

THE SOCIAL TRAVEL PATTERNS OF YOUTH AND YOUNG ADULTS

by

Reena Anne Elizabeth Thomas

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS IN PLANNING

in

The Faculty of Graduate Studies

THE UNIVERSITY OF BRITISH COLUMBIA

June 2007

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Abstract

Young people between the ages of sixteen and twenty-nine represent one-third of transit riders in Canada and over half of transit riders in the Greater Vancouver Regional District. They socialize in different places, and at different times of day, from children or adults. Because they are often left out of transportation studies involving children or adults, researchers know little about the way in which young people travel.

Twenty-one youth and young adults from Vancouver and Surrey participated in this exploratory study to determine the ways in which transportation affected their social travel patterns. Social network mapping and focus groups with youth aged 17-21 and young adults aged 22-25 revealed the constraints that young people face when they travel for social purposes. Young people tend to socialize in the evening and at night, when transit frequency and reliability are low. Extensive planning and organization of trips means that young people socialize in a few small social activity corridors, face long travel distances to the residential areas of the region, and rarely travel spontaneously. Their ability to use other alternative transportation modes, such as cycling and walking, is limited by long travel distances and consistently rainy weather for six months of the year. Young people also make extreme adjustments to their social lives, schedules and personal safety in order to take transit in the evening and at night. Although affordability is a significant barrier to car ownership, young people in the GVRD are also increasingly aware of urban planning and environmental issues, making them reluctant to rely on cars. Many choose transit as their preferred mode of transportation, and would like to continue to use transit in the future.

This study contributed to an understanding of the social travel patterns of youth and young adults, and revealed the significance of this demographic in planning transit services. However, because of the small sample size, future research might include quantitative surveys of youth and young adults in the GVRD to clarify and reinforce their social travel patterns.

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Acknowledgements

I would like to thank my thesis committee, Dr. Penelope Gurstein and Mr. Don Buchanan (TransLink), for their assistance with this project. I would also like to thank the TransLink Transit Planning Department, in particular Graeme Masterton, for encouraging and funding this research. Thanks to Cornelia Sussmann, Michelle Babiuk, and Allison Jones at the School of Community and Regional Planning, who helped with note taking and organization of the focus groups.

Most importantly, I would like to thank the youth and young adults who participated in this study, and who are directly responsible for my newfound knowledge on their social travel patterns.

Chapter I

Why study the social travel patterns of young people?

Youth and young adults today occupy an increasingly uncertain niche in society. Although young people represent a significant portion of transit riders in Canada, researchers know little about the way in which young people travel. As a loosely defined demographic group, their travel patterns and behaviour are largely unknown and unstudied. Yet even a casual observer in Toronto, Ottawa, Montreal, or Vancouver notices that young adults' travel patterns differ from those of older adults. Young people tend to use transit for social events, to visit and hang out with friends, to attend concerts and participate in other late-night activities. This social prime time for youth coincides with the lowest transit frequencies and the highest degree of transit unreliability. Not only are young people often stigmatized by adult society, where they are the frequent target of rules and regulations around social conduct, but because of their tendency to socialize and congregate with other youth at night, they are left with few transportation options. Young people also make decisions based on social and environmental considerations. These differences, both in behaviour and travel patterns, make young people an interesting subject of study in any field, but particularly in the area of transportation. Because little is known about youth travel behaviour or patterns, the subject is particularly well-suited to exploratory methods of research, such as interviewing and focus groups. Transportation authorities have recently begun to use these qualitative research methods to supplement traditional transportation surveys and travel counts. While these methods have often been used to gauge consumer attitudes and preferences for particular services, they are increasingly being used in the development of long-term transportation plans. This study aims to use qualitative research methods to uncover the social travel patterns of youth and young adults.

1.1 Goals and objectives

Many transportation authorities, including the Greater Vancouver Transportation Authority (TransLink), now involve transit users in the research and development of long-term transportation plans. Youth involvement in transportation planning is growing. Young people are becoming increasingly aware of transportation and land use issues, global warming and peak oil. In high school, youth begin to rethink their parents' habits, including their reliance on their parents for transportation. School travel surveys acknowledge that student behaviours and social stigmas are changing (Corrigan, 2003; Orsini, 2003). Many cities are actively seeking the input of young people in order to plan equitable transportation systems. Their perceptions of transit and their observations on transit service can help plan transit route patterns and frequency. Providing better transit service to destinations frequented by youth will foster a positive attitude towards transit, which will impact their transportation decisions later in life.

The main goal of this study is to determine to what extent transportation influences the social networks of young people. Other objectives of the study are:

- To identify trends in youth transportation, such as traveling at certain times of the day or to certain areas of the city
- To advocate for youth participation in the transportation planning process in the GVRD, either through surveys or the establishment of a youth planning committee
- To encourage TransLink to include off-peak travel in transportation demand management decisions

1.2 Research context

1.2.1 Youth psychology and behaviour

Youth and young adults often occupy a sort of social "no-man's land", where they do not fully fit into one group in society. On one hand, they are too old for children's activities and interests, and easily bored by the playgrounds and structured after-school programs aimed at this group. Both their parents, and society in general, consider them too young to make independent choices about their education, housing, or transportation. At the end of high school young adults are expected to behave like prototypes of their parents. But an increasingly complex and technological society makes high school, university or college, and even advanced degrees necessary for young adults, increasing the time of dependence on the family (Rice, 1999; Jaffe, 1998). Unlike his contemporaries at the turn of the twentieth century, today's eighteen-year-old is not an important and necessary

part of the workforce. For youth these days, a straightforward transition from school to work is interrupted by a variety of vocational training schemes, part-time work, education and periods of sub-employment and unemployment; the transition to adulthood has become more prolonged, uneven and uncertain (Hollands, 2002, p153). Youth and young adults occupy an increasingly uncertain niche, as the traditional signs of adulthood (career, marriage, children, home and car ownership) are postponed further into the thirties and even forties. Nighttime social activities, once popular in the late teens and early twenties, now extend to the thirties. One can scarcely read a lifestyle magazine or article today without seeing the words, "Forty is the new thirty." There is no one homogenous "youth" (Hollands, 2002, p161) and therefore no homogenous youth behaviour. However, for the purposes of this study, "teen" will be defined as between the ages of 14 and 16; "youth" as between the ages of 17 and 21, and "young adult" between the ages of 22 and 25.

Rice (in Weston, 2005) points out that teenagers are at the stage "where they are forming an identity away from their family and looking for people with whom they have an affinity." Travelling independently can have a positive effect on teens' self esteem, decision-making, and social skills, allowing them to interact with other people in a variety of different environments (Weston, 2005, p3). Young people have different cultural values, understandings and needs than adults. The night in particular is a welcoming venue for people exploring their acceptance of cultural norms, as youth do when they go to nightclubs, hang out on street corners, dress more casually/provocatively and act less formally than they would during the day at school (Malone, 2002, p163). As youth begin to construct their social identity in relation to their peers and the rest of society, having a place to socialize at night with people different from themselves is crucial.

In some countries, such as Italy and Spain, nighttime is seen as a social time for all members of the community. Dancing, strolling the streets, eating in restaurants and going to see plays or musical groups are rituals that all take part in. In other countries, such as Denmark, Sweden, the Netherlands, and Germany, there was a concentrated effort to encourage nighttime cultural activities as student populations increased in the 1970s and 1980s. North American social activities follow the British model, where night culture is not well developed. Bianchini (1995, p123) suggests some reasons for this: the male and youth-oriented British pub culture, with little communication between the pub and the street; the monofunctionality of town and city centres, with only shops and offices; the unfriendliness of places designed and planned for the car; the poor provision of public transport late at night; the constraints imposed on the evening economy by licensing laws; the fact that most consumer disposable income tends to be absorbed by the mortgage and home-based

expenditure; and the "in-and-out" syndrome, where people go into town centres for classes or concerts but leave as soon as the activity ends. The general British dislike of cities plays out as well, with people preferring more open, outdoor, and therefore daytime, activities.

All of these issues are current in Canada, particularly in Vancouver. Vancouverites are known for their physical fitness, particularly in the pursuit of outdoor activities such as skiing, surfing, hiking, and kayaking. The West Coast love of daytime outdoor activities is also related to the particular geography of the place: the predominance of mountain and seascapes, with easy access to the wilderness. Vancouver is not a city in which to pursue urban activities: a comment on the lack of nighttime activities in the city prompts the response, "Vancouver is still a young city." And yet,

The "fear of crime" in the streets has made the city dweller nervous of those exhibiting behaviours seen as different from the mainstream. Because of the visibility of youth in the streets, they are constantly under barrage of these regulatory practices. Excluded, positioned as intruders, young people's use of streets as a space for expressing their own culture is misunderstood by many adults. (Malone, 2002, p157)

People are afraid of the night, and planners inadvertently discourage nighttime activity. The result is that people do not go out at night as much as in other cultures, and those who do are both less fearful and more in control of their personal safety: youth and young adults. Older adults exaggerate their own fears and anxieties, playing to the media, inciting police harassment and even youth curfews in some countries (Malone, 2002, p163). Young people, with their desire to do things outside of the norm and apart from their parents, still choose to socialize at night, when individualism and difference are tolerated more than during the day. Yet their penchant for nighttime socializing is hampered by several factors, not the least of which are the transportation, land use, and home ownership trends that have resulted in the need to travel long distances from residential areas.

1.2.2 Transportation and land use trends

Home ownership and land use trends in the past fifty years have led to urban sprawl, characterized by its distinctive street patterns and land use zoning. Residential areas are typically separated from work, school, shopping and leisure opportunities, increasing travel distances to every other type of land use or destination. Families usually live apart from the extended family or community. Weston (2005) believes that this contributes to a youth subculture, where young people increasingly socialize only with each other, apart from family or community members of different ages (p29). In four of Canada's five largest cities (Toronto, Vancouver, Calgary, and Ottawa) the high price of

home ownership and increasingly tight rental markets have driven most families to the suburbs, while Montreal retains the highest rental rates in Canada. Yet the dream of home ownership remains for most adults. In Vancouver, suburban communities such as Surrey, Langley, Richmond, Coquitlam, and Maple Ridge are the fastest-growing areas of the region.

Land use factors may affect youth more than children or adults. Many parents choose homes in suburban locations because they are more affordable and are seen as providing a good environment for children. Typically, the ownership of at least one car permits driving to social events, shopping as a family, chauffeuring children to and from school and other destinations. But older children, teens, and youth are able to travel independently from their parents and often desire independence for social travel. The long-held assumption that once teenagers turn sixteen, they will become drivers, may not hold. Car ownership is often postponed until the mid to late twenties in large Canadian cities for several reasons: affordability, environmental concerns, and the availability of efficient transit services. Young people may not be able to drive, may not have access to a parent's car, or may not be able to afford their own car. The graduated licensing procedure, which has been in place in British Columbia and other Canadian provinces for over a decade, means that young people are not allowed to drive on their own until they are almost nineteen. This means that there can be a significant amount of time, from the mid-teens until the late twenties, when young people rely on transit and getting rides from friends or family.

Long travel distances to friends' houses and the social activities normally located in downtown centres present significant limitations to alternative transportation: walking and cycling are particularly unviable. Isolated, segregated residential areas force young people to get rides from parents, an option they consider childish, or to use alternative modes of travel. Unlike adult transit users, who rely on transit primarily for commuting to work, young people use transit to socialize, meet with friends, and travel to part-time jobs, primarily in the evening and nighttime. The inability to choose their mode of travel, the infrequency or unreliability of transit late in the evening and night, the relative danger of suburban collector roads, and the relative freedom offered by the car may lead to the desire to own a car as soon as possible. This situation leads to the labeling of young people as transit-dependent "captive users" by most transportation authorities: that is, they use transit because they have no other alternative. But is this an accurate description? Or do young people prefer to use public transportation rather than relying on rides from parents, a choice they would have been unable to make as children? Does transit provide a viable "in-between" mode for youth and young adults?

1.2.3 Youth and young adults as a significant demographic

Young people represent a significant portion of transit riders in Canada. Canadian Urban Transit Association statistics show that youth account for one-third of transit ridership nation-wide (CUTA, p1). These numbers are even higher in the nation's largest cities, where efficient public transit systems can enable young people to travel relatively independently without the purchase of a private automobile. In Vancouver, 16-34 year olds represented 55% of all bus users, 52% of Skytrain users, and 45% of cyclists. TransLink identified the 16-34 year old group as the most likely to increase their transit use within the next year (2003, p76). Transit use in Vancouver has increased dramatically among youth since the introduction of the U-Pass for students at the University of British Columbia and Simon Fraser University in 2003: 53% and 39% respectively in the first year alone. Transit now accounts for 41% of the mode share at UBC (UBC, 2006). In Vancouver, the popularity of the U-Pass for university students has led to increased transit use, even late at night, but bus frequency after 9pm is not sufficient to keep up with demand. This is the norm for most large Canadian cities, and mid-sized cities such as Victoria, BC and London, Ontario offer drastically reduced transit service after 9pm, allowing young people few choices. Infrequent service in the evening (9pm-12am) and night (12-4am) is largely a reflection of our preoccupation with providing extensive options and increased service for peak hour commuter travel (6-9am and 3-7pm).

The fare structure at various transit agencies usually includes a separate, cheaper fare for young people, but the ages vary. Some companies offer discount fares for teens 18 and under, some 16 and under, and some 12 and under; the U-Pass offers discounted fares to university students of any age. The definition of "youth" for transportation research purposes is also affected by driver's licenses; the graduated licensing policy in British Columbia means that young people now do not get their full licenses until age 18 or 19. The various demands of school, part-time work, high rental costs, and the legal drinking age all influence youth transit ridership. National data in the US suggests that transit use peaks in the 21 to 25 age group and that ridership for teens varies with the size of the city (Cain et al., 2005). The fuzzy age limits of "youth" mean that researchers are uncertain where to draw the line: youth are more easily grouped with either children or adults. This means that they are alternately considered dependent children who do not make their own transportation decisions, or fully informed and independent adults.

Because youth trips are often not counted in surveys, or are statistically grouped with young adults, it makes their particular travel patterns difficult to discern. Weston (2005) writes that "Since teens are clearly more mature and developed than primary school children, but not yet viewed as a

problem to society as crash-prone novice drivers, they have been largely overlooked in transportation research, and to some extent, by social science in general.” (p29). However, the fact that young people travel extensively at night, when transit frequencies and reliability are greatly decreased, begs the question: are young people “captive users”? Or do they prefer using transit, but are limited in their use by infrequency and unreliability in the evenings and nighttime?

