.13).

4.4. Travel training program components

Travel training programs must cater to their own target groups, goals, training, partners, and funding sources. As a result, the programs are going to be different from

one another (Park, Welch, & Sriraj, 2016, p.12). When comparing the wide variety of travel training programs available, it is helpful to divide programs into components. Park, Welch, & Sriraj have created a framework that can be used to evaluate travel training programs which encompasses components both within and outside of the program.

4.4.1. Within the travel training program: Organization-level factors

Organizational-level factors include the different types of training providers, different approaches to travel training, and financial sustainability (Park, Welch, & Sriraj, 2016, p.12). A variety of different organizations may run travel training programs such as public schools, school districts, public transportation providers, human and social service agencies, for-profit organizations, and non-profit organizations (Park, Welch, & Sriraj, 2016, p.9).

Travel training approaches include in-house training, contracting-out, or a combination of the two (Park, Welch, & Sriraj, p.12). In the United States, approximately 60% of travel training programs are run in-house by transit providers, 30% are contracted out to non-profit or for-profit organizations, and 10% are a combination of in-house and contracted services (Park, Welch, & Sriraj, 2016, p.12).

Funding for travel training programs may come from federal, provincial, or municipal sources, as well as private foundations, taxes, and transportation providers. One-off or short-term grants can make programs much more vulnerable. Stable funding can allow for many advantages such as training capable instructors, developing curriculum, and providing high quality instruction (Park, Welch, & Sriraj, 2016, p.12)

4.4.2. Within the travel training program: Instructors' skills and competencies

Depending on the travel training program, travel trainers may be paid staff, volunteers, or even peer-to-peer trainers. Professional instructors play a key role in travel training programs, especially specialized travel training programs. Their tasks can include, in addition to the training itself, reviewing applications, conducting pre-assessments, and evaluating transportation environment and routes (Park, Welch, & Sriraj, 2016, p.12).

4.4.3. Within the travel training program: Training-related factors

Training-related factors include the training model, training content, and training tools and materials. Training models are group training, one-on-one training, peer-to-peer training, or a combination of two or more of these (Park, Welch, & Sriraj, 2016, p.13). While group training provides information to more people and doesn't require as highly trained staff, it doesn't take into account individual participants' needs which one-on-one training can provide (Park, Welch, & Sriraj, 2016, p.13). Peer-to-peer training is a form of general travel training taught by past travel trainees who volunteer to share their conventional public transit travel skills (Park, Welch, & Sriraj, 2016, p.13).

Training content varies widely depending on the needs of the trainees (Park, Welch, & Sriraj, 2016, p.13). To use conventional public transit safely and independently, trainees need to be able to demonstrate certain knowledge and skills. These skills include: road safety knowledge, reading traffic signs and transit maps, finding and planning the safest and most convenient travel route, boarding and disembarking the correct bus or subway, handling unexpected situations or emergencies, dealing with strangers appropriately, handling money³, maintaining appropriate behavior, and recognizing when they need assistance and being able to request help from an appropriate source (Park, Welch, & Sriraj, 2016, p.13). Many of these skills will not be new to many seniors, and general group training will be sufficient (Burkhardt, 2014, p.5). For others, some repetition may be needed, especially for seniors who haven't used any conventional public transit before. Curricula may also need to include follow-up or refresher training because transportation services and personal capabilities may change (Burkhardt, 2014, p.5).

Training tools and materials for specialized travel training can include journey picture books, simplified timetables, communication cards or wallets, mobile devices and applications, and travel training software (Park, Welch, & Sriraj, p.14). Many of these could also be useful for general travel training. New mobile technology with GPS is rapidly increasing the field of travel training, with many mobile apps geared towards people with diverse abilities. While it may be a challenge for many seniors today to use

³ In Metro Vancouver, trainees will also need to learn how to use a Compass card, which may eliminate barriers around handling money for some people.

technology such as apps and smartphones, this may be different for many baby boomers that are more likely to use these technologies already.

4.4.4. Influencing the travel training program from outside: Travel infrastructure and environment

It is more challenging to provide travel training in rural and suburban areas than urban areas because they have fewer fixed routes, less coverage, and less regular service (Park, Welch, & Sriraj, 2016, p.15; Burkhardt, 2014, p.7). Trainees may have difficulties finding feasible routes due to a lack of coverage, the length and complexity of trips, or a lack of amenities such as sidewalks, crosswalks, and seating either near their homes or destinations (Park, Welch, & Sriraj, 2016, p.15). This seating is needed at transit stops and may also be needed to allow for people to rest on their way to the stop.

4.4.5. Influencing the travel training program from outside: Individual trainees' characteristics

Trainee characteristics that can influence the effectiveness of travel training include: age, type and severity of disability, anxiety and fear towards training, motivation and commitment to training, learning style, and prior experience with conventional public transportation (Park, Welch, & Sriraj, 2016, p.15). Type and severity of disability are important to consider since people with more severe cognitive disabilities will require more intensive, comprehensive, and repetitive training than people with mild to moderate physical disabilities (Park, Welch, & Sriraj, 2016, p.15). Trainee characteristics that are associated with better results include a high motivation to travel independently and some past experience using conventional public transit (Park, Welch, & Sriraj, 2016, p.15-16).

4.4.6. Influencing the travel training program from outside: Involvement of caregivers

The involvement of caregivers can influence travel training outcomes positively or negatively. It is important to ensure there is a relationship built on trust between travel training providers and caregivers as many may have concerns about the safety of trainees traveling independently (Park, Welch, & Sriraj, 2016, p.16). In building trust with caregivers, it is important to have them involved in each step of training. This can include

assessments and development of individualized travel plans, as well as daily communications about progress and activities (Park, Welch, & Sriraj, 2016, p.16).

4.4.7. Influencing the travel training program from outside: Collaboration and partnership among public, non-profit, and for-profit organizations

Most travel training programs are produced and delivered through a variety of collaborators (Park, Welch, & Sriraj, 2016, p.16). Key stakeholders include public transportation providers and operators,⁴ social service departments and agencies, school districts, police departments, non-profit organizations, and related professionals such as occupational, physical, and language therapists (Park, Welch, & Sriraj, 2016, p.16). Trust, mutual understanding, communication, procedural or institutional arrangements, and leadership are important in building relationships between trainees and trainers (Park, Welch, & Sriraj, 2016, p.16). Burkhardt emphasizes that involvement of the local public transportation provider and human service agencies that serve seniors is crucial (Burkhardt, 2014, p.6).

Outreach is another important aspect of collaboration between program partners. Partners that fully understand the program, how it works, and its value to seniors and the community will be more motivated to ensure potential trainees are referred (Burkhardt, 2014, p.6). Word of mouth referrals are highly effective (Burkhardt, Bernstein, & Kulbicki, 2014a, p.33). Public transportation providers and seniors' service providers are natural partners for travel training, but it will also be important to consider interdisciplinary partnerships with others such as the Insurance Corporation of British Columbia and medical professionals (Babka, Cooper, & Ragland, 2009, p.153). These groups will have a wider reach to share information and have contact with those seniors who may not be making use of community or seniors' services (Babka, Cooper, & Ragland, 2009, p.153).

⁴ A transit provider is the organization that plans and coordinates the public transit in a region (i.e. TransLink) whereas a transit operator is the person that operates the vehicles (i.e. bus driver, train conductor).

4.4.8. What has the greatest effect on travel training outcomes?

With so many components that influence the outcome of travel training, one might wonder which are the most important. According to case studies by Burkhardt, the following had the greatest positive influence on travel training programs:

- “• Hiring travel training staff based on personal qualifications (like compassion and understanding the value of travel training), social service experience, and depth of experience. “People skills” are most important.
- Tailoring training to individual needs and capabilities.
- Focusing on customer service.
- Obtaining sustainable funding.
- Partnering with key community stakeholders.
- Continually monitoring and analyzing program impacts that involves:
 - Fully documenting expenses.
 - Following up over time to document results and to offer more training if needed.
 - Developing a performance measurement system to evaluate program success.
 - Documenting results in both quantitative and qualitative terms with regular program reports.
- Integrating travel training into agency marketing and branding efforts; marketing the program through educational outreach or through program partners.”

(Burkhardt, 2014, p.4)

Chapter 5.

Travel Training Programs

5.1. Legislative Context in the United States and Canada

Travel training programs across the United States and Canada have developed in different ways. It is important to understand the historical and legislative context that has affected the development of programs in Canada and the United States.

In the United States, the *Americans with Disabilities Act* of 1990 requires that all services provided by state or local governments are prohibited from discrimination against people with disabilities whether or not they receive federal funding (Easterseals Project Action Consulting, n.d.b). This includes a requirement that transit providers provide paratransit. The result of this legislation is that there is federal and state funding available to travel training programs in the United States, and many programs are very well established (Burkhardt, Bernstein, & Kulbicki, 2014a, p.21).

Canada has no overarching federal legislation similar to the ADA. The *Canadian Charter of Rights and Freedoms*, the *Canadian Human Rights Act*, and provincial human rights codes are meant to ensure people with disabilities do not face discrimination (Picard, 2015). The issue is that denial of rights must be proven on a case-by-case basis (Eagland, 2018). Legislation at both the federal and provincial levels could help ensure the rights of all transportation users are protected regardless of the jurisdiction providing the transportation services (Accessibility Ontario, 2018).

Consultations on an *Accessible Canada Act* began in 2016, but legislation has not yet been passed (McQuigge, 2018). This will include inter-provincial air, rail, ferry, and bus transportation systems (McQuigge, 2018). The Province of British Columbia is also working on a *British Columbia Accessibility Act*. British Columbia will be the fourth province to enact accessibility rights legislation, following Ontario (2005), Manitoba (2013), and Nova Scotia (2017) (Accessibility Ontario, 2018). The first reading of the *British Columbia Accessibility Act* was in May of 2018 and includes public transportation and transportation infrastructure (Reid, 2018). It is unclear what the effect of the new

legislation will be in Metro Vancouver for public transportation, and whether this will result in funding available for a travel training program.

5.2. Summary of Travel Training Programs Examined in Canada and the United States

Staff from six travel training programs across North America were interviewed. The full details of each program are in **Appendix A**. See **TABLE 2** for a summary of findings for each program.

Table 2: Travel training interview results

	King County Metro Transit	Ride Connection (Portland)	OC Transpo (Ottawa)	BC Transit Victoria	Calgary Transit	York Region Transit
Travel training approach	In-house	Non-profit not funded by transit provider	Train-the-trainer	Contract out to accessibility agency	Combination of in-house & train-the-trainer	In-house
Population served	2.1 million	1.7 million	930,000	383,000	1.2 million	1.1 million
Year founded	1993	2004	2004	1999	2000	2010
Staff	12 staff- 1 manager, 3 pathway reviewers, 8 travel trainers (6 for one-on-one, 2 for group and ramp training)	5 staff - 1 supervisor, 4 travel trainers	1 staff who coordinates the trainers at other organizations, also fills many other roles	5 staff- 1 manager, 4 travel trainers	1 travel trainer , also piloting train-the-trainer with other organizations	4 staff- 1 coordinator, 3 inspectors
Cost avoidance	\$2,199,037.52 (2018)	Return on investment is 3 to 1	Not calculated	Not able to share	Not calculated	Not able to share

	King County Metro Transit	Ride Connection (Portland)	OC Transpo (Ottawa)	BC Transit Victoria	Calgary Transit	York Region Transit
One-on-one travel training (route and system)	199 route trainings, 26 re-trainings, 8 system trainings in 2018. (average of 171 route trainings 2013-2018). Or approximately 200 per year	325 2017/18 fiscal year (average of 283 successful trainees per year last 5 years)	800-850 trainees per year who buy their own monthly pass as a direct result of travel training annually	approximately 200 per year	approximately 50 per year	approximately 600 per year (includes Family of Services trips)
Trip minimum for one-on-one training	50 per year (~1/week)	trip must be taken regularly	no minimum	trip must be taken regularly (ex: 1/month)	no minimum	no minimum
One-on-one training sessions available	minimum 3, average 5, maximum 15	minimum 3 sessions, 10-12 hours of training per trainee on average	No minimum or maximum	no minimum, maximum 15 (very few need this many)	3-5 sessions officially listed, will do up to 7	Most need only 1, maximum 3-4 training sessions per route

	King County Metro Transit	Ride Connection (Portland)	OC Transpo (Ottawa)	BC Transit Victoria	Calgary Transit	York Region Transit
Trainee eligibility criteria	seniors or people with disabilities	people over the age of 60 or people with disabilities	no limits	no limits, but must have baseline skills (cross street, tell time, count money)	seniors and people with disabilities listed, but train all who ask. Must have baseline skills (cross street, tell time, count money)	current paratransit customers who already have baseline skills and likely to need 4 or less training sessions per route
Route training success rate (%)	96% learn at least one route	most trainees able to learn at least one route	>80% buy monthly transit pass after travel training	80% of trainees use conventional transit regularly	87% learn at least one route	98% learn at least one route
Group training	Yes (157 in 2018)	Yes	Yes	Yes (may charge fee to the groups)	Yes (mainly with students during summer program)	Yes

	King County Metro Transit	Ride Connection (Portland)	OC Transpo (Ottawa)	BC Transit Victoria	Calgary Transit	York Region Transit
Paratransit and travel training relationship	Travel training and paratransit co-located within the same department, work closely to find best transportation options for customers.	Transit provider includes information about Ride Connection on website, but no longer provides funding.	Travel training and paratransit have communication about customer eligibility although (paratransit application process is contracted out).	Travel training and paratransit have communication about customer eligibility, policy	Travel training and paratransit co-located within the same department, work closely to find best transportation options for customers.	Travel training and paratransit co-located within the same department, work closely to find best transportation options for customers. Family of Services model.
Paratransit application process	In-person assessment for all applicants in-house	In-person assessment for some applicants	In-person assessment for some applicants with 3rd party	In-person assessment for some applicants with 3rd party (CBI Health Centre)	In-person assessment for all applicants with some exceptions (dialysis, referred by hospital, day program)	In-person assessment for 20% of applicants in-house
Paratransit/conventional transit costs per one-way trip	Paratransit subsidized \$60 per trip. Conventional transit subsidized \$4.92 per trip.	Paratransit subsidized \$36 per trip, bus fare is \$2.50 (subsidized amount not available).	Paratransit subsidized \$27. Conventional transit subsidized \$2.60.	Paratransit subsidized \$25. Conventional transit subsidized \$8.	Paratransit subsidized \$30 per trip. Conventional transit subsidized \$3 per trip.	Not able to share

5.3. Thematic analysis

The thematic analysis focuses on learning from interviews and focus groups about one-on-one travel training programs. Literature supplements the analysis in areas where information was not available.

5.3.1. A social services philosophy

A social services philosophy means that the goal of the travel training program is meeting trainees' needs so they can travel independently, participate in their communities, and for seniors, so they are able to age in place if that is their wish (Burkhardt, Bernstein, & Kulbicki, 2014a, p.11).

The cost savings and cost avoidance that are seen for public transit providers are a positive result of travel training, but should not be the main focus (Burkhardt, Bernstein, & Kulbicki, 2014a, p.11). However, demonstrating paratransit trips avoided and additional conventional transit fares gained through travel training can be key to ensuring funding is available to travel training programs (Burkhardt, Bernstein, & Kulbicki, 2014a, p.11). For travel training programs that are experiencing high demand and long waitlists, this type of information could also help to secure funding to expand services.

All the interviewees' travel training programs were voluntary, which makes sense considering one of the most important trainee qualities to indicate success is that they are motivated to learn to travel independently (Park, Welch, & Sriraj, 2016, p.15-16). In addition, travel training isn't meant to force people off paratransit, but to give them more travel options. If trainees think that travel training will remove their paratransit eligibility, they will be disincentivized from participating, and it is important that communications make clear this is not the case.

5.3.2. Integration of travel training with paratransit

Information from interviewees presents a pattern. Transit providers that are more integrated with paratransit are also more likely to have an in-house travel training

program (SEE Figure 6). This includes paratransit application and ride booking processes.

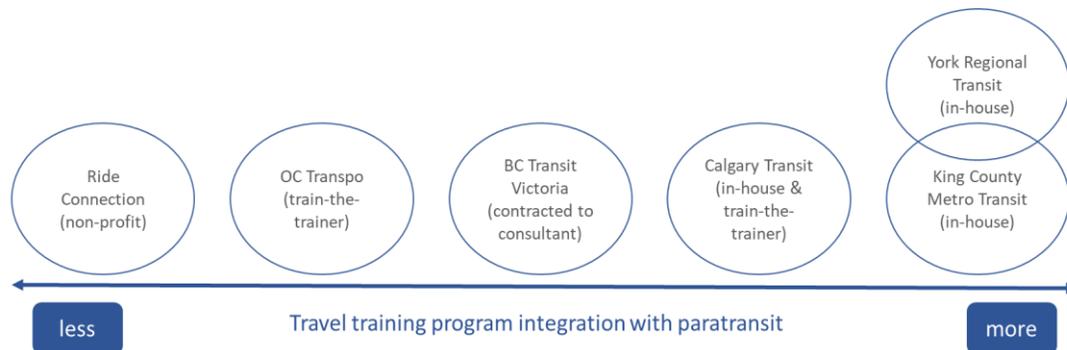


Figure 6: Integration of interviewees’ travel training programs with paratransit

King County Metro Transit and York Regional Transit both have an in-house travel training program that is co-located with their paratransit. They collect data on each customer on a trip-by-trip basis in paratransit, meaning more customized mobility services and a more accurate analysis of costs and benefits (INTERVIEW 6, INTERVIEW 9).