1.3 Conclusion

Youth and young adults present a unique opportunity for transportation research, since their travel patterns and behaviour are largely unknown and unstudied. Young people represent a significant portion of transit riders in Canada, and they use transit in different ways and at different times of day from adults. “Youth” is an ever-expanding demographic which may provide us with a wealth of information on transportation needs during the transition from childhood to adulthood, using the sub-groups “teen”, “youth”, and “young adult”. Because of a tendency to focus on peak-hour commuter travel, transit options at night are still relatively limited in large Canadian cities, and young people have few transportation options for socializing at night. Young people also make decisions based on social, environmental, and technological considerations. Land use patterns, and a desire for independent travel, also impact youth and young adults considerably. These patterns and trends raise several questions about the travel behaviour of youth and young adults, particularly at a time when society is beginning to question its reliance on automobile travel. In the next chapter, I will discuss transportation methods relevant to a study of youth and young adult travel behaviour. I will also detail the development of a research methodology that will explore the influence of transportation on the social networks of young people.

Chapter 2

Studying youth social networks and social travel

Youth and young adult travel patterns have traditionally not been the subject of transportation research. There may be several reasons for this. Transportation research around public transit generally focuses on peak hour travel by commuters, in order to maximize the transit ridership of this group, who are called “choice users”. Other transit users generally fall into a second group called “captive users” or “transit dependent”. Secondly, young people may be more difficult to recruit for studies or surveys. Youth do not typically read traditional media such as newspapers, they are rarely at home, and they socialize at times and in places often unknown to adults. The development of a research methodology, then, will involve drawing out information on off-peak travel and social activity locations, for a specific age group, with attention to youth psychology and behaviour. The research methods used will have to elicit a range of attitudes and travel patterns.

Transportation researchers using quantitative methods such as travel surveys, transit ridership data analysis, and travel diaries, typically attempt to derive results that can be generalized and applied to the greater population. However, in the industry, transportation authorities are increasingly turning to qualitative research methods, such as interviewing and focus groups, to elicit the opinions of specific groups of transit users regarding specialized transit services or long-term planning. For researchers interested in marginalized transit users such as women, the elderly, ethnic minorities, and youth, these methods may offer the best means of drawing out a range of previously unexplored issues surrounding travel behaviour. Sociologists and geographers have examined social connections using social network mapping, which may help in the identification of youth social spaces in the

region. These methods were useful in the development of a research methodology to study the social travel patterns of youth and young adults in Vancouver and Surrey.

2.1 Quantitative research methods: advantages and disadvantages

Transportation research has traditionally been done using quantitative methods such as travel surveys, transit ridership data analysis, and the use of travel diaries to collect trip information. Unlike other fields, transportation as a discipline did not experience the legitimacy crisis with quantitative, positive research methods common in many fields in the 1960s and 1970s. The field has up until recently been dominated by transportation engineers, with transportation planners playing a role in long-term projects. In other fields of study, such as sociology, anthropology, geography, and urban planning, the voices of women, minorities, and other marginalized groups began to be heard through the use of qualitative research methods and public participation. There are inherent power dynamics here: the fact that the transportation engineering field is still dominated by a single age group and gender is one reason for the lingering power of quantitative methods in transportation planning. The field has relied on measurable data in which the researcher keeps an objective distance from the participants.

The almost exclusive use of quantitative methods in the field has provided us with some useful, generalizable results but has left us with gaps in our understanding of the travel patterns of specific groups. Likewise, transportation research has focused largely on travel to work, with very few researchers specializing on leisure, or social, travel despite its growing prominence (Axhausen, 2003). We do not have a full understanding of transportation as it applies to women, minorities, the disabled, seniors, or young people (Clifton and Handy, 2001, p3). Some transportation researchers (Axhausen, 2003; Clifton and Handy, 2001; Grosvenor; Gaber and Gaber, 1999; Handy et al., 1998; Poulenez-Donovan and Ulberg, 1990) have called for the use of qualitative methods in transportation research. In fact, transportation authorities have begun to use these methods, although they are just beginning to be used in academic research.

2.2 Capturing social travel by examining off-peak patterns

Historically, public transit programs and funding have disproportionately gone into peak-hour travel, or travel to work, supporting the commuter group at the expense of "captive users." The needs of "captive users" are seen as unnecessary to fulfill: these transit users will take transit regardless of infrequency or unreliability. Young people, because of their extensive use of the transit system in the evening and nighttime, fall into this group.

The costs associated with traffic congestion have also prompted transit agencies to devote a considerable amount of time and effort into increased service and frequency during the peak hours. Several American cities, such as San Francisco, developed their transit systems in the 1970s, focusing on commuter travel from suburbs into the city for work. Vancouver, as a large region with the only regional transportation authority in Canada, has developed a similar array of commuter bus and rail services reaching the distant suburbs during peak hours. Yet this increase in services and frequencies has come at a price: evening and nighttime bus services across the region have hardly improved in the past ten years, so travelling at off-peak times is still difficult.

Research on commuting dominates the literature. Cervero (1996) was one of the first researchers to examine the effects of neighbourhood planning and design on the use of public transit, walking, and cycling for commuting to work. Schwanen and Mokhtarian (2005) examined physical neighbourhood characteristics that might affect commute mode choice. Sanchez (1999) examined public transit and employment disparities in Portland and Atlanta. Poulenez-Donovan and Ulberg (1990) used semi-structured interviews to uncover factors that influenced an employee's decision to participate in an employer-based transportation demand management (TDM) program. Transportation demand management for commuting to work emerged as a major industry focus in the 1990s, and most municipalities and major employers now have TDM programs to encourage commuters to use alternate modes of transportation.

In the past few years, researchers and transportation authorities have found that travel for social purposes is on the rise (Axhausen, 2003). This means that more attention is starting to be devoted to travel during off-peak hours: during the mid-day, evening, night, and weekend. TransLink's data shows that there is considerable transit use in the mid-day and on Sundays, and has increased bus services accordingly (2005; 2006). Focus groups discussions with transit users and business owners in the City of Tukwila, Washington prompted the suggestion for better evening and weekend service (2003). Teen and youth focus groups conducted by TransLink (2006) also elicited comments on poor evening and night bus service, particularly in the suburban municipalities such as Surrey, Delta and Langley. Study of off-peak travel could show the effects of reduced mobility on social networks and travel patterns.

2.3 Mapping the social networks of youth and young adults

Studying social travel patterns requires knowledge of the participants' social sphere, including places they go for entertainment, meeting friends and shopping. The social networks of youth and young adults could be studied using social network mapping, a technique that is used to create diagrammatic connections between people, to map out routines or show functional relationships. Many sociologists and geographers have studied social networks, and most are interested in the relationships between members of the network. Tindall and Wellman (2001) write that social networks have expanded beyond the neighbourhood base. Technology has facilitated the creation of fragmented communities: a lifestyle study in the US showed that Facebook, an online social network that connects friends and colleagues, has become the new extended community for many university students (Coughlan, 2006). Social network maps have been used to determine key players in the development and provision of youth services, how information is shared in offices, and even the extent of social connection created by text messaging. These maps are usually diagrams showing interconnections between people, rather than geographical maps showing spatial connections. Studying social travel patterns will involve examining young people's social networks to see if they are geographically or technologically based. Because they socialize in off-peak times and maintain their social networks in constantly changing ways, young people may become important sources of information in the design of new transit services to support social travel. Their social networks are quite different than those of children or adults, with whom they are frequently grouped.

2.4 Youth and young adult inclusion in transportation research

Young people are typically included in other demographic groups for transportation research. For example, in TransLink's Regional Travel Survey (2003), youth and young adults were included as participants aged sixteen and older, but the age category used for analysis was quite broad: 16-34. Statistics Canada collects data on individuals' car ownership and travel to work, but youth are usually included on a parent's census form. In some cases, teens or youth would be grouped with dependent children. Researchers, including those specializing in children's health and travel to school, have looked at household travel patterns that include parents driving their children to school and other activities (Doherty and Miller, 2000). Youth are included, but not asked specifically to record their own travel patterns.

This is interesting considering the size of the youth and young adult population in many cities. For example, in the Greater Vancouver Regional District (GVRD), there are over four hundred

thousand people between the ages of 15 and 29 (see Table 2.1), accounting for 20.5% of the region's population.

Age Group	Population
15-19	131,180
20-24	135,795
25-29	139,875
Total (15-29)	406,850
Total GVRD population	1,986,965

Table 2.1. Youth and young adult population in the GVRD.

Source: Statistics Canada, 2001 Stats, listed on BC Stats website.

In most large cities, this demographic is also very likely to take transit; TransLink's Regional Travel Survey revealed that 16-34 year olds represented 55% of all bus users, 52% of Skytrain users, and 45% of cyclists; this group was the most likely to increase their transit use within the next year (2003, p76). Yet despite their significance, only a few studies consider teens, youth, or young adults as specific demographic groups.

2.4.1 Research on attitudes and travel behaviour

One notable study used focus groups to develop an understanding of teenage attitudes and perceptions regarding transit use (Cain et al., 2005). The researchers held four focus groups, one with teens aged 13-15, one with teens aged 16-19, and two with the parents of each group of teens. Four major themes emerged: safety, cost, availability/convenience, and image. One recommendation was a marketing campaign that emphasized freedom from parental control to the teens, while stating how much time parents could save if their kids used transit. (Cain et al. 2005, p 42). The research uncovered some of the difficulties in marketing to teens, including social image (the implications of riding the bus), difficulties in getting schools to cooperate, budget constraints, parental control, and tracking teen ridership to determine if efforts were successful. Parental participation was considered essential, since most parents influence their children's decision-making well into their twenties.

Weston (2005) also involved parents when she conducted 31 in-depth interviews with teens using a unique travel diary that she developed. The 13- and 15-year-old teens used the travel diaries for three consecutive days, and then Weston interviewed them in their own homes, often with a parent present. She was able to collect some very detailed data from the teens and uncovered some

interesting trends, such as the predominance of travel by car (getting a ride), different travel patterns in the summer versus the school year, and weekday/weekend travel patterns.

2.4.2 Participatory research

Other projects involve youth directly as research participants. *offramp*, a Canadian youth-led initiative, is one of several participatory action research (PAR) projects conducted in recent years. These PAR projects involve youth in the creation of educational materials and events to change attitudes and circumstances around non-motorized transportation modes for the trip to school. High school student leaders in *offramp* are encouraged to investigate the barriers and incentives to alternative modes of travel and create projects that can raise awareness, reward good behaviour and generate opportunities to use alternative travel modes (Orsini, 2003, p20). Student leaders select from an ever-growing list of activities to run at their school and lead longer-term initiatives, like fundraising for a bike rack or petitioning for a bus shelter in front of their school (Orsini, 2003, p21). Some of the benefits have been youth empowerment, stress reduction, opportunities to make friends with like-minded youth from different schools, and positive reinforcement: the more bikes young people see at school, the more socially acceptable biking becomes. School travel surveys completed after *offramp* events showed that student behaviours and social stigmas had changed.

Another PAR project was "Catching Them Young", a project undertaken in Manchester, UK. The project was a one-year attempt to influence young people's modal choice through a short-term intensive educational intervention (Pilling and Turner, 1999). The target age range was 12-23 years old, spanning the teen, youth, and young adult subgroups. At the beginning of the project, current travel behaviour and attitudes showed that 90% of the young people walked once a week, 32% cycled, 79% used the bus, 5% took the train or tram, 14% were car drivers and 86% were car passengers. Most participants aspired to be car owners and drivers in the future and perceived cars as comfortable and convenient. The participants then developed educational/awareness-raising materials, with the help of local youth workers and a university visual arts department. The materials were designed to promote non-car travel rather than highlighting the negative impact of cars, and young people were asked to create an advertisement promoting any form of non-car travel focusing on any factor that they perceived as important. After undergoing the intervention, 90% of the young people changed their attitudes about cost and image (cost became more of an issue in their modal choice decision and image less of an issue). Ninety-five percent said that the environment had increased in importance as a factor in their travel decisions. Their attitudes towards specific modes also changed, with 95% changing their attitudes towards cars (they

perceived the car more negatively). They perceived all alternative modes more positively: 90% changed their attitudes towards walking, 95% towards cycling, and 95% towards trains. These results show that youth attitudes towards transportation modes are flexible. The researchers felt that taking the young people through the process and creating a product provided them with some ownership of the educational materials, much more so than if a teacher had taught the material at school. They recommended that this type of educational intervention be used in tandem with greater youth participation in transportation planning.

2.4.3 Transportation planning research

Several transportation authorities have conducted complex planning processes in the development of long-term transportation plans. These involve many research methods including quantitative surveys, automated data collection and analysis, and interviews. These have been conducted at the state, regional and municipal levels (WDOT, 2003; FDOT website; CRTA, 2000; COT, 2003). Only a couple of these processes have included teen, youth, or young adult participants.

The St. Lucie Metropolitan Planning Organization in Florida conducted a PAR project specifically to involve youth in the transportation planning process (2002). The goals were to give youth the tools to understand and make recommendations for their transportation future, and to develop a sustainable transportation plan for their community. The students researched transportation systems on the Internet, brought guest speakers into the classroom, and interviewed experts outside of the classroom. They job shadowed staff in transportation careers, participated in two leadership conferences, and ended up producing a transportation survey and eight videos on different transportation issues. They presented their long-range transportation plan to the county commissioners, Florida DOT officials, school board members and legislative delegates in June of 2002. As a result of their efforts, the commissioners and city council eventually agreed to create a Municipal Service Taxing Unit to fund long-term transit costs. The program manager recommended that this curriculum be incorporated for geography or civics classes, or as an elective class. Students could network with other schools to develop and provide input into regional transportation plans, or expand on implementing certain areas of their plan such as assisting younger kids to take the bus to libraries.

TransLink conducted 26 focus groups and two community vision workshops in the Greater Vancouver region to get input into the South of Fraser Area Transit Plan (2006). These two methods were supplemented by an extensive telephone survey, which allowed quantitative analysis

of the origins and destinations, and automatic passenger count data collected on the buses. There were two teen focus groups (14-16), two youth groups (17-21), adult groups (25-54), and seniors groups (55 and older). Young adults (22-25) were not included. Participants were asked to draw their ideal transit routes on a map of the South of Fraser region, including the following municipalities: Delta, Surrey, White Rock, Langley City, Langley Township (see Figure 2.1).

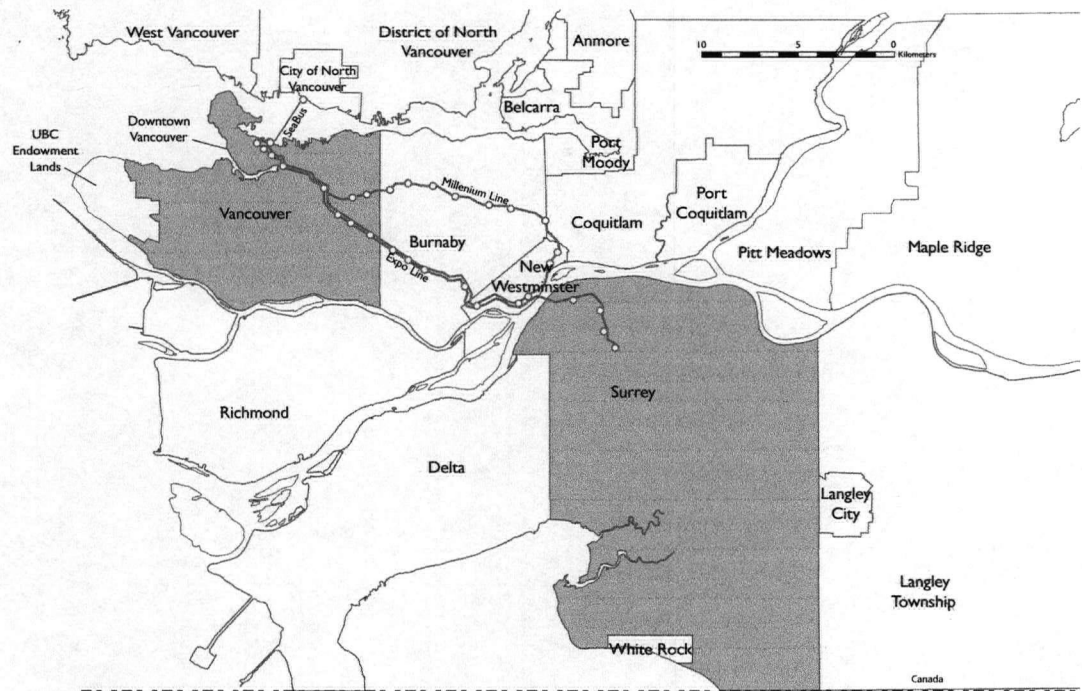


Figure 2.1 The Greater Vancouver Regional District (GVRD) includes a small downtown peninsula with long travel distances to most residential neighbourhoods. The region is divided by branches of the Fraser River; the South of Fraser municipalities are Delta, Surrey, White Rock, and the Langleys. Bold lines indicate SkyTrain lines. The City of Vancouver and City of Surrey are shaded.

The vision workshops involved about one hundred key stakeholders, including a few young people, who were asked to play a transit planning game to create both long-term and short-term maps of a future transit system. For the long-term map, groups prioritized where they wanted future SkyTrain, light rail, bus rapid transit, and high frequency local bus service. On the short-term local maps, they prioritized bus frequencies (from 7.5- to 30-minute service as well as peak-only service.) A market research firm conducted the focus groups, while TransLink planning staff facilitated the vision exercise. Some of the concerns were route frequency, route reliability, night bus services, lighting, safety, and transit information at bus stops and stations.

Youth and young adult travel patterns may show more social travel during off-peak hours, including mid-day, evening, and weekends, long-neglected times for efficient transit services and funding. Research participants have already raised the issue of poor evening and night service, which may prove to be essential in the maintenance of youth social networks. Youth have become more involved in transportation research as advocates for transit and non-motorized transportation, as focus group participants, and as interview subjects. Young people are emerging as legitimate subjects of study in the field of transportation behaviour, and as research participants in the creation of educational interventions that affect attitudes and perceptions of alternative transportation modes. Qualitative research methods such as focus groups and participatory action research are well-suited to this type of exploratory research for this group, particularly when the boundary ages of the demographic are variable. The broad age category provides the opportunity to study young people's travel behaviour across the period of time concurrent with their maturation and increasing independence.

2.5 Research methodology

Transportation research is slowly moving towards fuller, more detailed, and more accurate knowledge through a combination of qualitative and quantitative research methods. These factors make a study of the social travel patterns of youth and young adults, using qualitative methods, especially timely. Researchers are modifying their traditional roles from the "knowers" of knowledge to the "learners"; participants' unique knowledge of the transportation system is being collected and shared. While transportation authorities still use external market researchers for focus groups in the interest of objectivity, the distance between the transportation researcher and the research participant is often lessened. This is particularly evident in PAR, as the participants are treated as co-researchers, help develop the research process, and create materials disseminating the research results.

Since it is difficult to define youth as an age category, thinking of them as groups within a larger age category acknowledges the stages of development. Teens are still living at home and dependent on their parents; youth are more independent socially and financially, and may have access to a car; young adults may be living on their own, used to travelling independently, and have had more exposure to their own city as well as national or international cities. These stages could give rise to completely different travel patterns.

2.5.1 Partners

TransLink held focus groups as part of the planning process for the South of Fraser Area Transit Plan, which will be complete by the end of summer 2007. They recruited South of Fraser teens and youth for focus groups to discuss current routes taken, key destinations, and problems encountered in taking transit at various times of the day or night. For my study, I decided to recruit participants for youth and young adults in two different locations, Vancouver and Surrey. This would facilitate a comparison between Vancouver and South of Fraser youth social networks and travel patterns, which we expected to be quite different due to their geographical and land uses differences (see Figure 2.1). TransLink funded the recruitment of participants, honorariums for the participants, scheduling of focus group sessions, and recording of the sessions.

2.5.2 Methods

For this study, I used two research methods, focus groups and social network mapping. I felt that focus groups would allow an exploration of the social networks and social travel behaviour of youth and young adults. In order to relate the social networks and travel behaviour to Vancouver's regional geography, I used social network mapping. This allowed me to identify areas of concentration for social activities, as well as travel patterns in the region.

A pilot focus group for young adults was held at the University of British Columbia in December 2006; participants were students at the School of Community and Regional Planning. Following the pilot focus group and the completion of the Ethical Review process at UBC, four focus groups were planned:

- Vancouver Youth aged 17-21
- South of Fraser Youth aged 17-21
- Vancouver Young Adults aged 22-25
- South of Fraser Young Adults aged 22-25

Focus group participants were recruited by Mustel Group, a firm specializing in quantitative and qualitative research. Mustel Group was instrumental in recruiting participants for the focus groups held by TransLink in May 2006. Participants had to be residents of Vancouver or one of the South of Fraser municipalities (Delta, Surrey, White Rock, Langley City, and Langley Township). Each focus group was to have 6-8 participants, with an equal number of males and females. Participants had to bike, walk, and/or take transit as their main mode of transportation. They could use a car (or get a ride) occasionally, but no more than once a week.

Participants were randomly recruited using telephone listings. Mustel Group also keeps a list of survey participants who are willing to participate in future studies; some participants were recruited using this list. All the participants were contacted by phone in the first two weeks of January for focus groups in February, and if they agreed to be part of a focus group, they were e-mailed detailed information according to the UBC Ethical Review process. This included a letter of initial contact, explaining the project and giving contact information for myself and my research supervisor, an informed consent form, and a discussion guide (see Appendix). Participants were required to read and sign the consent form before the focus groups began; those under the age of nineteen were required to obtain parental consent. The focus groups were held in two different locations: False Creek Community Centre in Vancouver, and White Spot Restaurant in Scottsdale on the Delta-Surrey border. Both were easily accessible by transit and participants were provided with detailed directions. The groups were tape recorded for later transcription, and a note taker was also present.

When the participants arrived for the focus groups, they were given a sheet of paper and asked to list some of the places they went to shop, for entertainment, to visit friends, and to participate in sports, as well as their home, work, and school locations (see Appendix). This served as a preliminary technique to get them thinking about where they travelled, and was useful while waiting for all the participants to arrive. The pilot focus group revealed the difficulties in getting everyone to draw on the map at the same time, and the TransLink focus groups showed that some young people had trouble finding their homes and transit routes on the map. When all the participants had arrived, I explained what they would be doing, and asked if there were any questions about the research, privacy concerns, or the methods they would be using. I then asked them to turn in their informed consent forms. Participants who had arrived early or on time, and had finished listing their activities, then began the social mapping exercise while the others finished their lists.

The map of the Vancouver region was placed on a large table so that the participants could sit around it. Participants were asked to mark on the map social activity locations with coloured markers. At the same time, participants drew their travel patterns to and from the various destinations. Each participant had their own unique colour of marker, labeled with her name, which allowed us to visually separate their social networks and travel patterns. This process created a composite map for each focus group that collectively represented their social networks, within about forty minutes. The process of creating the maps generated ideas and stimulated critical

thinking about social travel. The map remained on the table, where it served as a catalyst for discussion...

During the social mapping process, the participants began to think about how social activities and transportation are linked in their own lives. The collective map served as a starting point for the second exercise, focus group discussions on their daily and weekly routines. I guided the discussion using pre-determined questions on the participants' social activities, their mode of travel to these activities, and their experience of traveling (see Appendix). The note-taker attempted to capture the main themes and issues raised by the participants, as a backup in case the recording failed. I allowed the conversation to flow naturally, raising issues if the participants did not raise them. The focus group discussion lasted about forty-five minutes to one hour. At the end of the discussion, each participant was given an honorarium.

Analysis of the maps included transferring them into Adobe Illustrator to identify areas of concentration of social activities, social contacts, shopping, and entertainment. Analysis of the focus group discussions included transcribing the notes from each focus group, and reviewing the tapes of each group, transcribing them in part.

2.5.3 Difficulty recruiting youth and young adults

When Weston (2005) explored the factors that facilitate and prevent young teens from travelling independently, she overcame the difficulty in recruiting teens for her study by using a recruitment firm to create a list of thirteen- and fifteen-year olds (p84). Mustel Group, the research firm I engaged, had previously recruited young people for TransLink and other clients. The two youth focus groups were not a problem and filled up quickly; similarly, in Weston's research her teen participants were likely still dependents in their parents' homes, and could be easily reached. But recruiting young adults proved to be much more difficult. They are not as accessible by telephone, perhaps because most have cell phones and are no longer listed in the residential phone directory, Mustel's main source of participants. They are also less likely to respond to the firm's online surveys and studies; the firm keeps a database of their respondents who have requested to be involved in other research in the future. Eight participants were finally recruited for the Vancouver young adult group, but only one for the South of Fraser young adult group. Because of the difficulty in recruiting participants, I did not hold a focus group for the latter; instead, I interviewed the sole available recruit for this group and had him do the social mapping exercise.

2.5.4 Ethical considerations and the role of the researcher

The participants were fully informed of the research project, their rights and the methods of research. In the data analysis, the participants are identified by an alias. The recording of the sessions was explained to the participants and they were given the option of not participating for privacy reasons. The tapes were used for analysis only, and after the final report is presented, they will be destroyed.

The role of the researcher was to facilitate dialogue on social travel. Therefore the discussion guide was designed to raise issues around transit use, ease of travel, and social determinants of travel. However, the questions were carefully written so as not to sound biased; rather, they attempted to draw information out of the participants based on the social mapping exercise. The researcher attempted to remain neutral on the topics discussed, particularly as the question of social travel is so new and this research is exploratory in nature.

2.5.5 Anticipated outcomes

Based on TransLink's focus groups, I anticipated several outcomes for this study. One possible difficulty in collecting this research was the reluctance of young people to open up to strangers who are considerably older than them. The TransLink youth focus groups showed that withdrawn participants could be encouraged to answer specific questions, so my discussion guide was written with open-ended questions in order to encourage participation. I expected that the social mapping exercise would create a feeling of familiarity with each other so that the focus group discussions would be more natural.

The TransLink youth focus groups and the pilot test for this study all showed that participants' social lives were affected by travel. They showed that participants tended to socialize along transportation corridors. Among the issues raised were route infrequency and unreliability, night service, the inaccessibility of transit schedules, the unfriendliness of transit drivers, and the targeting of youth for fare evasion and loitering. Despite travelling at night and in isolated locations, participants were not concerned for their own safety. There were marked differences between the teen age group and the youth age group: the younger group was often not allowed to travel on their own without parents and the older group was relatively free to explore the city. This resulted in the younger group having little understanding of regional geography, while the older group understood the layout of the region and spoke of larger issues such as density, land use, and employment destinations. The younger group was also more likely to want to own a car, and participants frequently believed they

would own a car as soon as they turned sixteen. They seemed to be more affected by peer pressure and image when making transportation decisions. The older group showed more variety in their attitudes towards car ownership, with many saying they couldn't afford to buy one, that the cost of gas and insurance were prohibitive, or that they simply didn't want to buy one. Older participants had often lived in different cities or provinces, and their knowledge of the larger issues of climate change, efficient transit systems in other cities or countries, and urban planning considerably impacted their travel decisions. I expected similar results in my study.

Based on the TransLink focus groups, I expected to see differences between the age groups in terms of social activities and destinations, the effects of peer pressure, the act of accepting rides, and time constraints on their lives due to part-time work. I opted to study only youth and young adults because they would have an increased tendency to travel on their own without parental consent. The young adult age group had not been covered in TransLink's research, with adult groups starting at age 25. I expected this group to show conflicts with increased mobility, more adult social tendencies and the desire to own a car. I expected that the time of day would influence each age group, with younger participants having to be home by a certain time and older participants having virtually no constraints. Since both the South Fraser Area Transit Plan (2000) and the Regional Travel Survey (2003) acknowledged youth as representing a major portion of their ridership, I assumed that a significant portion of the focus group participants would be transit users. I did not expect the participants to have previously thought about socializing in terms of transportation before their involvement in this study.

Chapter 3

Research results from focus groups on social travel patterns

Qualitative research with youth and young adults helped to draw out a range of attitudes towards modes of transportation, travel behaviour and social activity locations. In particular, youth and young adults are beginning to see things differently than their parents, becoming more independent, and doing more on their own with friends. They are old enough to live on their own, and their transportation decisions are unique to this liminal stage in their lives. Getting rides from parents, taking transit, walking, and cycling are the main modes of transportation used, and car ownership for these two age groups is becoming a more attractive mode choice as they make the transition to adulthood. How does transportation affect the social travel patterns of youth and young adults?

3.1 Participant characteristics

There were 21 participants in the sample, broken up into five groups (including the pilot group). Because of the difficulty recruiting South of Fraser young adults, I decided to include the pilot group in my analysis. The pilot group, all of whom were young adults and students in the School of Community and Regional Planning, raised themes similar to others of their age group. Table 3.1 summarizes the participant demographics in each group, and Figure 3.2 shows their residential locations in the region.