Calgary Transit has an in-house travel training program that is co-located with its paratransit and is currently piloting a train-the-trainer model with some partner agencies. While they are exploring a paratransit model that is more similar to York, most trainees are referred when they are found to be ineligible for paratransit (INTERVIEW 8).

BC Transit Victoria’s accessibility agency is contracted-out. However, they do communicate with paratransit to connect customers with mobility options (INTERVIEW 5).

OC Transpo’s train-the-trainer model is complex. The travel training coordinator is a part of OC Transpo, but the paratransit application process is contracted-out and so there is limited communication between the two (INTERVIEW 4).

Ride Connection in Portland is a non-profit organization. Its travel training program is very integrated within its own mobility services. The local transit provider does not fund the non-profit but has some connections to it (INTERVIEW 7).

5.3.3. Trainees as individuals

A key theme is the recognition that each trainee will have different needs and abilities, and each must be treated as an individual with a focus on customer service (Burkhardt, Bernstein, & Kulbicki, 2014a, p.18). While travel training programs may have wider or narrower eligibility requirements for trainees, all emphasized that no two clients are the same. There was consensus that seniors who have moderate mobility challenges are unlikely to need many training sessions. The biggest barriers can often be their own knowledge of public transit and their concerns about inconveniencing others (INTERVIEW 9).

5.3.4. Seasons and waitlists

Weather is included in literature among the many challenges a travel training program may face (Burkhardt, Bernstein, & Kulbicki, 2014a, p.15) and mentioned in nearly every interview in relation to travel training sessions themselves or waitlists. Seasons with rain, and especially snow, were associated with canceled training sessions and shorter waitlists (INTERVIEW 8, INTERVIEW 9).

5.3.5. Eligibility

There was a wide variety in eligibility seen between the interviewee's one-on-one travel training programs. Differences between routes eligible for training, number of training sessions available to a trainee, baseline skills a trainee must possess, and what groups of people are eligible for training include:

- Programs that have a larger budget tend to have narrower eligibility criteria for trainees. Programs with big budgets tend to train only seniors and people with disabilities who would be eligible for paratransit, while other programs are able to train all who ask.
- Narrower eligibility requirements for routes trained are connected to larger programs, usually in-house with larger budgets, which must be more careful with their resources and prove programs deliver cost savings.

- Programs that have lower limits to the number of training sessions available also required a higher level of baseline skills such as counting money, telling time, or crossing the street.
- The focus groups felt seniors and people with disabilities should have priority and expressed concerns about long waitlists with wider eligibility. They also did not want to exclude anyone who may benefit from the training and thought that reviewing “all who ask” on a case-by-case basis would ensure equity (FOCUS GROUP 1A & 1B).

5.3.6. Travel trainers: Qualities and qualifications

Interviewees, focus groups, and information from the literature identified the qualities and qualifications that travel trainers need. This can also help to determine if it is appropriate to have a train-the-trainer approach, or if the other travel training approaches are safer for trainees. There are some areas of consensus, and others of debate.

Consensus:

- Travel trainers should be kind, empathetic, patient, adaptable, and excel at customer service. Focus groups emphasized these qualities and thought that there must be considerations made for newcomers’ first languages (FOCUS GROUP 1A, FOCUS GROUP 1B).
- One focus group thought that friendly bus drivers might make good trainers because they are knowledgeable about transit (FOCUS GROUP 1A)
- The other focus group thought that some trainees may need support from people who know them best such as social workers who already work with them (FOCUS GROUP 1B). Interviewees noted their transit authorities hired staff with experience working with people with disabilities or seniors. Most were those with a background in social work, education, or healthcare.

Debate:

The biggest difference of opinion arises when comparing a train-the-trainer approach to any other approach where travel training is the trainer's main role.

- Travel trainers at in-house, contracted out, or non-profit programs receive 6-8 weeks of training before they start working with trainees independently.
- Travel trainers in a train-the-trainer approach may receive one day with an in-class component and a hands-on opportunity that day or may simply be given an information package. The expectation is that trainers have such in-depth knowledge of their clients that the focus can be on transit.

On one side, organizations with travel training programs feel that the train-the-trainer approach does not offer sufficient training on transit and travel training (INTERVIEW 7), while those who work at partner organizations in the train-the-trainer approach feel that they know their clients best and would provide the best travel training for that particular trainee (INTERVIEW 1). One way to solve this debate would be to compare outcomes. Comparisons are difficult because programs rarely measure success in the same way, however, all programs have an 80-98% success rate with trainees able to travel at least one route independently, so it is clear that both types of trainers prepare a strong majority of trainees to travel independently.

5.3.7. Travel training approach: Advantages and challenges

All the travel training programs in this study, as well as all the case studies included in the report by Burkhardt, Bernstein, & Kulbicki are successful examples (Burkhardt, Bernstein, & Kulbicki, 2014a, p.19).

Some transit providers prefer to keep travel training in-house because they value having the program under their direct control (Burkhardt, Bernstein, & Kulbicki, 2014a, p.19; INTERVIEW 6). Other transit providers find contracting out is more flexible and successful (INTERVIEW 5). It was also mentioned that having a contractor outside of the conventional transit provider and paratransit operator meant that the incentive on the

travel trainer is to ensure that the trainee gets the transportation options that best fits their need, rather than pushing them towards any particular service (INTERVIEW 10). With only one travel trainer in-house, there is concern on how to accommodate the wide variety of abilities and needs that exist (INTERVIEW 1). In Metro Vancouver, many potential partner organizations are already doing some travel training as a part of life skills training. They would benefit from additional support from TransLink through better knowledge of transit and other resources such as transit passes (INTERVIEW 1).

For those transit providers that choose a train-the-trainer approach, value is seen in being able to give many people access to travel training with only one employee coordinating, even if that may mean less control for the transit provider (INTERVIEW 4).

5.3.8. Demonstrating costs and benefits

Measuring the costs and benefits is important in order to maintain support from decision makers and funders, as well as to evaluate and improve the program. This includes keeping track of expenses and other resources, the number of people trained, and outcomes in changes to trainees' travel behavior in the short and long run (Burkhardt, Bernstein, & Kulbicki, 2014a, p.13). The benefits of travel training programs can also be difficult to explain to decision makers since costs are immediate, but many of the benefits such as cost savings may take months or years to accrue (INTERVIEW 7; Burkhardt, Bernstein, & Kulbicki, 2014a, p.36).

The interviewees in this research were not able to share many financial details, so I use case studies from the literature to gain further understanding of travel training program costs and benefits.

- VIA Mobility Services in Boulder, Colorado, is a private non-profit organization that also provides paratransit. Their travel training program has a budget overall of \$145,000. Their one-on-one travel training costs \$1,500 per trainee, while the group training costs \$22 per trainee (Burkhardt, Bernstein, & Kulbicki, 2014a, p.43).
- In a report by Burkhardt, Bernstein, & Kulbicki (2014), travel training programs had budgets between tens of thousands of dollars for programs running for only part of the year to hundreds of thousands for larger programs. Within the report,

the highest budget was a total program cost of \$855,000 for the travel training program in Chicago, which also reported the highest number of trainees (Burkhardt, Bernstein, & Kulbicki, 2014a, p.21).

- Wolf-Branigin et al. (2012) present a cost-benefit analysis comparing three different transportation agencies in the United States that provide specialized travel training. Each agency in the study had a positive benefit-cost ratio, ranging from \$1.45 to \$3.98 saved or diverted for each \$1 spent on travel training (Wolf-Branigin, Wolf-Branigin, Culver, & Welch, 2012, p.36-37). The differences in benefit-cost ratios were mainly the result of economies of scale, distances traveled, and the respective costs of both paratransit and conventional transit (Wolf-Branigin, Wolf-Branigin, Culver, & Welch, 2012, p.38).
- In Portland, Ride Connection reports a 3 to 1 ratio of benefits to costs over a one-year time period for their one-on-one travel training program. The biggest savings come from reduced demand for paratransit trips (INTERVIEW 7). Actual savings are likely much higher than reported because most trainees would likely continue to use transit for longer than the first year, and so this ratio does not capture long-term benefits.
- At King County Metro Transit, an early calculation for cost avoided is approximately \$2.2 million (INTERVIEW 9). This shows that a large, long-standing program with budgets in the hundred thousands are still able to reduce costs overall to a transit agency.
- Spokane Transit Authority, which is able to accurately measure cost avoided by tracking fare cards, has shown that 32,000 paratransit trips have been avoided (Burkhardt, Bernstein, & Kulbicki, 2014a, p.13). They were also able to calculate that shifting just one paratransit user from using paratransit 5 days a week to conventional transit, can save a transit provider more than \$7,000 per year (Burkhardt, Bernstein, & Kulbicki, 2014a, p.20).
- In the United States, many transit agencies subsidize paratransit trips at more than \$20 to more than \$50 per trip, while conventional transit is subsidized from \$3 to \$5 per trip (Burkhardt, Bernstein, & Kulbicki, 2014a, p.32). In addition,

paratransit costs are very sensitive to the number of trips taken, while the same is not true of conventional transit (Burkhardt, Bernstein, & Kulbicki, 2014a, p.32).