Focus Group	# of partic.	Age	Male/ Female	School/Work	Method of transit payment	# of years living in the region
Vancouver Youth (aged 17-21)	5	17	F	Kitsilano High School	Tickets	12 yrs. (Los Angeles)
		19	F	UBC	U-Pass	19 yrs.
		19	F	Langara College	Sticker/ monthly pass	5 yrs. (Korea)
		19	F	Emily Carr Institute of Art and Design	Monthly pass	19 yrs.
		21	M	Working full-time	Tickets	19 yrs.
Surrey Youth (aged 17-21)	5	18	M	Art Institute of Vancouver (Burnaby)	Monthly pass	18 yrs.
		19	F	Working full-time	Monthly pass	19 yrs. (Burnaby)
		19	F	Working full-time	Tickets	19 yrs. (Vancouver)
		19	M	Douglas College (New Westminster)	Sticker/ monthly pass	19 yrs.
		19	M	UBC	U-Pass	19 yrs.
Vancouver Young Adults (aged 22-25) (Pilot)	5	22	F	UBC	U-Pass	1.5 yrs. (Montreal)
		24	M	UBC	U-Pass	1.5 yrs. (Timmins)
		24	F	UBC	U-Pass	24 yrs.
		25	F	UBC	U-Pass	0.5 yrs. (Oregon)
		25	M	UBC	U-Pass	1.5 yrs. (Victoria)
Vancouver Young Adults (aged 22-25)	5	22	M	Working part-time	Tickets	22 yrs.
		22	M	UBC	U-Pass	22 yrs.
		24	M	Langara College, working full-time	Sticker/ monthly pass	13 yrs.
		24	F	Simon Fraser University (Surrey)	U-Pass	7 yrs. (Alberta)
		24	F	UBC, working part-time	U-Pass	6 yrs. (Toronto)
Surrey Young Adults (aged 22-25)	1	24	M	UBC, working part-time	U-Pass	24 yrs.
Total Sample Size	21					

Table 3.1 Participant demographics. The U-Pass, for unlimited travel throughout the region, is included in student fees for UBC and SFU students. Langara and Douglas students get special discount stickers for their student cards, allowing them to use a one-zone pass in all zones (see Figure 3.1). For participants who were not born in the region, their former place of residence is listed in brackets.

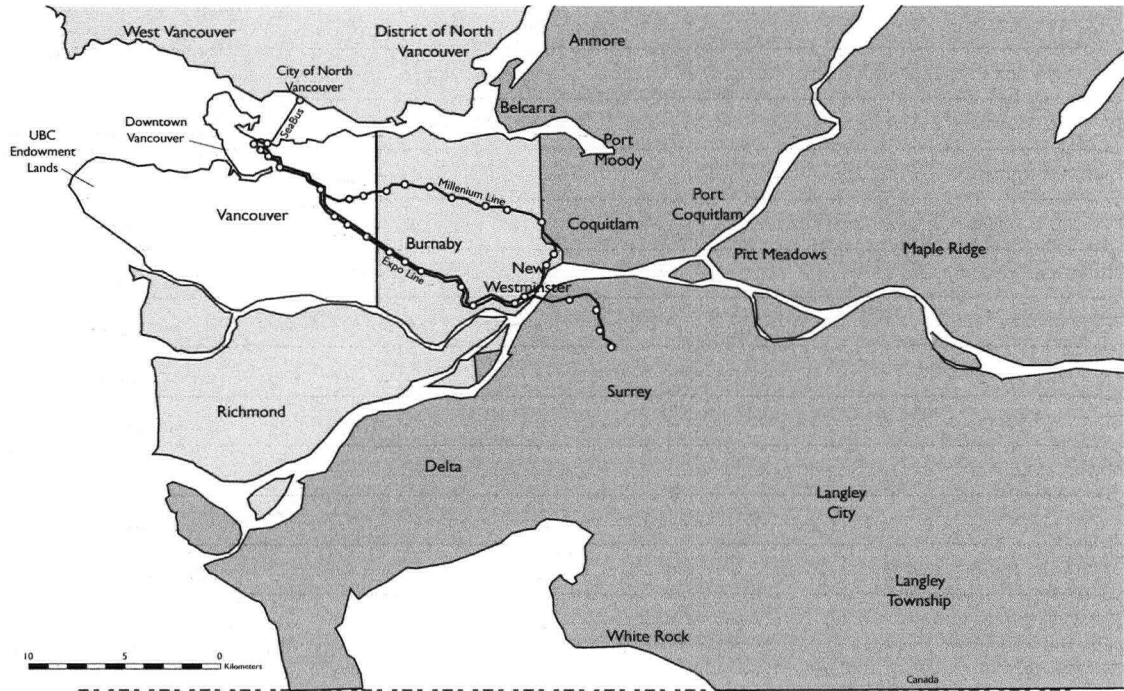


Figure 3.1 Fare zone map. Zone 1 is white, Zone 2 is pale grey, and Zone 3 is dark grey. Fares vary depending on whether one is travelling through one, two, or three zones, with one zone being the cheapest.

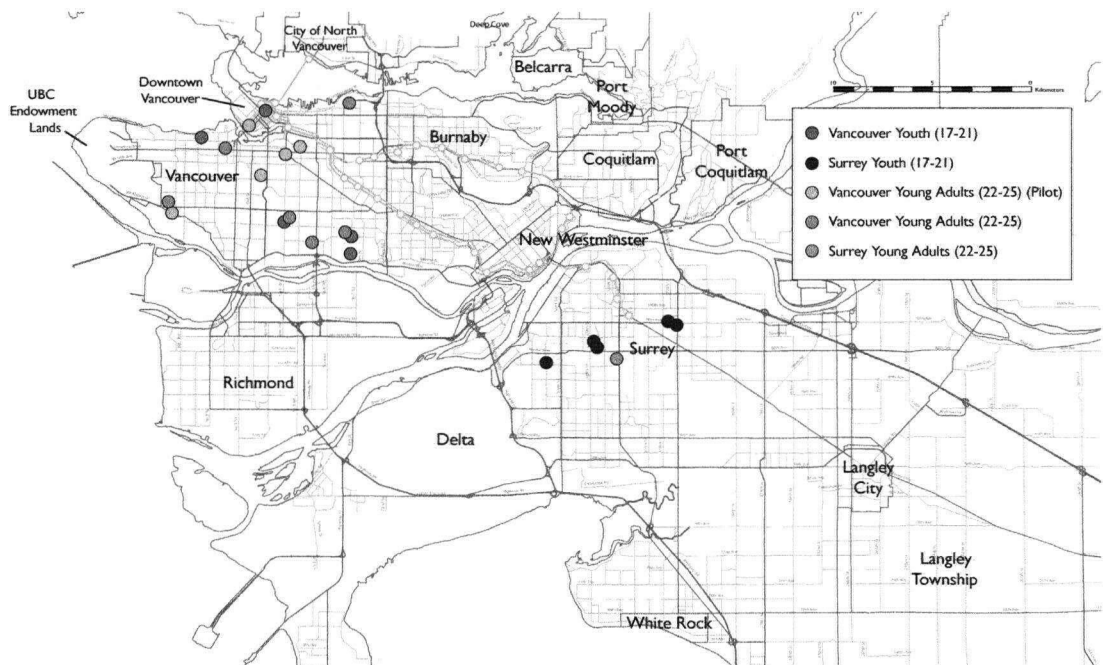


Figure 3.2 Residential locations of the participants.

3.2 Common themes

Several themes were raised during the discussions and will be prevalent in the following analysis:

- Concentration of social activity destinations in a few locations: downtown, Commercial Drive, 4th Avenue, Broadway Avenue, and Metrotown
- Transit frequency and reliability
- Evening and night service
- Weather
- Planning and coordination of trips
- Awareness of broader issues surrounding transportation
- Car ownership

These are listed in the order of most to least predominant in the focus group discussions.

3.2.1 Social activity destination patterns

The concentration of social activities in the Vancouver region shows the young age of the city, which has not yet developed many dense, mixed-use streets. Virtually all of the social activities young

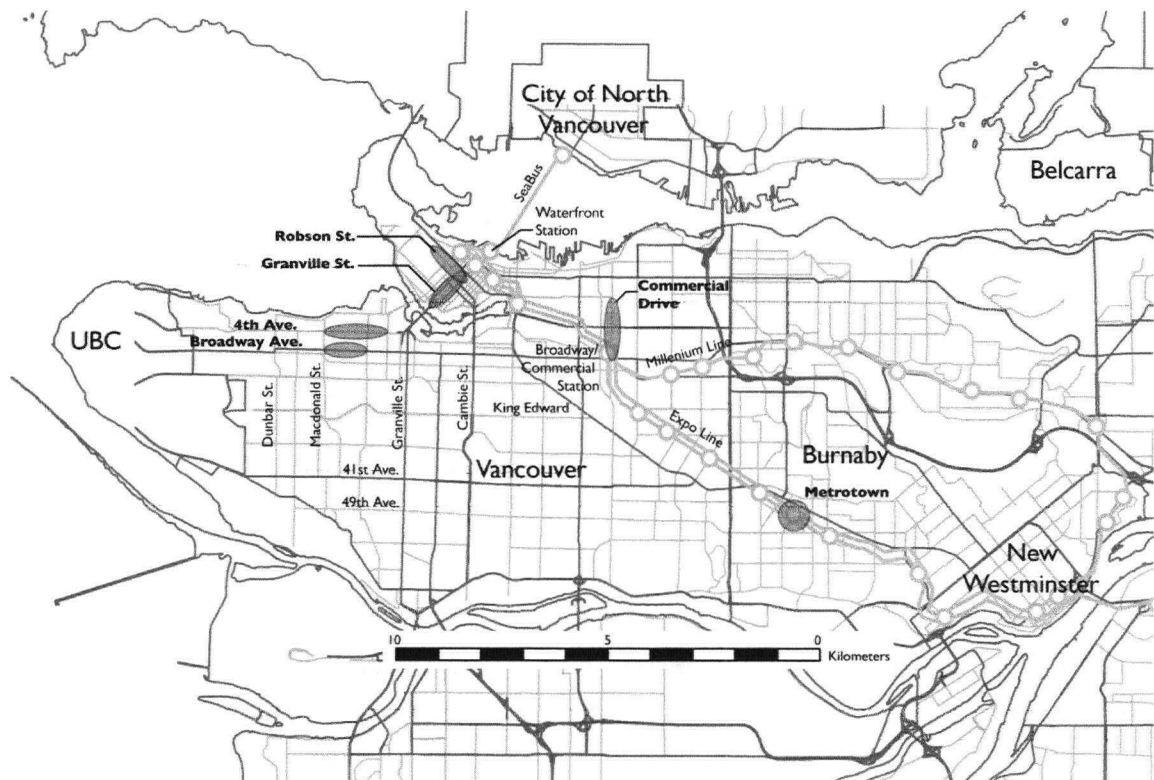


Figure 3.3 The main social activity areas: Downtown (Granville and Robson Streets), Commercial Drive, 4th Avenue, Broadway Avenue, and Metrotown.

people mapped and mentioned in the focus groups could be grouped into five main areas: the downtown peninsula, Commercial Drive, 4th Avenue, Broadway Avenue, and the Metropolis mall at Metrotown Station. Four of five of these are in Vancouver; Metrotown in Burnaby is the only exception. A closer look at these activity areas (see Figure 3.3) reveals how small each of them is; most are four-to-ten-block stretches of the street.

Other social activity locations were dispersed throughout the region: the homes of friends and family, and outdoor recreational destinations such as Grouse Mountain, Cypress, and Lynn Canyon. The participants revealed a wealth of information on social travel to these destinations (see Figures 3.4-3.7). Because the social activity corridors were all located outside their municipality, Surrey youth and young adults travelled much further than Vancouver youth for social purposes. Vancouver young adults in this study travelled much further than Vancouver youth.

Downtown Vancouver was the main destination for social activities such as shopping and entertainment. All the participants went downtown frequently on evenings and weekends to the two major shopping streets, Granville and Robson, or the underground mall, Pacific Centre. Most of the participants marked the two downtown multiplex theatres, Tinseltown and Paramount, as social destinations. Late night activity is concentrated at bars and clubs along Granville Street, which features a variety of venues for live music, dancing, and social drinking.

Metrotown, the common term for the huge Metropolis mall at Metrotown SkyTrain station in Burnaby, is a popular destination for shopping, restaurants and movies. Ten of the twenty-one participants marked this destination, with an interesting geographical breakdown. All of the Surrey youth and young adults went to Metrotown regularly, while only three Vancouver youths did; only one young adult from Vancouver marked Metrotown as a destination. This is likely due to two factors: first, the Surrey contingent found Metrotown easy to get to because it is on the SkyTrain, and it is the closest shopping destination on rapid transit. Secondly, Vancouver youth may have other places to hang out closer to where they live. For example, three Vancouver youths marked Oakridge Mall as a destination, which was closer to their houses than either Metrotown or Oakridge. Other Vancouver youth preferred downtown. Surrey youth did some shopping and socializing at local malls, including Surrey Central, Strawberry Hill, Guildford Centre, and big box stores on 72nd Avenue and 152nd (Scott Road), but not as often as going to Metrotown or downtown.

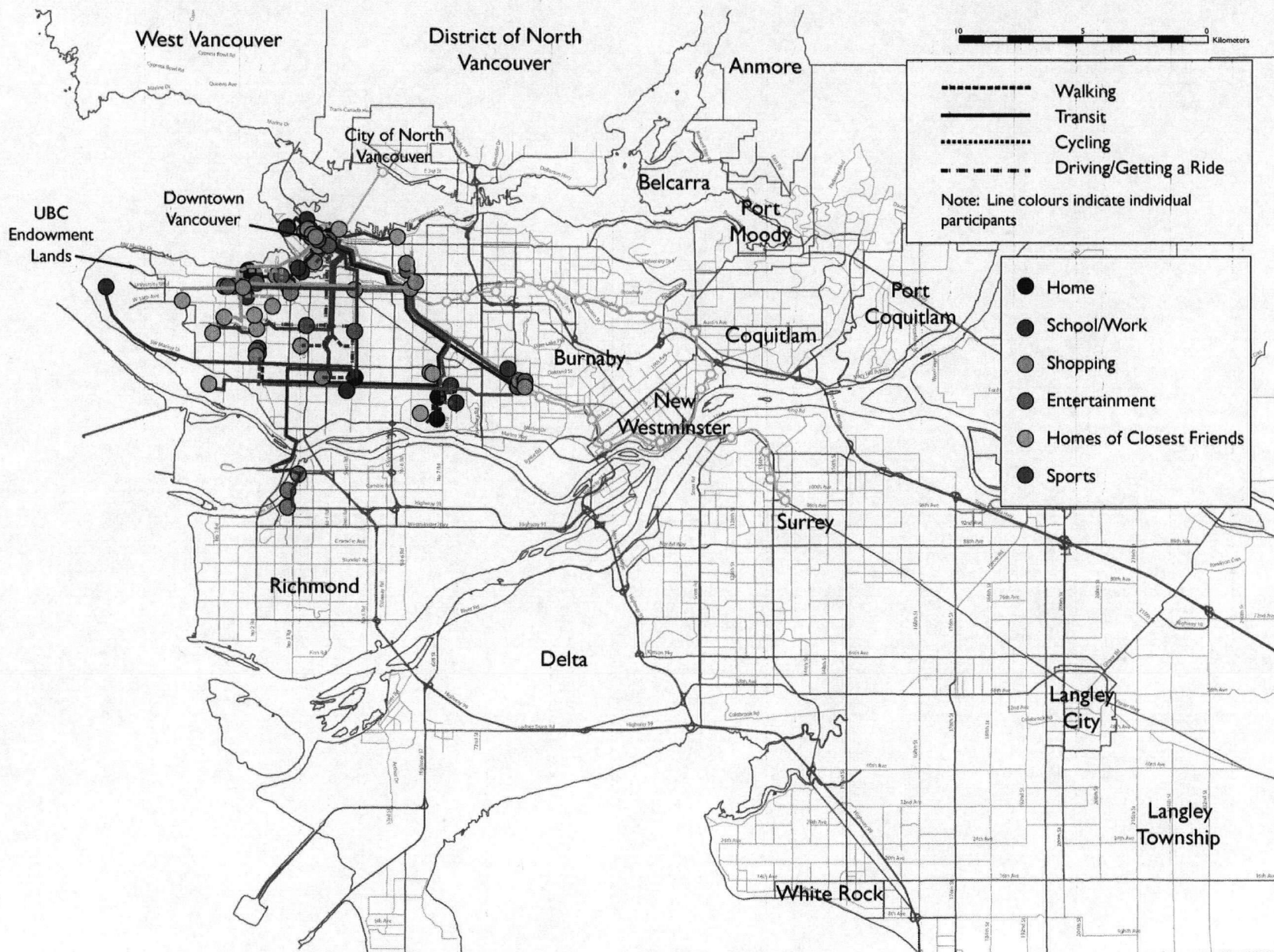


Figure 3.4 Social travel patterns of Vancouver Youth (aged 17-21)