Usually, there are no changes that need to be made to the frequency of conventional public transit to accommodate trainees, so the marginal cost of additional passengers who often travel at off-peak times is very low (Burkhardt, Bernstein, & Kulbicki, 2014a, p.32). It is fortunate that seniors are able to travel at off-peak times considering that transit in many parts of Metro Vancouver can be crowded at peak times. This creates less of a burden on transit and a more comfortable experience for seniors.

Chapter 6.

Policy analysis: One-on-one travel training

This chapter explores different policy options for TransLink in the short term, as well as potential longer-term initiatives that might be considered in the event of legislation changes and other factors. The current situation and gaps in travel training in Vancouver are as follows.

Vancouver, British Columbia, Canada: Interview 1

Metro Vancouver has a population of 2.4 million served by TransLink. The paratransit, HandyDART, uses an application process that does not include any in-person assessment. TransLink provides presentations to people with disabilities, seniors, new immigrants, and school groups through its TravelSmart team, and provides ramp training for people with mobility devices at the Vancouver Transit Centre. TransLink is also a part of the Seniors on the Move collective impact project which is piloting a highly successful general travel training program that has in-class and experiential components, including a peer mentoring aspect. Currently, its funding finishes at the end of 2019.

What TransLink is missing is a one-on-one travel training program that can teach people to travel independently, especially older people and people with disabilities. TransLink identifies this as a gap and they have started outreach with potential partner organizations in the region. Usually, there are no changes that need to be made to the frequency of conventional public transit to accommodate trainees, so the marginal cost of additional passengers who often travel at off-peak times is very low (Burkhardt, Bernstein, & Kulbicki, 2014a, p.32). However, certain approaches to travel training could require significant changes to HandyDART application and ride booking processes.

6.2. Policy options

I assess four policy options based on the travel training approaches informed by the interviews and relevant to Metro Vancouver:

1. Train-the-trainer

Train-the-trainer, similar to the program at OC Transpo, would involve having one employee at TransLink that is able to coordinate with partner organizations in order to facilitate travel training activities at those organizations. This involves provision of a curriculum to travel trainers and transit passes to both trainers and trainees. Once established, this program takes approximately 10% of the coordinator's time (INTERVIEW 4). The cost is approximately \$11,050 to TransLink based on 10% of one staff member's salary at \$85,000 plus 30% to include Mandatory Employment Related Costs (MERCs) and benefits (INTERVIEW 1). It would result in 800 or more successful trainees. There are likely to be more trainees because Metro Vancouver has approximately double the population of the region served by OC Transpo. At OC Transpo, all trainees could have paratransit eligibility. However, paratransit in Ottawa has a wider eligibility to include not only physical or cognitive barriers to taking conventional public transit, but also those with serious mental health concerns that affect their ability to ride. As a result, it is not clear if all the trainees would be eligible for transit in Metro Vancouver. However, looking at travel training programs through a social services lens and considering the high number of trainees, this is not a significant concern.

Once the program is developed, there are enough partner organizations that anyone who needs one-on-one travel training is able to access it (INTERVIEW 4). In addition, there is no limit to the number of training sessions or routes trained beyond the discretion of the partner organizations.

One important difference between OC Transpo and TransLink is that TransLink does not contract out the paratransit application process to a third party. The paratransit application is in-house at HandyDART, and so collaboration between the travel training coordinator and paratransit will be simpler.

2. Contract-out

Contracting-out, as seen at BC Transit Victoria or at Ride Connection in Portland, would involve some coordination on the part of TransLink staff, but the main

expense would be the fee for services. The estimated cost is approximately \$110,500 per year (INTERVIEW 1) for approximately 200-300 trainees per year.

In Victoria, the contract is between BC Transit Victoria and an accessibility agency. In Portland, Ride Connection receives funding from several funding sources, including a contract with the state, but not from the local transit provider. TransLink would be the main funder due to the lack of funding streams at the provincial or federal level in Canada.

All who need travel training are eligible, and the routes that are trained must be taken with some regularity. Travel trainers would receive extensive training within the contracted organization.

While the contractor would not be co-located with paratransit or its intake process, communication to support customers in their transportation needs will happen regularly.

3. Combination of in-house and train-the-trainer

A program with a combination of in-house and train-the-trainer approaches, similar to the one seen at Calgary Transit, would involve one trainer in-house who also coordinates with partner organizations that have the most demand for travel training from their clients. TransLink would support them by providing transit information and transit passes. These activities combined would take up 100% of that employee's time. The estimated cost of \$91,000 covers one employee's salary, MERCS, and benefits (INTERVIEW 1). The result would be 50-100 successful trainees per year.⁵

This model allows for minimal in-house staffing, while also ensuring certain groups of people with the most demand for travel training have more options for access to travel training, thereby ensuring that waitlists are kept at a reasonable level.

⁵ The number of trainees stems from the Calgary Transit example, which only began in 2018. It is likely that there will be more trainees from partner organizations in future years.

Training would be available for all who ask, however the number of training sessions for in-house is limited to 7⁶ and routes trained must be taken with some regularity. For partner organizations, the number of training sessions possible is likely to be higher and is at the discretion of that partner organization. The regularity that a route must be taken is also at the discretion of the partner organization.

While the in-house trainer would be co-located with paratransit,⁷ the same will not be true of the partner organizations, which are not integrated with paratransit.

4. In-house

In-house training, as seen at both York Regional Transit and King County Metro Transit, would involve at least 5 staff as in York, but is likely to be closer to 7 staff as seen in King County, with one manager and the rest doing one-on-one travel training. This is because York Regional Transit serves about half the population of Metro Vancouver at 1.1 million, while King County Metro Transit serves a much more similar 2.1 million. This would cost between \$370,500 for 5 staff as in York and \$500,500⁸ for 7 staff as in King County (INTERVIEW 1). The result would be 200-400 successful trainees per year.

Training would be targeted towards seniors or people with disabilities, including those who are eligible for paratransit and those who have applied but are found to be ineligible. Routes that can receive training must be taken at least 50 times per year, or about once a week.

The travel training would be highly integrated with paratransit, including a more comprehensive paratransit application process that looks at the best travel option for customers on a trip-by-trip basis, and offers travel training when appropriate.

This integration with paratransit is important to the policy option because it is how

⁶ This limit on sessions is to use the travel trainer's time more efficiently, especially considering that there is only one trainer.

⁷ This makes the most sense given existing TransLink personnel, however more generally would be a decision made by the transit provider.

⁸ All dollar amounts are in Canadian dollars, and the range for this option is due to the challenge with finding appropriate data.

trainees are referred and how benefits and costs are demonstrated for the program, which has a much larger budget than the others do.

6.3. Criteria & Measures

This section outlines the criteria and measures used to evaluate each policy option. The criteria stem from analysis of the literature, jurisdictional scan, interviews, and focus group.

CRITERIA	MEASURES	UNITS
Cost efficiency	Cost to TransLink per trainee	Successful trainees per TransLink staff salary, or fees for service from a contractor. <i>Measured in \$ per trainee.</i>
Ease of implementation	Looking at the context of paratransit processes at TransLink and changes needed to implement the travel training approach.	Would new staff need to be hired and trained? Would the paratransit application process need to be changed? Would the paratransit ride booking process need to be changed?
Ease of evaluation	Ease of communication, ease of data collection, availability of data	Number of organizations providing travel training, data collected on each trainee's trips.
Stakeholder acceptance	Potential trainees	Feedback given in interviews and focus groups (positive, neutral, negative).
	Potential partner organizations	Feedback given in interviews (positive, neutral, negative).
Equity	Access to travel training by all people	Wider (all who ask, newcomers, people with mental health concerns) or narrower (only seniors and people with disabilities) trainee eligibility criteria.

Cost efficiency:

This criterion looks at the cost to TransLink per trainee. It is not possible to compare the various financial inputs for programs directly as interviewees were unable to share financial information. Comparing staff time spent on one-on-one travel training as a part of their estimated salary, mandatory employment related costs (MERCs), and benefits is a practical way to compare costs. The only case where this isn't possible is with Policy option 2: Contract-out. In this case the cost to TransLink per trainee will be based on the estimated fee for services.

Ease of implementation:

This criterion examines the ease of implementing each travel training approach considering TransLink's current employees and HandyDART processes. To determine ease of implementation, I consider the following questions:

1. Would new staff need to be hired and trained?
2. Would the paratransit application process need to be changed?
3. Would the paratransit ride booking process need to be changed?