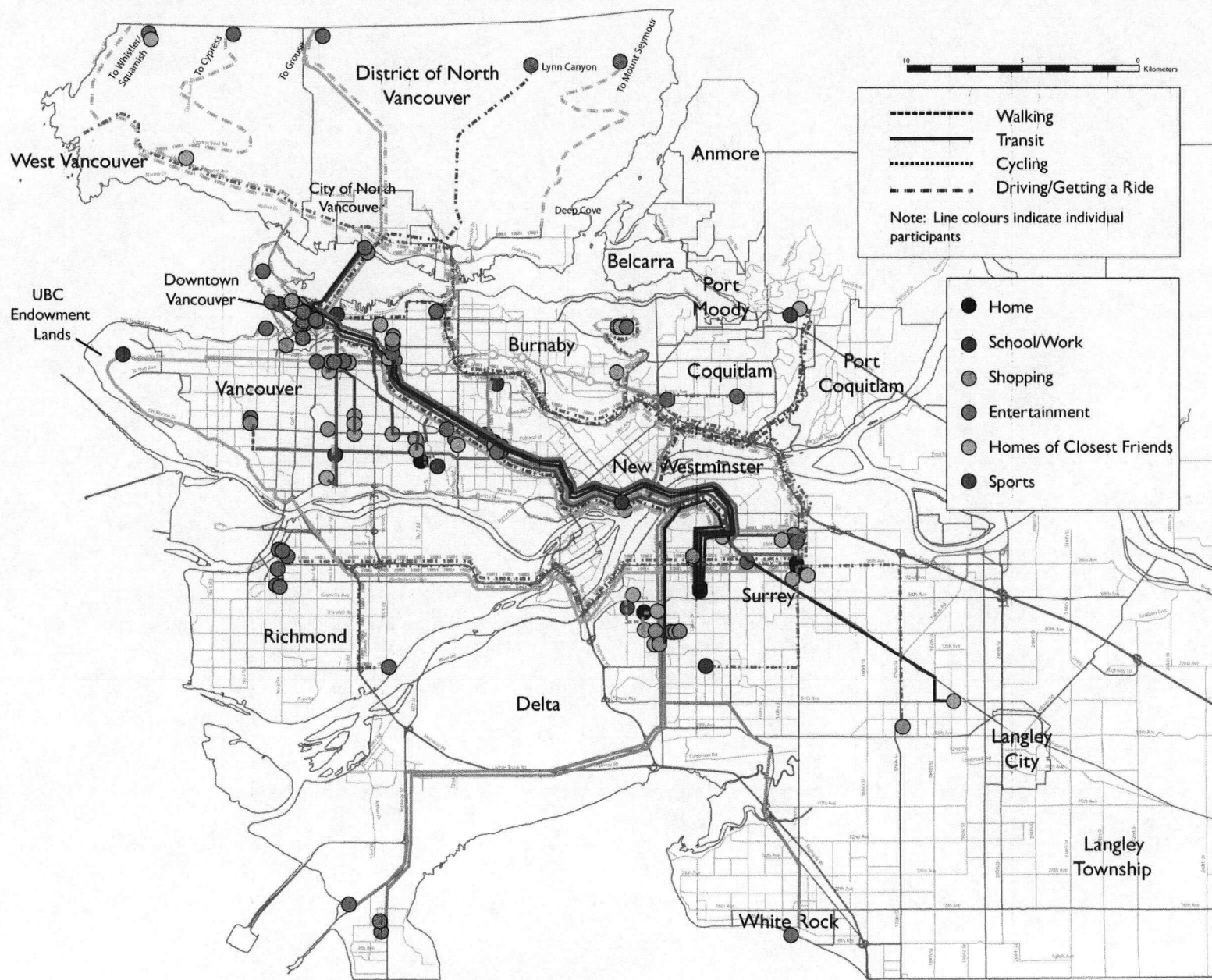


Figure 3.5 Social travel patterns of Surrey Youth (aged 17-21)

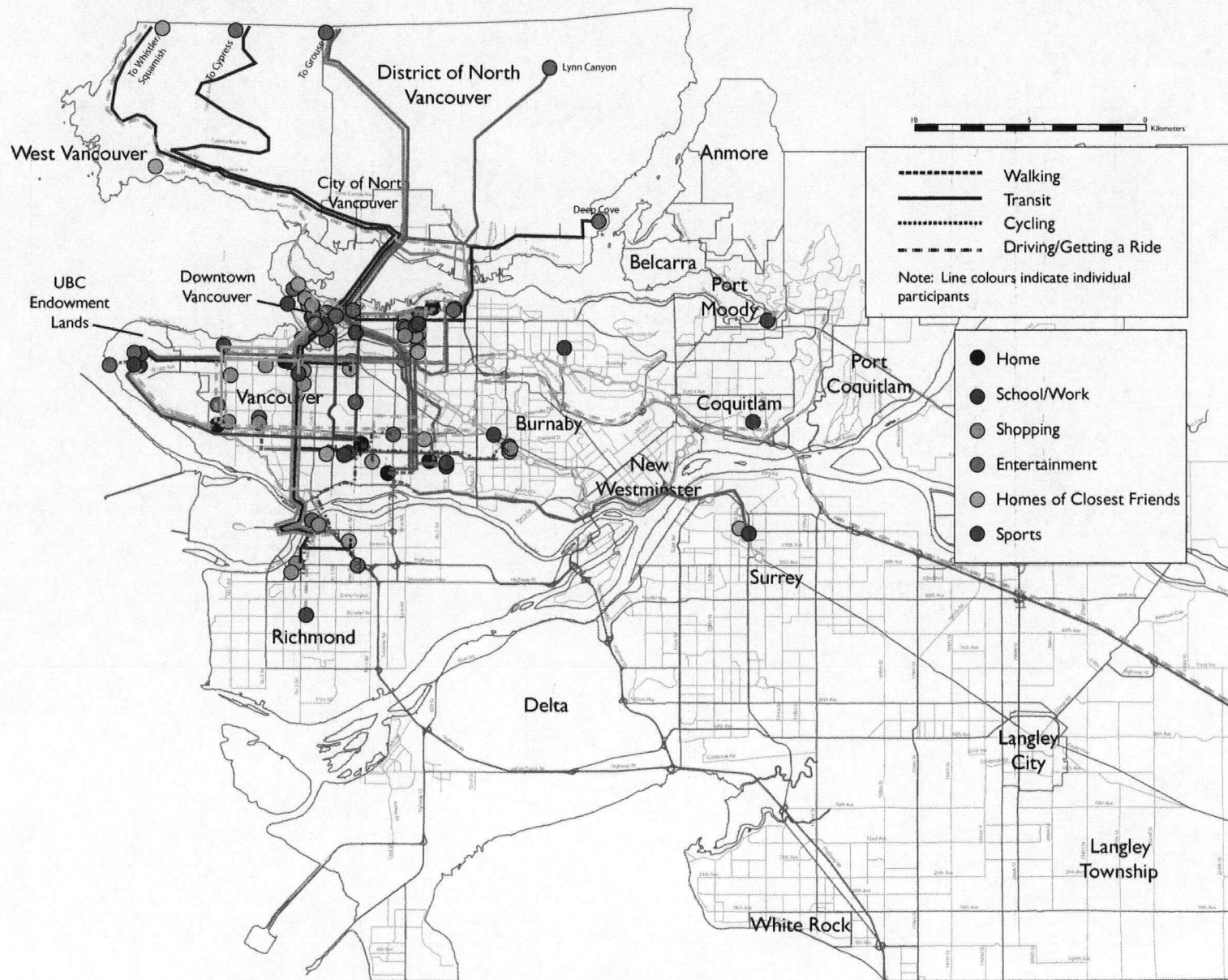


Figure 3.6 Social travel patterns of Vancouver Young Adults (aged 22-25)

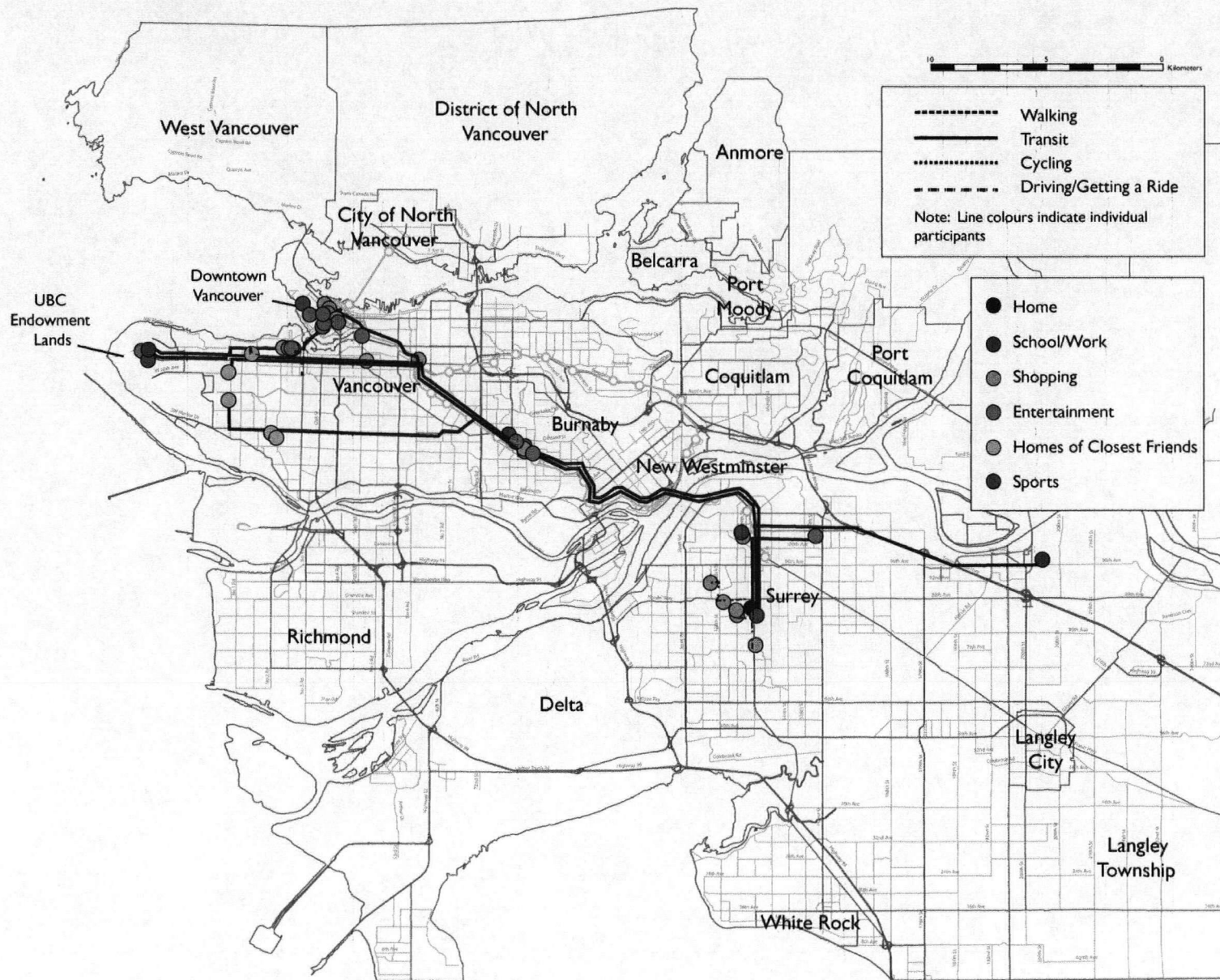


Figure 3.7 Social travel patterns of Surrey Young Adults (aged 22-25)

Other popular destinations were Broadway Avenue between Burrard and MacDonald Streets (shopping and restaurants); Commercial Drive between Broadway and Georgia Streets (shopping, bars, and restaurants); and 4th Avenue between Burrard and MacDonald Streets (shopping, restaurants, and the Fifth Avenue theatre). When asked where they shopped or socialized, the response would often simply be "Commercial" or "Broadway." About a quarter of the participants (six in total) mapped Richmond's No. 3 Road as an important social destination for shopping (Richmond Centre, big box stores, Chinese malls) and movies (Riverport Theatre). One participant regularly went to the River Rock Casino on weekend nights. Four of these participants were Chinese; it is assumed that with the high percentage of Chinese population and availability of Asian foods, the wide array of consumer products and the popularity of these destinations in the Chinese community were contributing factors. Participants taking transit, even from relatively close residential locations such as 41st Avenue, noted that Richmond was often difficult to get to:

If I was driving, it would be just down Marine Drive and that would be really close, but I have to take the 41st to Granville, and then I take the 98. (Jocelyn, 19, Vancouver)

For a grid, Richmond is really hard to navigate. (Rick, 24, Vancouver)

It's inconvenient to take two buses and then SkyTrain, and still be in the middle of nowhere in Richmond and have to walk. (Larry, 19, Surrey)

The predominance of downtown as a destination was expected, as well as the concentration of activities on Granville and Robson Streets, since this can be observed on any night downtown. Friday and Saturday nights in particular show the popularity of Granville Street's bars and clubs among the region's youth and young adults. Indeed, when asked specifically where they went downtown, the participants often simply responded, "Robson," or "Granville." Social activities do not typically spread to other streets or neighbourhoods downtown, with the small exception of Denman and Davie Streets, which are often lively because of their proximity to the beach at English Bay and their assortment of restaurants. None of the participants mentioned Denman or Davie Streets as a destination, and only a couple mentioned the beach. The predominance of chain stores on Granville and Robson Streets, as well as in Pacific Centre, does raise the question of why so many of the participants chose to shop here despite living closer to shopping malls in their own neighbourhoods. However, Granville and Robson Streets are the closest things to 24-hour streets in the Vancouver region, so it is not surprising that youth and young adults choose to hang out here at night.

Downtown, Metrotown and Commercial Drive were popular meeting points as well; most of the participants did not own cars, nor did their friends. So a typical evening out would include meeting up with friends somewhere. The tendency to socialize along corridors, such as Commercial Drive, Granville and Robson Streets, is aided by transit; all of these corridors are well-served by multiple routes. Granville Street has traditionally been used as a transit mall, where all of the buses run; currently this pattern has changed slightly because of underground construction of the new Canada Line rapid transit line and the displacement of bus routes to the adjacent Seymour and Howe streets. Commercial Drive and Metrotown are both served by SkyTrain stations. Broadway and 4th Avenues are also very accessible, with multiple local-stop and express buses. However, there are differences between the Vancouver and Surrey focus groups in terms of accessibility.

As previously mentioned, Surrey youth and young adults favoured shopping and socializing at Metrotown and Downtown because the locations are easy to get to, involving a local bus ride to King George or Surrey Central SkyTrain stations, then transferring to the SkyTrain (see Table 3.2).

From	To	Approximate Travel Time
King George Station	Waterfront Station	39 min.
King George Station	Metrotown Station	22 min.
King George Station	Broadway/Commercial Station	30 min.
UBC	Granville Street	30 min.
UBC	Downtown	30-45 min.
Granville Street	Commercial Drive	15-20 min.

Table 3.2 Some approximate travel times

Travel time from King George Station to Metrotown is only about 22 minutes; to Downtown, 39 minutes. Commercial Drive is also an easy trip for this group, with the SkyTrain ride from Surrey Central to Commercial/Broadway station accomplished in 30 minutes. In contrast, Vancouver youth and young adults did not go to Metrotown or Commercial Drive as often, likely due to the long travel times. For example, for students living in Vancouver west of Granville Street, travelling to Commercial Drive takes about 50 minutes and to Metrotown just over an hour; for a participant living at Granville and Broadway, the trip to Commercial Drive is only 15 minutes but transferring to the SkyTrain to get to Metrotown would take another 10 minutes. For participants living within 10

minutes of Granville Street, it would much easier to take a direct bus downtown, which could take under 15 minutes in many cases.

Participants living south of Broadway Avenue (in South Vancouver along 41st Avenue) or near Dunbar Street to the west, were particularly disadvantaged by poor transit service and fewer route options; one participant, whose residence looked close to Metrotown on the map, admitted that she rarely went there because “I still have to take two buses and walk a lot.” (Ho-Sun, 19, Vancouver). Anyone who lived between major transit routes faced accessibility issues because they would need to walk about 15-20 minutes to get to a major route. In Vancouver, transit corridors with frequent service and multiple routes exist along Broadway, 25th Avenue (King Edward), 41st Avenue, and 49th Avenue; MacDonald, Granville, Main, Cambie, and Fraser Streets (see Figure 3.8).

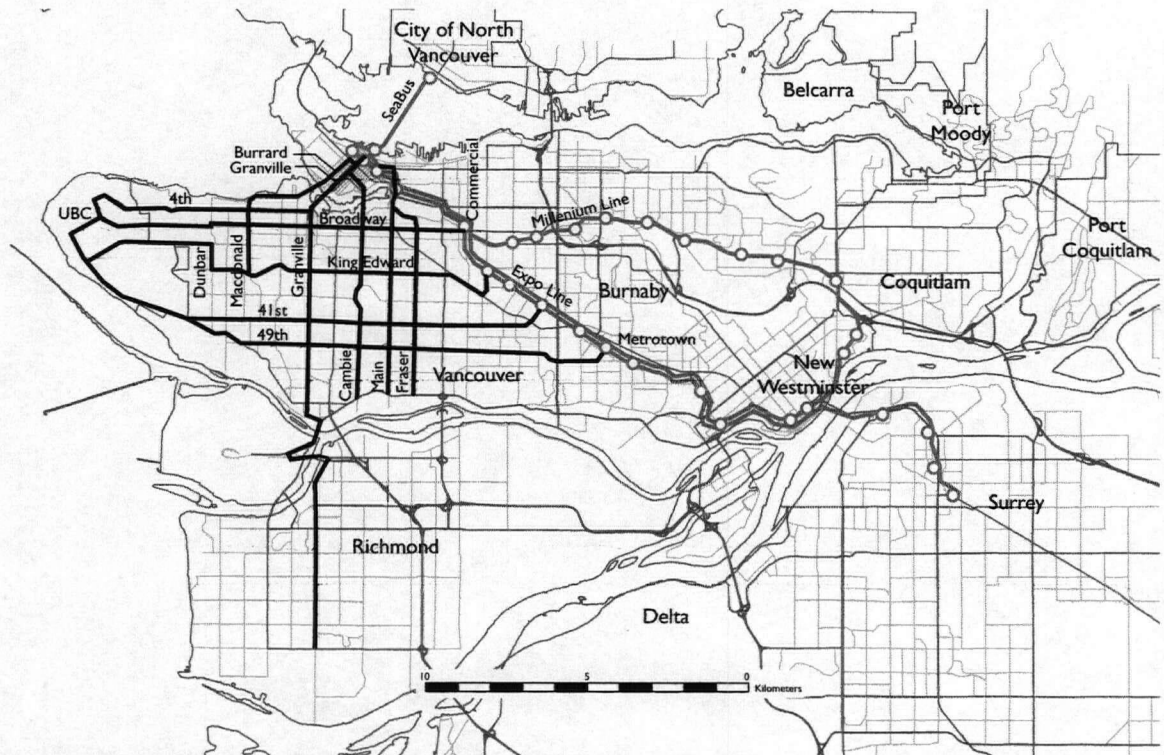


Figure 3.8 Transit corridors in the GVRD. Bus routes are shown in black and SkyTrain lines in red.

Anyone living more than a ten-minute walk from these corridors found transit difficult.

Sometimes, even if I want to take transit, even for some central location, there's no bus route that goes right there. Any bus you take you have to walk, like, 20 blocks in. Then, you know, you're just like, I'm driving. We've got

major routes on 41st, 49th, King Ed, and Broadway, and that's it. There's a big gap in between, so it really gets annoying. (Keith, 22, Vancouver)

One participant, who lived about a 20-minute walk from Commercial Drive, admitted that,

It's really hard to get from where I am to places on Commercial, and it doesn't make a lot of sense on the bus because of the amount of time you wait at the bus stop, it just makes sense to walk. You'll get there before the bus. (Pete 22, Vancouver)

Nevertheless, meeting friends along well-served transit corridors was a popular option: several participants noted that they met friends daily, downtown or on Commercial Drive. The maps also revealed an interesting pattern: half of the participants (11) socialized at friends' houses. These friends lived either in their own neighbourhoods, or in a location that was transit-accessible. The other half of the participants (10) never socialized at friends' houses, because they did not live nearby or in easily-accessible locations. They chose instead to meet these friends at one of the five main social activity areas: downtown, Commercial Drive, 4th Avenue, Broadway Avenue, and Metrotown. However, this was often complicated by transit frequency and reliability, especially when their friends were also travelling by transit.

3.2.2 Transit frequency and reliability

Transit frequency and reliability are the most influential issues around youth social travel within the region. Every one of the participants had stories to tell about missing buses late at night, waiting up to an hour for a transfer, and being late for social activities. The pilot group participants mentioned the unreliability of buses to the UBC campus (routes 25, 41 and the express 99 B-Line along Broadway) due to road construction, and an Emily Carr student mentioned frequent technical problems with the SkyTrain. But for the most part, participants spoke of the reliability and frequency of buses as a chronic, ongoing problem:

I've been saying I'm gonna do this forever, I want to do a nice spreadsheet, put it together, do my trip planner for every day, and just like do a plus or minus for each trip, and then like send it to TransLink and be like, all right, you're off by like, and I know they are, off by like half an hour. My trip is supposed to take 40 minutes, and in the last two weeks it's taken me less than 50 minutes once...and the other times it was an hour and a half, an hour and ten minutes...one time I left work at 5 and got home at almost 7, so that's almost two hours. (Rick, 24, Vancouver)

I find that every time you have a transfer, you have to add the plus or minus, whatever the frequency is of the bus you're trying to catch, because you should almost count on missing that bus. So say that bus comes every half hour,

and you've got to catch another one that also comes every half an hour, expect to be an hour late to where you're going. (Victoria, 24, Vancouver)

The buses that are less frequent, like every 30 minutes, are that way because there aren't many people taking it; so if they arrive early at their stop, they cannot wait, so that just makes things worse. (Ho-Sun, 19, Vancouver)

It's always late. It's *always* late. I don't think I've ever come home...like Broadway, the B-line is never late, but then when I get back to Surrey and take the bus back to my house, I don't think it's ever been on time...you go there expecting to wait. You're like, it's probably going to be late, like every other day. (Victor, 19, Surrey)

Sometimes you get there five minutes early and you still miss your bus. (Karla, 17, Vancouver)

The tiny inconveniences can definitely throw you off hugely...like today SkyTrain got held outside Broadway, then I missed the bus, and then there was construction further along Broadway, and the next thing I know I'm 20 minutes late. (George, 24, Surrey)

Maybe I'm just horribly unlucky but it seems like everywhere I want to go is on a horribly packed bus, and so I always miss my timing and I always end up waiting for way longer than I should. (Victoria, 24, Vancouver)

Meeting friends, who also took transit, under these circumstances was often difficult:

Sometimes you're late and your friends will get mad at you...I put my clocks five minutes ahead because I hate walking out there and just missing the bus. (Karen, 19, Surrey)

You're trying to get somewhere and you're on a schedule, and it matters that you get there, because once you miss one bus, then you know, you miss the next one and then the next one, and it can be...when you're trying to do a trip plan it's like plus or minus an hour. (Victoria, 24, Vancouver)

This undoubtedly impacts the social networks and activities of young people:

When asked which places on the map were easy or difficult to get to, transfers appeared to be a major barrier: one Surrey participant said that he now drives to Douglas College in New Westminster because he had to transfer twice on buses and SkyTrain. Another participant, who lived on 41st Avenue, took three buses each day to get to Emily Carr Institute of Art and Design on Granville Island, saying, "It's actually in the same city but it takes longer than for people outside the city." (Ho-Sun, 19, Vancouver)

Several participants mentioned overcrowding as a significant barrier to using transit; one UBC student even changed her 9am classes to 10am classes in her second year of studies to avoid

morning overcrowding. The popularity of the U-Pass for students has led to significant overcrowding, which many students had experienced:

I frequently have to wait for 8 buses before they'll pick me up...sometimes I can't make it to class. I can catch the 41, 49, 43, 480...I can catch any of these buses, and almost 95% of the time I have to wait for at least one, sometimes I've had to wait for 8 or 10 just to get to school, and I'm like a five-minute drive to school....with the U-Pass it's even worse because all these people park in the area because they want to use their U-Pass. So now there's like a ton of people at my bus stop who don't live in the area. (Victoria, 24; Vancouver)

The issues of frequency and reliability also influenced participants to change from using transit to another travel mode:

At night the buses aren't as frequent, or...if it takes me longer to wait for the bus than to get there, then I just usually drive. (Keith, 22, Vancouver)

Other participants mentioned walking, and a few mentioned cycling, as a viable alternative when frequency was an anticipated problem, i.e. if they knew they would be travelling late at night. But for the most part, long travel distances prohibited the use of these modes. Evening travel and night travel were issues so significant to social travel that they merit their own section.

3.2.3 Evening and night service

Young people are in dire need of viable transportation options for part-time work as well as accessing shopping and entertainment destinations. Most of these activities involve travel either in the evening or at night. Evening bus frequencies are spread out, with local routes often running every 30 minutes (or every 60 minutes in Surrey) after 9pm. Express buses, which run at high frequency during the day (every four minutes for the 99 B-Line along Broadway and the 98 B-Line along Granville) drop down to every 15 minutes after 9pm. Most buses end between midnight and 1am. Twelve Night Buses, which run from downtown to various neighbourhoods, run from 1:30am until 3-4am at a 30-minute frequency. These are widely spread geographically; there is only one Night Bus to Surrey, the N19, and only one serving UBC, the N17 (see Figure 3.9).

The SkyTrain runs very frequently: the Expo Line from Waterfront to King George runs every two-four minutes in the peak hour, dropping to 8 minutes late at night; the last train leaves downtown at 1:15am. The Millennium Line from Waterfront to Vancouver Community College has a slightly lower frequency during the day, but the same 8-minute frequency at night, with the last train leaving downtown at 1:05am.

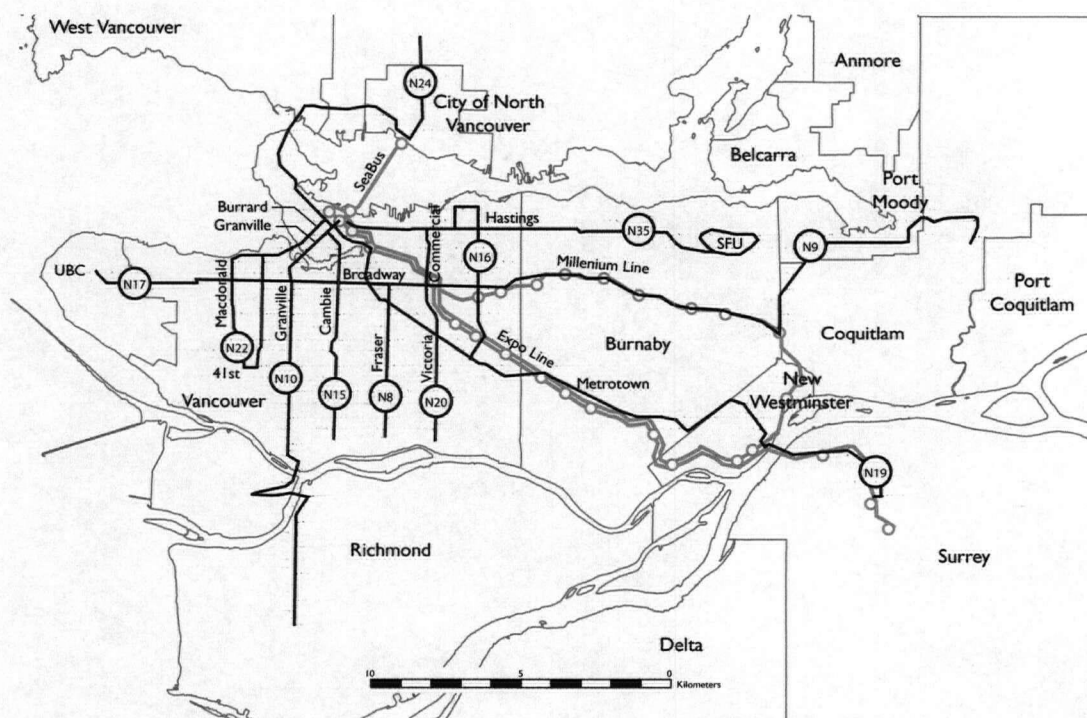


Figure 3.9 Night Bus routes in the GVRD are spaced reasonably in Vancouver, but barely serve the suburban municipalities of Richmond, Surrey, Coquitlam, Port Moody, and North Vancouver. Surrey is the only South of Fraser municipality with a Night Bus.