It is important to include the paratransit processes because of their relation to evaluation and trainee referral for each of the policy options.

Ease of evaluation:

Being able to appropriately collect data and evaluate the travel training program, as well as collect feedback from trainers and trainees on barriers faced on the conventional public transit system, is very important to program success. The ease of collecting data for evaluation will be measured by looking at the number of possible silos created within or between organizations that can make communication difficult, as well as the level of detail collected about each individual trainee's trips. Fewer organizations and more details collected on trips will indicate a higher level of ease of evaluation.

Stakeholder acceptance:

Stakeholders include both potential trainees and potential travel training program partners. As key participants in any travel training program, both trainees and partner organizations must find the program approach acceptable. This can include reactions to the options overall as well as certain aspects of the options. For example, who should provide travel training, who should be eligible for training, and important travel trainer qualities and qualifications.

Equity:

Travel training programs vary widely in their criteria for who has access to one-on-one travel training. Equity can be measured by who is included or excluded from access to the one-on-one travel training program, whether they be seniors, people with disabilities, people with mental health concerns, newcomers to the area, or anyone who asks.

It is also important to keep in mind that this criterion is measuring just one-on-one travel training in the context of what currently exists in Metro Vancouver. The travel training programs from the jurisdictional scan and literature with narrower eligibility often have complementary services for those who do not qualify for one-on-one travel training.

6.4. Policy Analysis of four approaches to travel training

6.4.1. Policy option 1: Train-the-trainer

The train-the-trainer approach costs the least (\$11,050) and results in the most successful trainees (800 or more). The cost efficiency is \$13.80 per trainee. There is no baseline for how many people would be trained by partner agencies regardless of TransLink support, so it is not clear how many are trained as a direct result of a train-the-trainer approach. It is certain, however, that the quality of training would improve because trainers would have a better understanding of the conventional public transit system and travel training techniques with any information and training provided by TransLink. Also, the provision of free transit fare would encourage more training at partner organizations. As can be seen, because the program runs at such a low cost, even if very few trainees are trained as a direct result of this travel training approach, the cost efficiency is still very good compared to other approaches. Even if only 50 of the

800 trainees can be directly attributed to the program, the cost per trainee is \$221. This is more than \$100 less than the next best option.

Other advantages to this approach include:

- No new staff need to be hired and no changes are needed to the HandyDART application or ride booking processes.
- Potential trainees, represented by the focus groups, suggested this approach. They preferred a wider trainee eligibility as long as resources aren't strained and felt that some trainees may be more comfortable with a trainer that they already know (Focus Group 1A & 1B).
- Potential partner agencies had a strong preference for this approach as they felt they were the best suited to work with their clients and welcomed any support TransLink could offer (INTERVIEW 1).
- The train-the-trainer approach has one-on-one travel training at organizations across the region, and is available to all who need it (INTERVIEW 4).

Disadvantages:

- Difficulty in data collection and program evaluation. With over 100 organizations, and remembering that there is only so much detail that it is reasonable to ask of an organization that is only provided support through transit information and transit passes, a lot of detail is lost.
- This approach relies heavily on the success and participation of partner organizations.

6.4.2. Policy option 2: Contract-out

Contracting-out is the second most cost-efficient approach to travel training. With an estimated cost of \$110,500, the cost efficiency is \$368.33 per trainee for 300 trainees, and \$552.50 per trainee for 200.

Other advantages to this approach include:

- No new staff need to be hired and no changes are needed to the HandyDART application or ride booking processes.
- It can be expected that a high level of detail will be collected by the contracted organization in order to ensure accountability of the funding provided.
- The contract-out approach provides one-on-one travel training to all who need it.

None of the disadvantages of this approach are very detrimental, but they are worth considering:

- Potential trainees in focus groups may be concerned about certain aspects of this approach such as a waitlist with a wide trainee eligibility and that travel trainers would be strangers for some trainees. Overall, however, they were happy for any service to be available (Focus Group 1A & 1B).
- Considering potential partner organizations interviewed had a strong preference for a train-the-trainer approach (INTERVIEW 1), they may be surprised that another organization has received a contract. However, it is unlikely they would be unsupportive, because their goal is to have supports for their clients.

6.4.3. Policy option 3: Combination of in-house and train-the-trainer

The combination approach is the 2nd least cost-efficient travel training model. With an estimated cost of \$91,000, the cost efficiency is \$910 per trainee for 100 trainees and \$1,820 per trainee for 50 trainees.⁹

Advantages of this approach include:

- No need to change HandyDART application or ride booking processes.

⁹ The number of trainees is from the Calgary Transit example, which only began in 2018. It is likely that there will be more trainees from partner organizations in future years.

- Evaluation for the in-house component will be simple.
- Potential trainees in the focus groups were very receptive to this idea as it gave options for those who may be uncomfortable with strangers and trains all people while avoiding long waitlists (Focus group 1A & 1B).
- The combination approach provides one-on-one travel training to all who need it.

Disadvantages to this approach include:

- A new staff person with a very specific skill set may need to be hired.
- Program evaluation for the train-the-trainer component will be challenging for the same reasons discussed within that policy option.
- Potential partner organizations spoken with preferred a train-the-trainer approach (INTERVIEW 1), which will be possible for some organizations in this approach but may exclude others.

6.4.4. Policy option 4: In-house

This travel training approach is the least cost efficient, but it also has narrower eligibility for routes and trainees, which ensures that the transit provider will still avoid costs that exceed the program budget. For a program with five staff, the cost is \$370,500. The cost efficiency is \$1,235 per trainee for 300 trainees, and \$1,852 per trainee for 200 trainees. For a program with seven staff, the cost is \$500,500. The cost efficiency is \$1,251 per trainee for 400 trainees, and \$1,668 per trainee for 300 trainees.

Some advantages of this approach include:¹⁰

- Travel training is co-located with paratransit, allowing for great ease of communication.
- Information collected for each trainee on a trip-by-trip basis facilitates evaluation.

¹⁰ It was not possible to explore what affect the different travel training approaches may have on demand for HandyDART and costs avoided. The in-house approach, including the Family of Services model seen in York, would warrant further consideration in this respect.

- Potential trainees in the focus groups prefer a wider trainee eligibility, however they are supportive of prioritizing seniors and people with disabilities. They were also supportive of heavy involvement from the transit provider to learn about barriers faced.

Some disadvantages of this approach include:

- Significant changes would be needed, including hiring a team of staff and changes to both the HandyDART application and ride booking processes.
- Considering potential partner organizations interviewed had such a strong preference for the train-the-trainer approach (INTERVIEW 1), it is likely they would be surprised to hear of an in-house travel training program. However, it is unlikely they would be unsupportive because their goal is to have supports for their clients.
- This approach is only open to seniors and people with disabilities, and so many others who may need travel training would not have access in Metro Vancouver.

6.5. Policy analysis recommendation and table of results

Criteria	Policy Option 1: Train-the-trainer	Policy Option 2: Contract-out	Policy Option 3: Combination of in-house and train-the-trainer	Policy Option 4: In-house
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Cost efficiency	\$13.80-\$221 per trainee	\$368.33-\$552.50 per trainee	\$910-\$1,820 per trainee ¹¹	\$1,235-\$1,852 per trainee
Ease of implementation	High ease of implementation. No new staff hired, no changes to HandyDART application or ride booking processes.	High ease of implementation. No new staff hired, no changes to HandyDART application or ride booking processes.	Relatively easy to implement. No changes to HandyDART application or ride booking processes. May need to hire a new staff.	Implement a-tion complicated New team of staff hired and major changes needed to HandyDART application and ride booking process.
Ease of evaluation	>100 partner organizations.	Detailed data on activities will be collected.	Simple with in-house component, more difficult with partner organizations.	Data collection and evaluation would be very efficient and accurate, including on a trip-by-trip basis.

¹¹ The number of trainees is from the Calgary Transit example, which only began in 2018. It is likely that there will be more trainees from partner organizations in future years.

Stakeholder acceptance	Trainees	Very positive.	Mixed reaction, but not opposed.	Very positive.	Mixed reaction, but like direct feedback to TransLink.
	Partner organizations	Strong preference.	May be disappointed to see another organization contracted combined with lack of support for own programs.	Partner organizations will be very positive, other organizations may feel excluded.	May be surprised, but will be supportive services for their clients.
Equity		Available to all who need one-on-one travel training.	Available to all who need one-on-one travel training.	Available to all who need one-on-one travel training.	Available to seniors and people with disabilities.

I recommend *Policy Option 1: Train-the-trainer* because it is the most cost-efficient, is easily implemented, available to all who need one-on-one travel training, and stakeholders are in favour of the approach. In addition, this option does not preclude other travel training approaches should they be found to be desirable in the future.