Many participants expressed difficulties getting to and from work or school on weekday evenings. For example, some had trouble getting home from evening classes:

Tonight if I take the bus home from Langara, I'd be coming back around 9:30 or 10, which is a brutal time to take the bus around there anyway, and there's lots of people waiting out there. (Rick, 24, Vancouver)

George, a young adult from Surrey who attends UBC, said that although he'd like to stay on campus longer for social events, he doesn't leave campus later than 8:30pm, because leaving any later is very difficult for his connection to Surrey buses; as it is, he gets home at 10pm. Keith, a young adult from Vancouver, usually takes transit to UBC but if there was a social event on campus, he would drive to school on that day.

Weekend nights, when young people typically stay out later for social purposes, involve special transportation problems and require drastic solutions. While most participants said that travel times at night were significantly longer because of the decreased frequency, and made adjustments, in many cases these were extreme. Every participant could recall incidents where they missed the last bus home and were forced to walk; every Surrey participant had taken the N19 Night Bus home

to Surrey Central Station, and then walked up to 45 minutes home. Because of the long travel distances between downtown and residential neighbourhoods like Kitsilano, South Vancouver, Dunbar, and the South of Fraser municipalities, taking a cab is not an affordable option (see Table 3.3).

From	To	Approximate Cab Fare
Downtown	Kitsilano	Under \$10
Downtown	UBC	\$25-30
Downtown	Dunbar	\$30
Downtown	South Vancouver	\$30-35
Downtown	Surrey	\$40 and up
Commercial Drive	UBC	\$25
Commercial Drive	Surrey	\$25 and up

Table 3.3. Some approximate cab fares home from some of the main social activity destinations

Almost all of the participants, including those living around Main Street, in Dunbar, South Vancouver, and Surrey, said they would just sleep over at a friend's house rather than take a cab. One young adult from Vancouver hitchhiked home regularly; another would stay out until the buses started running the next morning...

Once or twice I got stranded at Surrey Central...I had the option of calling a cab, but since I never had walked before I tried it...it was about 45 min. (Victor, 19, Surrey)

The buses stop at like 12, so...I'm usually hitchhiking home [from UBC to Dunbar] because there's no all night bus....I can't get to my house after 12, which is ridiculous. It's not terribly safe, but there's no other options because I'm a student and I'm broke, I don't have a job. And because I'm right there, cars don't mind picking me up because they're usually going right by my house. (Victoria, 24, Vancouver)

In Vancouver, the buses stop at like two in the morning, but in Surrey, they stop at like six in the evening. (Mandy, 19, Surrey)

[The 98 B-Line from Richmond] starts around 4am, and usually you're [at the casino] until like 6am. (Pete, 22, Vancouver)

It is often difficult for young people to find out when the last bus leaves downtown, because after 11:30pm TransLink's phone information line switches from a live operator system to an automatic...

computerized system. Participants in TransLink's youth focus groups noted the difficulties in using this service, which works on voice recognition, and has problems recognizing the names of streets or bus routes; ambient noise often makes the service difficult for cell phone users to use (TransLink, 2006). A few participants in this study noted similar difficulties:

Sometimes only TransLink knows when the last bus is, you can't call in. (John, 21, Vancouver)

During the day it's fine because you can talk to an actual person, but come 11:30, you get Chris, so when schedules are on demand it's kind of a paradoxical tragedy because it's when you actually can't access the schedules. (Karla, 17, Vancouver)

However, a couple of participants mentioned carrying transit schedules with them so they would know for sure when the last bus came. Schedules change up to four times per year, so carrying hard copies requires a certain vigilance.

Poor evening service, and the lack of night bus service, within Surrey means that these participants don't socialize in their own neighbourhoods. One Surrey participant, a car owner, said that he wished transit would run later on the weekend, because then he could take it to bars:

One of the reasons I'm not really likely to take transit at night, because let's say I want to go clubbing downtown, then by the time I'm out everything's stopped. (Larry, 19, Surrey)

Other Surrey participants said they would go to Surrey restaurants and explore the area more often if the buses ran later.

Safety was an issue that was barely mentioned by youth and young adults. TransLink's teen and youth focus groups (2006) also revealed this lack of concern about travelling at night, waiting for buses in the dark, and walking home alone at night. Even the young women were not concerned: Karen and Mandy, Surrey youth, would occasionally alter their walking routes home from Surrey Central station because they had been followed a couple of times. But they expressed no concern over these experiences. Jeremy, a 19-year-old Surrey resident, was attacked once at night on the way home, but he is not scared because he has taken years of karate and tae kwon do training. Pete, 22, said he was once beaten up by TransLink police at one of the SkyTrain stations at night, but he shrugged off the experience. George, a 24-year-old from Surrey, was the only participant to acknowledge safety concerns, describing several Surrey locations as "sketchy".

Getting a ride from parents or friends is a relatively minor option for most youth and young adults. Only six of the twenty-one participants mentioned getting rides from parents or friends in the evening or at night; this option is not very popular for routine travel. Getting a ride from a friend only happened when a group of friends was meeting somewhere, and one had a car. Sometimes this was the only way to stay out late at night; one participant admitted, "If I go out clubbing, someone's taking me home." (Karen, 19, Surrey). If one person in the group had a car, the group would arrive using transit, and the car owner would then drive everyone home afterward: "You usually have like two cars and ten people." (Jeremy, 18, Surrey) But ten of the twenty-one participants said their friends all took transit; the car owners in the group chose to use transit regularly. Larry, a Surrey youth who drives, takes transit to school every day and occasionally for social events; Keith, 22, from Vancouver, uses his car mainly in the evenings to go to movies, restaurants, and shopping with friends.

Participants were very unlikely to get rides from parents, unless it was a specific situation: one participant regularly got a ride from his home downtown to his parents' house in Dunbar. Eight of the participants still lived with their parents. Most participants said their parents owned a car and drove to work and for errands. Only two said their parents did not own a car and took transit; one participant acknowledged her parents' car ownership, but said that they also took transit regularly. Some participants would get a ride from parents when the weather was bad; in fact, weather emerged as a significant theme affecting youth and young adult social travel patterns.

3.2.4 Weather

Although Vancouver's climate is mild, with temperature ranges between 0-25 degrees Celsius (32-78 degrees Fahrenheit), it is characterized by heavy rain from October until April. It often rains continuously for up to a week in November, December, and January, making for a very unpleasant experience waiting for buses. The past two winters have been particularly bad, with 29 days of rain in November 2005 and hurricane-force winds and torrential rainstorms in November 2006. The 2006 storms resulted in power outages and felled trees, which disrupted bus routes and SkyTrain service throughout the region for a month afterward. Not surprisingly, weather is a significant factor in young people's socialization patterns. Bus shelters are often inadequate protection from the rain, particularly when there is wind. Poor visibility means that bus drivers often miss passengers waiting at bus stops. Transit waiting and travel times are significantly longer, but even

those who had cars were affected by rain. Some choose to stay in at night rather than brave the elements; most adjust their mode of transportation in some way....

I tend to leave earlier...I'll take transit anyway. I leave an hour earlier, I get there usually half an hour earlier than I would normally taking the bus, but that's because nobody's there. Everybody seems to want to go, like, unnecessarily at the last minute. But they all seem to go at the same time, so...I try to avoid those situations and not be lazy and get up that extra hour earlier. (Jeremy, 18, Surrey)

When it snows a little bit, the whole city shuts down. (Ho-Sun, 19, Vancouver)

Transit sucks in the rain, it's packed...there's never a window open so everyone's breathing each other's breath. (Karen, 19, Surrey)

Weather adversely affects my travel time, but I don't really have much of an option. (Rick, 24, Vancouver)

If it snows, you can wait like 45 minutes for the SkyTrain.. (Karen, 19, Surrey)

Participants often changed their travel mode due to rain or snow:

If it's within \$40-50 then I'll take a cab when it's cold or rainy...I only weigh like a hundred pounds...I get really cold. (Karen, 19, Surrey)

I prefer to drive to school on those days because the bus is so slow, it gets gross, you know, people won't open the window. (Keith, 22, Vancouver)

I live in Surrey so, if I were to have to cross one of the bridges, I'd consider taking transit [rather than drive] because there's traffic and it takes a long time to travel...but when it's raining, everyone's jackets and everything are all wet, and it's really packed, and not really well ventilated, so then it's like, first there's the smell, and then it's wet everywhere...there's not anywhere to put your things, and it causes people to be uncomfortable. That might cause someone to not take the bus. (Victor, 19, Surrey)

Bad weather greatly affects whether we'll take a cab home from downtown. (Rick, 24, Vancouver)

Getting rides from friends or family seems more tolerable in bad weather; a young adult from Surrey said that his parents are more likely to "surprise" him by meeting him for coffee in Vancouver, then driving him home. Victoria, who hitchhikes home, said that drivers are much more inclined to pick her up when it's raining.

In addition to adjusting or curtailing their social events due to weather, many participants acknowledged that travelling by transit required considerable planning and coordination.

3.2.5 Planning and coordination of trips

Because of transit frequency and reliability problems, young people do a considerable amount of trip planning and coordination when they travel. This is heightened by their tendency to travel between downtown and distant residential areas in the evening and at night, and often meet and socialize with friends who also take transit. Most participants acknowledged that their daily trips were planned according to trip length, weather, and traffic conditions.

Ho-Sun, who transfers twice to get to Emily Carr Institute of Art and Design, often makes adjustments to her schedule to deal with peak hour crowding on the SkyTrain, leaving earlier in the morning, and staying with friends in Kitsilano until after peak hour. Jeremy, a Surrey participant, memorized the transit schedules that he used regularly, so that he would always be able to travel without difficulty. Steve, a young adult from Vancouver, used to take transit regularly to school and social events, but switched to cycling because it was more reliable. Other UBC students who used the 99 B-Line along Broadway noted that passenger boarding takes a long time at peak hours, so they would have to leave earlier to get to school.

Weekly trips or occasional outings were planned well in advance by consulting transit schedules, the TransLink website trip planner or info line, and coordinating meeting times with friends. One Surrey youth, who makes weekly recreational trips to Tsawwassen, Delta, and White Rock, leaves early on Saturday mornings and spends the day in these locations because of the long travel time (about 75 minutes to White Rock and two hours to Tsawwassen). John, a Vancouver youth who visited his parents in Dunbar weekly, would arrange for them to pick him up from downtown, and would stay overnight because of the poor bus service in Dunbar. Likewise, any trips to the recreational areas north of Vancouver (Cypress, Squamish, Whistler, Grouse Mountain, Lynn Canyon, Deep Cove) were planned well in advance and required leaving in the early mornings on a weekend.

Anywhere far is early morning; you have to leave early morning if you're taking transit, because if you leave later than twelve, half your day is gone. (Rick, 24, Vancouver)

While Grouse Mountain is served by a TransLink bus route, many mountain destinations are not; one participant who had family in Squamish took charter buses regularly.

Spontaneous socializing becomes much more difficult when friends travel using transit. The lower frequency of buses in the evening, and their unreliability, hinders spontaneous travel. Mandy, a Surrey youth, finds it difficult to make spontaneous plans to meet; she generally meets her friends at accessible locations like Commercial/Broadway at pre-determined times. The participants usually had to make trade-offs between socializing, staying home, and meeting at various locations because of transit frequency and reliability.

It's not usually terribly spontaneous....It makes it a little harder I guess, a little more complicated....to some degree a little more frustrating. (George, 24, Surrey)

If I have to plan it out, then I don't feel like going. (Keith, 22, Vancouver)

Most of the participants acknowledged having to adapt their social activities to a schedule. Only one participant seemed to travel spontaneously, but she unwittingly sacrificed some independence:

I have no schedule whatsoever...I just do a lot of stuff, sometimes we just go driving, sometimes we'll just pack up and leave on a road trip...I like to just do whatever....I always bum rides, and if I can bum a ride, then I'll go.... If a buddy says, do you want to go to Whistler? And they have a car, then I'm in. If a buddy wants to go to the drive-in and they can acquire a vehicle, I'm in. A lot of what I do depends on what I'm offered to do. (Victoria, 24, Vancouver)

Surprisingly, none of the participants mentioned using cell phones to help meet up with friends. Perhaps they assumed that cell phone ownership is so universal, it did not need to be mentioned. The participants also did not mention meeting friends unexpectedly on transit, which seems to happen quite regularly in Vancouver. Despite their difficulties in travelling by transit, most participants were willing to spend time planning and coordinating their trips. The young adults in particular showed a true awareness of issues such as urban planning, environmental concerns, and the sort of lifestyle choices that go along with using transit and other alternative travel modes.