Instead, it could strengthen a future in-house or combination approach by having many partner organizations who understand the importance of travel training.

While program evaluation is important to ensure continued funding, the low cost of this option relieves some of the pressure to demonstrate costs avoided. Program evaluation is difficult because of the high number of partner organizations. It is also difficult because there is only so much detail on outcomes that can be asked for from the partner organizations when TransLink is providing support through information and transit passes. However, this could be mitigated by getting more detailed outcome data from a sample of organizations with whom TransLink has a stronger relationship.

The literature suggests implementing any new travel training program through the following steps, starting with a pilot project:

1. Establish a mission statement and set goals
2. Gather stakeholders
3. Design travel training program
4. Confirm Funding
5. Establish Administrative and Other Procedures
6. Conduct a Pilot Test
7. Evaluate Outcomes, Modify Goals and Activities as Needed (Burkhardt, Bernstein, & Kulbicki, 2014a, p.26-27)

Chapter 7.

Conclusion

TransLink, Metro Vancouver's transportation authority, is considered a leader in North America in its accommodations for people with diverse needs. It is projected that Metro Vancouver will be a "super-aged" society by 2029, with more than 21% of the population over the age of 65 (Population Projections, British Columbia and Sub-Provincial, n.d.). Seniors drive personal vehicles at a much higher rate than other age groups in Canada (Wasfi, Levinson, & El-Geneidy, 2012, p.8). This dependence on personal vehicles can become a barrier for seniors when they are no longer able to drive.

People who lack access to transportation are at risk of remaining socially isolated for long periods, with negative impacts on their mental and physical health (National Seniors Council, 2009, p.16). A barrier to conventional public transportation for many seniors is that they have not used it before, or have not since they were children (Office of the Seniors Advocate, 2018, p.3). A robust one-on-one travel training program to complement the general travel training program currently being piloted will help remove this barrier for many.

Of the four approaches to one-on-one travel training explored, I recommend Option 1: Train-the-trainer because it is by far the most cost-efficient, is easily implemented, and is favoured by potential trainees in focus groups and potential partner organizations. Program evaluation is difficult because of the high number of partner organizations. It is also difficult because there is only so much detail on outcomes that can be asked for from the partner organizations when TransLink is providing support through information and transit passes. However, its low cost will relieve some pressure to demonstrate costs avoided. It may also be possible to measure outcomes at a more detailed level with a sample of partner organizations with whom there is a particularly strong relationship.

An important area for future research, which was out of scope for this project, is how costs may be avoided or reduced if TransLink changes its paratransit application and ride booking processes as seen at King County Metro Transit or York Regional

Transit. These two transit providers are able to tailor their services to each individual customer's needs on a trip-by-trip basis, resulting in a more efficient use of limited paratransit resources and more trips taken by conventional public transit. By recording more detailed information about current paratransit customers' needs, abilities, and trips taken, TransLink would gain a better understanding of what effect different policy choices may have. In addition, this improved data collection is likely to prove especially helpful should there be any changes required with incoming accessibility legislation in British Columbia.

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Appendix A.

Travel Training Programs

King County Transit Metro, King County, Washington, USA: Interview 9

King County Metro Transit, founded in 1993, has one of the largest travel training programs in the United States serving a population of over 2.1 million. Its paratransit branch is called Access Transportation and requires an application process where users must come for an in-person, on-site assessment. This allows an opportunity to see what transportation services are a best fit for the applicant, including the option of travel training. The travel training program includes individual training done one-on-one for a specific route, system training done one-on-one on how to use the entire system and trip plan, ramp training¹² for individuals with mobility devices, and group training and field trips (King County Metro, n.d.). All training types are free to eligible trainees, and all communications clarify that learning to travel by conventional transit is voluntary and does not affect a person's paratransit eligibility.

The travel training program is run by First Group, a company contracted by King County Metro Transit, who also operates Access Transportation and has 12 people on the travel training team. This includes the Transit Options Program Manager, 3 pathway reviewers, and 8 staff who perform travel training related activities. One is a Service Coordinator who provides outreach, invoicing and assigning work to the team. One Group/Ramp instructor teaches large groups and the use of the ramp when boarding and deboarding the bus. The remaining six team members are dedicated to working one-on-one with clients and their quest for using conventional public transportation independently.

When hiring travel trainers, the manager looks for people who have experience working with people with a variety of disabilities. Most of the current staff have a background in education or the geriatric industry, and one is a past paratransit driver and

¹² Training on ramps and lifts seen on accessible buses for people who use mobility devices such as scooters, wheelchairs, walkers, or canes.

supervisor. Any observations made by Mobility Specialists regarding barriers are gathered and logged onto a map of the county. Travel Trainers gather data on training progress based on their observations of the client's skills. A final report for King County includes travel training outcomes and barriers.

Individual travel training is for seniors and/or people with disabilities who want to learn a specific trip that has a frequency of at least 50 trips per year¹³. Typically, the training will last 3 days to 3 weeks, and the average trainee needs 5 days to learn the route. Even if the trainee is a very fast learner, it is still important for the trainee to do the trip at least 3 times within the program. On the first trip, the trainee observes what to do by watching the trainer. The next step is for the trainee to show the trainer what they have learned. The last trip will have a trainer watch the trainee take the trip from afar to be sure they are safe to travel on their own. With at least three separate days to observe a trainee, trainers are also better able to see any variation in ability to travel safely.

The program is highly effective, with approximately 96% of trainees successfully learning their route. Those that are not successful at this stage receive options for transportation as well as information on specific skills that need improvement. In 2018, there were 199 individual trainings and 26 re-trainings. Between 2013 and 2018, there were 142-206 route training, with an average of 171 trainings per year. These actions are measured by route training rather than by individual trainee because some trainees may learn more than one route. Retraining is for trainees who may need to practice a previously trained route again or could be for someone who is going to a new destination with a very similar route to one they have already learned. Trainees are always welcome to return when their life changes, perhaps by moving to a new home or when attending a new community center.

Systems training takes place less frequently and is considered satisfying the rider's desire to be self-sufficient for in their transit needs. Trainees develop skills to be an entirely independent traveler, including planning trips so this customer will no longer need travel training in the future. This training is often offered to people who are used to a very different transit system, or to those who already have individual travel training on

¹³ The trip frequency may be assessed by looking at past paratransit trips, or because the trip is a weekly, or more frequent, activity such as employment, a community program, or medical appointment.

a number of routes, but would also like training for destinations that they go to less frequently. Usually the training takes place over 3 days. In 2018, 8 systems trainings took place.

When calculating the avoided costs for King County Metro Transit through the one-on-one route and systems training, calculations are made by subtracting new trips on conventional public transportation from the expected trips taken on paratransit without travel training and taking into account the cost of the travel training program. A one-way conventional transit trip costs \$4.92 to the transit provider, while a one-way paratransit trip cost \$60.63 in 2017. The total cost avoided annually works out to approximately \$2 million annually. This number is likely an underestimation as it is only considering cost avoided in the first year a trainee does travel training, but it is very likely that their training will allow them to continue to travel independently for a much longer time period.

Ramp training is for people who use mobility devices such as wheelchairs, scooters, walkers, and canes. Trainees are brought by paratransit to the training location where a special coach is provided, and then given 30 minutes in some cases longer when requested or recommended to practice using the bus ramp with just a bus driver and instructor present. A session is held once a month, with 48 trainees taking part in 2018. Again, taking this training does not affect a person's paratransit eligibility.

Group training and field trips are usually for seniors' groups or for schools. They are a good opportunity for seniors or students who may not have much previous experience with conventional public transportation. There is a presentation component on public transportation options in the area and how to take the bus, including where the bus stop is, how to pay, and some rules to follow. The next component is to go try a bus as a group. Groups of 5-10 travel with an instructor to a destination of interest, and then back again. Trainees also have the option to request individual training later or other travel options that may be best suited to them. In 2018, there were 157 group training sessions with a presentation and community outing. In addition, there were 85 outreach activities, including presentations, table events, and networking activities.

Ride Connection, Portland, Oregon, United States: Interview 7

In Portland the transit authority is TriMet, and the travel training provider is Ride Connection, a non-profit community service organization. The name of the travel training program at Ride Connection is RideWise. TriMet includes information about RideWise on its website (TriMet, n.d.), but it does not currently provide funding to the travel training program. Paratransit in the area costs \$36 per one-way trip to TriMet.

Ride Connection provides information and services to residents of Multnomah, Clackamas, and Washington County, an area with a population of more than 1.7 million. Founded before the ADA was enacted, the original purpose of Ride Connection was to amalgamate several smaller operations that were essentially already providing paratransit in order to be competitive when applying for federal grants. In the 2017-18 fiscal year, a combination of paid and volunteer drivers provided 530,000 rides. In 2004, a travel training program was also created. When the travel training program first began as a pilot, TriMet was the primary funder. Today, there are multiple funding streams, with the largest being a contract with the State of Oregon through a Special Transportation Fund.

Within the travel training program group transit trips are provided for school or senior groups, one-on-one travel training is provided for people who have a disability or older adults aged 60 and over, and support is provided for educators. Ride Connection only considers the one-on-one training to be travel training internally. However, for the purposes of this research, the group transit trips are also of interest as a complementary type of travel training. Staff are able to assess calls to Ride Connection about which travel options might be the best fit for that individual, including ride programs, travel training, or simply information on transit.

One-on-one travel training is provided by trainers who are trained in-house. There are five full-time travel trainers, one of whom is a supervisor. The supervisor spends 60% of their time in the field and 40% in the office, while the remaining four travel trainers spend 25% of their time in the office and the remainder of their time in the field. The four travel trainers spend their time in the office charting progress notes, making calls, and coordinating training. The number of successful trainees has been

steadily growing since beginning of program in 2004 and has trained an average of 283 successful trainees in the last 5 fiscal years. The travel training team produced 325 independent travelers in the 2017-18 fiscal year.

The training is designed to meet each individual where they are for their needs and abilities. It is important to ensure that training caters to each individual to help ensure success and to teach at an appropriate level based on need and understanding. In cases where there is a language barrier, there is a third-party service to interpret. Some trainees are not able to complete training, but a rigorous screening process ensures most are successful. On average, trainees receive 10-12 hours of training each.

Most group rides are with students with disabilities who are receiving life skills training from their teachers. Ride Connection provides presentations to the students, bus and train fare for the teachers, and collects information on the number of students trained. In the 2017-18 fiscal year, 27 group rides took place. Rider's Clubs are group trips that are for seniors that want to use public transportation. Ride Connection provides fare for a round-trip chosen by the group, as well as a ride ambassador to talk about how to use the bus. It is a relaxed, social atmosphere where seniors without much experience on public transportation can gain confidence. Afterwards, Ride Connection also does an evaluation on changes in attitudes and knowledge with participants. Results have shown that people who go at least two trips with Rider's Club are much more likely to start using public transportation for other trips too.

An outreach specialist on the team ensures anyone who might need the services is aware of them. The outreach specialist targets people where they receive other services and makes sure staff know about the services as an additional resource for their clients.

As a non-profit organization, it is always important to evaluate programs and demonstrate value to funders. In this case, the return on investment is three to one for the entire travel training program, with the largest return coming from the reduced demand for costly paratransit services.

OC Transpo, Ottawa, Ontario, Canada: Interview 4

OC Transpo serves over 930,000 people that live in Ottawa, and they have one person that coordinates all travel training-type programming in the region. While the travel training coordinator spent a full year setting up the program, they now spend only 10% of their time working with partner agencies on travel training. The paratransit, Para Transpo, has an application process that includes an in-person, on-site assessment at the discretion of the staff at LifeMark, who have had a contract to process applications since 2018. However, very few applicants need to do in in-person assessment.

While Ontario has had accessibility legislation since 2005, OC Transpo falls under federal jurisdiction because some of its routes cross the provincial border into Quebec. With the incoming federal accessibility legislation, it will be interesting to see what effect this may have in the region.

In addition to a unique jurisdictional situation, OC Transpo has a unique travel training approach. The training itself is delivered by local schools, community groups, organizations, and agencies in partnership with OC Transpo. The program started in 2004 and has grown to have over 100 partner organizations. To support these programs, OC Transpo acts as a central hub to refer people to the appropriate programs and provide transit passes for use during training by trainers, trainees, and caregivers that may also want to take part in training. Partnerships with the medical community ensure that many who are losing their driver's license are directed to OC Transpo to find a travel training program or other transportation option that may be best for them.

OC Transpo also supports partner organizations to deliver travel training and travel information in several other ways according to the organizations' needs. One way is by providing training for those staff at partner organizations that will be doing one-on-one travel training such as social workers and occupational therapists. Presentations include information on conventional transit, travel training, and how to apply for paratransit. The interviewee explained that the majority are already experts in what their clients need, and so they do not need much training.

While the cost savings or cost avoided through the travel training program is not calculated, everyone that takes the travel training is likely to be eligible for paratransit. Each conventional public transit trip is subsidized \$2.60, while paratransit trips are

subsidized \$27 on average at OC Transpo. About 1,500-1,800 people take part in travel training per year, and 800-850 buy travel passes as a direct result of the training. In 2018, 1,083 of those people were students, and so only those graduating would be expected to begin traveling independently. Of all participants in 2018, 857 are now buying travel passes of their own.

The travel training program has no wait list, no minimum number of times a trip must be taken to learn a route, and no maximum number of training sessions for trainees. In fact, those trainees that take part in the program as students may participate in the program for years before they graduate the program as young adults.

OC Transpo is able to be flexible in providing support by bringing an out of service bus for various clients to experience. This is most often for students with disabilities as a part of their very robust school program or for people with anxiety or other mental health issues. For people who want to practice using mobility devices, OC Transpo will bring an out of service bus to the stop nearest to their home so they can practice for up to an hour. All buses now have low floors, and so this allows more independence and mobility for many who previously had fewer options.

For seniors specifically, there are several different programs. At least once a year when requested, OC Transpo will use an out of service bus to take groups from the three main seniors centres for sightseeing tours around the city, then have lunch and get a presentation on transportation options. For many who take part in this activity, it is their first time on a bus. There are also some programs with seniors serving agencies where they will partner with high school students with disabilities to take the bus along with trainers. Mostly, however, there are peer-to-peer programs for seniors in many agencies. It has been found that seniors love peer-to-peer training and that it is very safe because it is monitored very closely.

BC Transit Victoria, Victoria, British Columbia, Canada: Interview 5

BC Transit Victoria serves a population of over 383,000. Their paratransit, HandyDART, has an application process that may include an in-person assessment that the applicant does at a CBI Health Centre, paid for by BC Transit. In Victoria,

conventional transit is subsidized \$8 while paratransit is subsidized \$25 per ride. Their travel training program is contracted out to a local accessibility agency. The program started in 1999 modeled after the Easter Seals Project Action program in the United States. Communication between BC Transit Victoria, HandyDART, and the travel training accessibility agency occur regularly about customers' transportation needs as well as gaining feedback on policy.

On the travel training team there are four trainers and the manager. The trainers are trained in-house and are hired based on their experience working with people with disabilities and knowledge of the local public transportation system. BC Transit Victoria also does ramp training for people with mobility aids at the bus stop closest to their home.

When the travel training program first started in 1999, it was recognized that it would take some time to make connections in order to gain a steady stream of trainees. An outreach program was developed, and it took about 2 years for community integration. Today they collaborate with approximately 1000 community organizations and professional groups. Outreach continues today, including with a question on the paratransit application form asking about an interest in taking travel training. The result of this has been very few referrals, however. Many could be concerned that the ability to use conventional public transit for some trips will affect eligibility for paratransit, which is not the case.

The accessibility agency will train anyone who needs one-on-one travel training. This may be a senior, or person with a disability, but could also be someone who has a language barrier, a mental health issue, or simply has not taken a bus before. The youngest trainee has been 13, and the oldest 95. Organizations that have been a part of outreach efforts are where most referrals come from, especially hospitals. However, are not necessary, and the training is always free to the trainee. There is an expectation that any route trained be traveled with some regularity, for example, once a month. Seniors with some moderate mobility challenges require less training than other trainees, usually a couple of sessions is all it takes. Some trainees need only one session, and they may receive up to 15 sessions, although this is very rare. Follow up with each client is an important part of the program, and many clients return for further training. This could be

because they have a new route or there are changes in abilities. Approximately 80% of trainees use conventional transit regularly after completing travel training.

Some people that apply to the program are not a good fit, and so the program refers them to other services and travel options that might work better. In some cases, the trainee is not a good fit because there are some skills they need to learn before they are ready for the travel training program such as crossing the street, using money, or telling time. The focus of this travel training program is using buses and reinforcing safety, and so it is suggested the applicant focus on those skills and come back again.

On average, there are 50 one-on-one training sessions per month, resulting in approximately 200 people per year trained to use conventional public transportation. The program provides bus passes to trainees during training and provides monthly passes for some clients after training where it may help the trainee continue riding. The interviewee clarified that this is not income based, as it is not appropriate to ask about a trainee's income.

The accessibility agency also does some group training as necessary and many outreach presentations, often for schools or at seniors' agencies. The average number of participants is several hundred per year and there can be variations in requests depending on the time of year and weather. The training caters to the needs of the group, and participants can be referred to one-on-one training. The manager does the presenting but having additional staff available for face-to-face conversations makes many potential trainees feel more comfortable.

Calgary Transit, Calgary, Alberta, Canada: Interview 8

Calgary Transit serves a population of 1.2 million. The paratransit, Calgary Transit Access, has an application process that includes an in-person, on-site assessment for all applicants except those referred by hospitals, those on dialysis, or those attending adult day programs. The in-person assessment determines if the applicant may also be a candidate for travel training or any other services. While Calgary Transit subsidizes paratransit by \$30 per one-way trip on average, conventional transit is only \$3 per trip on average, and so travel training is a good investment.

The travel training program was started in 2000 and is run by one person who works within the Calgary Transit Access team. The goal of the travel training program is to teach seniors and people with disabilities how to use conventional public transportation, especially those who are not accepted for paratransit. Anyone who requests training can receive it, but it is important they already have pedestrian safety skills such as being able to safely cross the street on their own. If they are not able to do so, the interviewee will give the family information on how to work with that individual so they may be ready for travel training in 6 months or a year once they have learned those skills. Most people only need 3-5 sessions, but the trainer is willing to do 1-2 extra sessions if needed.

Training sessions begin from the trainee's home and then onto transit for hands-on experience going to the locations that the trainee needs to go regularly. Some materials help with training such as maps, schedules, and apps. There are also hailing kits for trainees with visual impairments. Many trainees are seniors, but at the same time, transit has also become more accessible with all low-floor buses and better wayfinding on trains. Some trainees use paratransit for some trips, but use conventional transit for others, which Calgary Transit Access policies allow. The in-house travel trainer successfully trains approximately 50 people on one or more routes per year. At any given time, the travel trainer is working with 10 people. Of all who receive training, 87% can successfully travel at least one route independently. Trainees can learn any route needed, or be trained to plan their own trips, as is appropriate to the needs and abilities of that trainee. Following up with trainees after training has completed is not possible because there is only one travel trainer at Calgary Transit, but it is something the interviewee would like to be able to do.

There is always a waitlist for one-on-one travel training, which can vary seasonally between 2 weeks and 2 months. As a result, the travel trainer has recently partnered with some local organizations that often refer trainees to try out a train-the-trainer model as seen in Ottawa. To date, the in-house travel trainer has trained 10 more professionals in travel training, and the result has been 16 successful trainees so far. When training the trainers, there is an expectation that they already have experience working with people with disabilities. The training takes place over one day, covering travel training and giving insights into features and options that the general public may not know about the public transit system, followed by hands-on training that day. The

interviewee also checks in monthly with the trainers and has recently created a group chat online where they can share lessons learned and best practices.

The travel trainer and Calgary Transit Access also does summer camps for youth with disabilities to introduce them to transit which are very successful. Two staff lead the camps, and students have the option to register for one-on-one training after the camp. The camp receives funding from the school boards, and participants pay a small fee that is refundable on completion of the camp. While some parents can be nervous to send their children to do travel training, the camp is only an introduction. Parents can then feel more comfortable since their children will not be expected to travel independently immediately after the camp. In addition, the travel trainer acts as a community liaison, presenting to schools, senior groups, and sometimes others such as immigration societies. These are an opportunity to talk about travel options, as well as the opportunity to take one-on-one travel training.

York Region Transit, York, Ontario, Canada: Interview 6

The transit authority in York is York Region Transit (YRT). YRT serves a population of approximately 1.1 million and works closely with its many neighboring transit agencies to ensure services are as seamless as possible. YRT also uses a 'Family of Services' model for its paratransit customers. This means that for paratransit customers, YRT will work to give transportation options beyond paratransit when it is a good fit for both the customer and the trip they are taking. Their paratransit, Mobility Plus, has an application process that can include an in-person assessment. Mobility Plus receives Approximately 250 applications each month, and 40-50 applicants come in for an assessment to determine eligibility for the paratransit service. The myRide Travel Training Program offers individual travel training, train-the-trainer presentations, and transit overview presentations to community organizations. MyRide travel training targets seniors who are not familiar with taking transit, people with disabilities, newcomers to the region, and people preparing to enter the workforce (York Region Transit, n.d.).

The myRide travel training program was developed with a consultant 12 years ago and has always been run in-house. At first, the program focused on youth and a train-the-trainer approach with organizations such as March of Dimes. The next area of focus became presentations to certain groups such as seniors and schools. Today, the

program has developed to include, and focus on, one-on-one training. Train-the-trainer only happens a couple of times a year. About 50 group presentations are given a year, and depending on the group, a bus may be brought along as it can be easier to have a spare bus for a training trip than doing training on the route. In 2017, a travel training centre was also built. It has a retired bus, a Presto fare machine, a bus shelter, a crosswalk with lights, and tables with tablets where trainees can trip plan and set up fare cards.

On the myRide team, there are four people. A transit ability coordinator is responsible for paratransit eligibility and does travel training. The current coordinator has a background in health sciences with training as both an occupational therapist and physiotherapist. Three inspectors are dedicated to paratransit and do travel training. The inspectors go through bus driver, platform, and terminal training.

The one-on-one training started in 2010 and was very small at first. It has grown quickly to training about 600 trainees per year. Trainees can come to the program in one of two ways. The first is when members of the public in the region request training for a specific route. The second is Family of Services one-on-one training. In this case, customers take paratransit to the nearest conventional transit hub instead of door-to-door from home to their destination, and a trainer will accompany them for the trip to be sure that the trainee is comfortable travelling on the conventional service. Most paratransit is pre-booked, and so the customer is immediately notified on the phone that they will be met by a travel trainer to see if conventional transit is an option for them for part of their trip. With the way sessions with trainees are booked, there is no waitlist. Only 1-2% of people are not able to use the conventional transit, and for the majority the real barrier is getting to conventional transit. YRT has made many investments in accessible conventional public transportation. The Family of Services model allows this new investment to be made use of, while also having shorter trips made on paratransit. This means lower costs, a more efficient use of resources, and more independence for people with diverse abilities.

The one-on-one Family of Services travel training is important to ensure that trainees are able to safely reach their destination on their first Family of Services trip. Any route may be trained, with no minimum number of expected trips per year. Most trainees need only one training session to learn their route. If a trainee needs more than

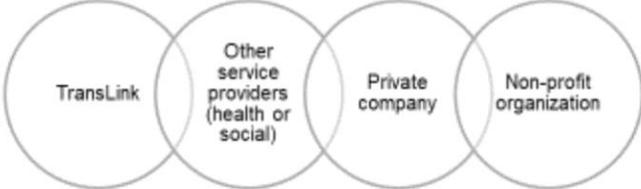
three or four training sessions for one route, conventional public transit might not work for them either because they are not comfortable or not able. The trainer also provides a booklet with step-by-step instructions for that route and is able to come re-train if needed or train on any future routes. In addition, travel trainers keep a record of the training and are able to retain data on any additional barriers that need consideration such as a problem at a particular platform or with a driver. One challenge noted was weather. On colder winter days, many Family of Services trips switch to door-to-door trips so that no customers are waiting in the cold at transit hubs for their paratransit ride.

Appendix B.

Focus Group Worksheet

Each question was printed on a full page.

1. Who should provide travel training, *and why?*



Take into consideration: trainee preferences and comfort, ease of communication, ease of data collection, possible locations of travel training

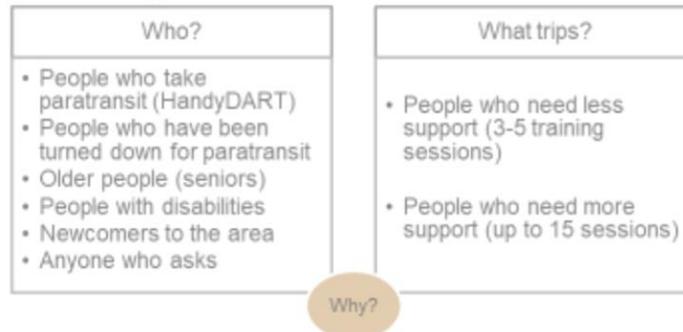
2. What qualities are important in a travel trainer?

Credentials or training

Personal qualities

Other?

3. Who should be eligible for one-on-one travel training, *and why?*



4. How should a new one-on-one travel training program be communicated?



5. Anything else I should consider?



Appendix C.

Travel Training Interview Schedule

Informed consent/ housekeeping:

Consent to do interview?

Consent to use name?

Would you like a copy of the finished project?

Semi-structured interview questions:

1. Tell me about yourself, your position, your program, and how it came to be?
2. Who is the travel training provider, the transit provider, and the paratransit provider?
3. How is your program funded?
4. What qualities and qualifications should travel trainers have?
5. What kind of travel training models do you have (group, individual...)?
6. Can you tell me about the travel training curriculum?
7. Can you tell me about your trainees?
8. How do you involve caregivers?
9. Can you tell me about community partners, collaborators, and outreach?
10. Can you tell me about your program outcomes and how those are measured?
11. What are the greatest strengths and challenges you see within your program?