3.2.6 Awareness of broader issues surrounding transportation

Perhaps the most surprising knowledge gained through TransLink's teen and youth focus groups (2006) was the extent to which young people understand the larger issues around transportation planning. Similarly, in this study, young adults showed a remarkable grasp of urban planning issues such as housing location, density, and street patterns. Some chose to use transit because of the environmental implications of owning a car; others chose to live in a central location that would

allow them excellent transit access. Many had lived in other cities, or travelled to other large cities in Canada, the US, Europe, or Asia, so they could compare Vancouver to other places. While this type of knowledge was expected in the pilot group, all of whom were students in the School of Community and Regional Planning at UBC, all of the young adults from Vancouver and Surrey also mentioned these issues:

They've got all these rail tracks throughout [Vancouver], they've got tons and tons of rail, like old-style rail tracks, and yet they do nothing with it. It just sits there overgrown with weeds, and leaves, and it's like, what's that about...you could be using that to make the city functional. Instead, in five years...this is why I'm trying to localize what I'm doing, because in five years this city is going to be nearly impossible to navigate. (Rick, 24, Vancouver)

[Vancouver] wasn't designed to be a big city. One reason why Toronto has such a good system is because they've got their high density living like right along Yonge Street. And so, you've got your subway, and they've got just people on top of people all along Yonge Street. So you can get around because it's a high-density population, whereas like you know, you go up to North Van and you've got one person on a big hill by themselves. I think Toronto has a larger surface area, but the people are piled on top of each other. [In Vancouver] it's just houses everywhere. (Victoria, 24, Vancouver)

The city is not designed for the volume of people it actually has, and I think this is a problem that, structurally, has a huge effect on the transit system...you guys probably notice if any bridge goes out anywhere in the city, the repercussions of that bridge going out...And you go to a city like Toronto, where even though there's traffic all over the place, it's made for the amount of people it has. (Rick, 24, Vancouver)

The whole city is just designed to have cars. How much of this space is just road, parking lot? (Pete, 22, Vancouver)

Surrey bus routes aren't intuitive; in Vancouver they sort of run up and down, whereas in Surrey they go more through the residential areas. (George, 24, Surrey)

The North Van buses are better too...if you catch a bus someplace, they all meet up at the same time. (Pete, 22, Vancouver)

[In North Van] you've got six or seven buses that all go to the same place, and they all have the same name, and they meet up for when the SeaBus leaves...it's pretty in tune compared to Vancouver. It's much better in terms of reliability, but that's also because...they don't have huge amounts of traffic that back up everywhere, other than the bridges. (Rick, 24, Vancouver)

In London, you have to pay just to take your car into the city. (Pete, 22, Vancouver)

The main city in Cuba doesn't even allow cars in the core area. (Rick, 24, Vancouver)

If we had a solid transit system, something that can get people around...like Toronto isn't even that great, go to France and look at their system, London, New York...that is a serious transit system. (Victoria, 24, Vancouver)

In Ottawa they have their own highway for the buses...routes that are just for buses, and the bus shows up on time, to the minute when it's supposed to come, no excuses. (Rick, 24, Vancouver)

A few expressed the desire for a more equitable transit system. In particular, Pete lives on East Hastings and frequently takes the bus home through the Downtown Eastside, the poorest neighbourhood in the city. He felt that the transit system should be free. Other participants voiced their opinions on transit funding as well:

The stupid thing is that buses shouldn't be there to make money. They're there to transport people. Only working class people, you know, no one else uses it.... I take the bus through the Downtown Eastside a lot and you see a lot of people try to get on for free, and it kind of offends me when I see bus drivers say no. (Pete, 22, Vancouver)

Well, the government should fully subsidize transit. It just makes sense, it's like a green alternative, and environment is front and centre now. (Rick, 24, Vancouver)

You could only [make driving in the city difficult] if you had the system to back it up...right now, if they implemented a driver tax tomorrow, it would be total chaos. You wouldn't be able to get around. (Victoria, 24, Vancouver)

All five of the pilot group participants said that transportation influenced their housing choice, and many other participants mentioned that the main reason for their current housing location was good transit access:

The location I picked where I lived, I pretty much made it so that it was central to everything...like UBC, work, and evenings [at Langara]. (Rick, 24, Vancouver)

When I moved out, I always tried to pick central locations...when I went to Langara, I lived right across the street....it was pretty close to transit. I lived on 12th and I picked that because it was close to Broadway, and Broadway's close to every major transit route you can find. (Joanne, 24, Vancouver)

Julie, a UBC student, lived on campus last year but moved because there was no transit back to campus after midnight; she chose to live on Ontario Street because of its easy access to downtown, Main and Cambie Streets. Pete, a Vancouver young adult, has always lived close to transit. Karen and Mandy, who recently moved to Surrey, chose to live there because it was more affordable than Burnaby and very close to the SkyTrain station, so they could still travel by transit. Justine and Victoria, both young adults, live in Dunbar and would consider moving to another neighbourhood

because of the poor transit frequency and lack of routes in Dunbar. Keith, who currently lives in South Vancouver, would like to move to Granville Street so he has better access to Richmond and to Broadway Avenue.

Perhaps because of their knowledge of broader planning and environmental issues, the participants had considered many different aspects of car ownership. While some did plan on buying cars, and there were a few car owners in this sample, all of the participants expressed concerns about becoming too reliant on driving as a mode of transportation.

3.2.7 Car ownership

Surprisingly, youth and young adults in this sample showed rather cool and cautious attitudes toward car ownership, even though almost all had parents who drove and some had friends with cars. The youth participants were more likely to say they would get a car as soon as they got their license (four out of ten mentioned this). Two out of the ten participants already owned cars, and the other four did not want to own cars. Of the eleven young adult participants, only one said that she wanted to buy a car eventually; one owned a car, one owned a scooter and motorcycle, and the other eight did not want to own cars.

I'd rather take transit....I'm all for a green alternative. I'd definitely take it over a car. I've taken transit for years and years and years and I've never owned a car. I'm 24 now. I've always taken transit.... (Rick, 24, Vancouver)

I really have no desire to own a car. I'd rather have a good transit system. Not even for environmental reasons, it's just that cars are just stupid. It's such a waste of energy. (Pete, 22, Vancouver)

As one person it would just be irresponsible, unless I was going to be staying late or carrying something that wasn't feasible, like seven boxes or something. (George, 24, Surrey)

I enjoy driving, but I'll drive my roommate's....I don't need it, so...it's not necessary when you're living in the city and you're a student. (Karla, 17, Vancouver)

Even the car owners in the sample showed restraint in the use of their car. Keith, 22, and Larry, 19, both took transit daily to school, using their cars only for evening socializing. Keith admitted that sometimes it's faster to take the bus to school than drive. Several participants, who did not own cars, said they would make similar choices:

Even if I had a car, I'd try to limit my use. I wouldn't use it on a daily basis, but stuff like going to Deep Cove or Cypress. But for work and stuff, even though this is the stupidest commute ever, I still wouldn't drive to work.
(Rick, 24, Vancouver)

Seven out of ten youth participants mentioned the high costs of gas and insurance as significant barriers to car ownership. Jocelyn, 19, whose parents and brother all own cars, said that her brother's friends are obsessed about the cost of gas and insurance; she admitted they were "pretty much working a lot of different jobs to pay off gas." John, 19, said that among his friends, there were "a lot of worries around gas and mileage...people get really stressed out about those things, when you actually own the car...oil changes, checkups." In the young adult age group, six out of eleven mentioned affordability as a barrier to car ownership. Of the entire sample, five participants said they'd like to buy a car eventually, when they had more money; another three of the participants mentioned car sharing as an option they might consider.

The preceding sections have shown how much the social networks of youth and young adults are affected by transportation modes, particularly transit. Social activity destinations are concentrated in a few locations: downtown, Metrotown, Commercial Drive, 4th Avenue and Broadway Avenue. The predominance of these areas can be seen in their identification by one-word descriptives: "Granville" and "Commercial", for instance. Most of the participants regularly meet friends in the evening or at night in these areas. Long travel distances, and the geography of the region, make socializing in these locations at night problematic and limit walking and cycling as viable transportation options. Transit frequency and reliability makes it difficult for them to get to school or work on time, and often makes them late when meeting friends in the evening. Evening and night service impacts young people's travel patterns significantly, with decreased bus frequency, increased unreliability, and relatively early ending times. Young people make extraordinary sacrifices, such as staying at friends' houses over night and walking home 45 minutes late at night, when they use transit for their social trips. Getting rides from friends or from parents is not a popular option, and most only accepted rides occasionally. Bad weather in the winter is a major factor in young people's travel behaviour, with many participants taking extra time to travel or switching to cabs or accepting rides in the pouring rain. Generally, taking transit involved major efforts at planning and coordination of their trips, particularly in evenings and on weekends. Young people, particularly the young adults, showed a remarkable awareness of broader issues surrounding transportation. Their reluctance to own and drive cars was surprising, considering all of the problems and constraints that they face using transit. What does this research tell us about youth social travel?

3.3 Analysis of research results

I just wonder, why don't we have a [good] transit system? Why can't we get around? (Victoria, 24, Vancouver)

The underlying theme in discussions with Vancouver and Surrey youth and young adults was travelling within constraints. When discussing factors that affected their travel patterns, such as weather, transit frequency and long travel distances, participants in this study frequently referred to their social lives and social travel patterns throughout the region. This revealed the extent to which young people modify their activities to fit their available mode of transportation. Although this study had a small sample size, the TransLink study (2006) also uncovered similar trends and issues. This type of restriction of social behaviour could have several effects. First, failing to provide young people with viable transportation alternatives means that most will eventually decide to buy cars. With car ownership in the GVRD reaching well over one million registered vehicles (BC Stats, 2007), and chronic traffic problems in the region, postponing car ownership until the late 20s could slow down the increase in number of cars on the road. By meeting the needs of youth and young adults, TransLink could eliminate their desire to buy a car. Secondly, young people are marginalized in transportation planning processes, even though they represent 30% of TransLink's transit ridership and 20% of the GVRD's population. And finally, restricting young people's rights and responsibilities might prevent youth and young adults from making an easy transition to the adult world.

3.3.1 Constrained social travel among youth and young adults

As discussed in previous sections, young people made many modifications to their social travel patterns due to the constraints of the transit system. Towards the end of the focus group discussions, participants were specifically asked how traveling affects their social lives, and if they would socialize differently if they could get to places more easily (see Appendix). Most participants said they would stay out later, travel further, and be more independent if they could get to places more easily.

If friends didn't offer me rides [to Seymour, Cypress, Whistler] I just wouldn't go because I wouldn't pay for alternate modes of transportation and transit doesn't go there. (Victoria, 24, Vancouver)

I wouldn't have to cancel so many stuff for the weekend. (Ho-Sun, 19, Vancouver)

One of the major themes that emerged with night travel was the extent to which young people obeyed a "transit curfew". Time and time again, participants mentioned that they would have to cut activities short at night to make their last bus:

I mostly hang out around my neighbourhood because I get stressed...well, I don't get stressed, but I don't like knowing that I have to keep looking at my watch. (Karla, 17, Vancouver)

[Transit] affects me tremendously because I can't get a ride. A lot of times if I don't get a ride, I don't bother to go out, because I know that going there and coming back will be so much more. And I'm not going to enjoy it because I might miss my last bus. (Ho-Sun, 19, Vancouver)

It means I have to leave at 10:30 to get home at midnight, which is lame...it's sort of like, well, why bother? (George, 24, Surrey)

Sometimes if it's a specific time when I'm deciding to leave or the movie's over and I know the schedule's going to stop by the time I get to it...it's a better idea to just sleep over at a friend's, catch the transit early the next morning. (John, 19, Vancouver)

I just memorize what time I have to leave. (Jeremy, 18, Surrey)

Some participants acknowledged that travelling by transit generally limited their ability to participate in activities:

It limits your ability to do things, but everything does to some extent, right? It's something that you have to plan around...like if you're on the North Shore, you gotta know when the last SeaBus is. Or if you're somewhere else, you gotta know when the last bus runs...I don't think it limits your ability to do anything *per se*, but it does have a big impact on the free time that you have available to do those things. (Rick, 24, Vancouver)

I know I'd do a lot more if we had a good transit system. Even just when I was visiting Toronto for Christmas, I got around *everywhere* very easily on transit. Vancouver, I just feel like...I feel trapped, sometimes, because you just can't get places even if you want to. And I have the transit system, I wish it was half-decent... (Victoria, 24, Vancouver)

Young people are constrained by transit to a much greater extent than adults. They tend to socialize in a few mixed-used areas, mostly in Vancouver, all of which are easily accessible by transit. They usually meet up with friends along transit corridors with frequent and reliable service. They avoid going to friends' houses in areas that are poorly served by transit. They are often late for school, work, or meeting up with friends because of transit infrequency and unreliability. Limited transit service in the late evening and at night means they walk long distances home from bus stops

at night, cut short social activities to make the last bus home, or sleep over at friends' houses. Young adults even tend to choose housing locations that are transit-accessible.

These constraints on travelling to social events means that young people are forced to socialize less and to go home earlier. They are unable to control when, where, and how long they can stay out with friends; they cannot travel or socialize spontaneously, and are forced to get rides, take cabs or walk long distances when transit fails. The areas in which they socialize are commercially-oriented, meaning that young people must spend money in order to hang out with their friends. And although they seem immune to any safety concerns, the fact that young people often travel alone at night means that they are vulnerable.

3.3.2 The benefits of postponing car ownership

The high costs of gas, insurance, and repairs already prevent most young people in large Canadian cities from owning cars. In addition to allowing young people to become responsible adults, and providing a valuable independent travel option, a transit system designed with youth and young adults in mind would better serve over half of the transit users in the Greater Vancouver Regional District. It could also postpone car ownership for the majority of this group for many years; imagine the impact transit could have if even half of the young people in the GVRD put off buying a car until they were 29 years old. At a time when most municipalities are pondering solutions to global warming, promoting and funding alternative transportation modes makes sense. A recent opinion poll showed that 74% of British Columbia residents would support taking money from the government's road-building budget to improve transit to help slow the rate of climate change (SPEC, 2007). Decreasing the car ownership rate among youth and young adults and increasing funding for evening and night transit service could be significant steps forward.

3.3.3 The untapped youth and young adult demographic

The current transit system only marginally supports the social travel patterns of youth and young adults. The participants in this study ranged from 17-25; at the age of 18 they are legally considered adults; at 19 they can legally drink. Participants in this study took part in many activities their parents may not approve of: going to bars, drinking at clubs, hanging out on the street, gambling. But young people are also participating in part-time work, sports, cultural events, and shopping, and taking night classes, activities that bring them closer to the adult world. Most adults are not constrained by the transportation system when they participate in these activities, largely because they are more likely to own cars. Treating young people more like adults could include supporting their travel

needs as we have supported those of older adults. Transit authorities have traditionally funded increased peak-hour transit to support commuting adults. Since young people in the GVRD represent over half transit users, and is the group most likely to increase their transit use within the next year (TransLink, 2003, p76), TransLink would benefit from increased evening and night bus services to support young adults.

Participants in this study showed that they have considerable knowledge of the transit system and the desire to use it. Young people in this study were quick to point out the benefits they get from using transit, from increased independence to better time management:

I'd probably be more lethargic if had a car...I wouldn't do anything...I don't have my parents living with me, there are no free rides, there are no freebies. I have to take care of myself. Otherwise, it just helps you manage your time in a way. (Karla, 17, Vancouver)

Somehow, I make it to my classes on time, but my friends that live on campus, they don't make it to classes on time. (Jocelyn, 19, Vancouver)

Taking the bus gives you more discipline. (John, 19, Vancouver)

They also show a real awareness of planning and environmental issues; most of the participants in this sample showed a strong desire to keep taking transit, if frequency and reliability were improved.

For the most part [my friends and I] are all transit junkies. (George, 24, Surrey)

Really, I'd prefer to take transit [instead of hitchhike] but I can't so...it's not an option. (Victoria, 24, Vancouver)

I'd rather take transit...I'd definitely take it over a car. (Rick, 24, Vancouver)

Even the participants who owned cars were more than willing to take transit for specific trips, such as to and from school, and social events that were easily accessible by transit. In fact, they seemed to drive only in the evenings and weekends. Keith, a young adult from Vancouver, said he would take transit if the trip wasn't complicated and didn't involve multiple transfers. He regularly took transit to school, but drove if he knew he'd be staying late on campus or going out with friends. Larry, a Surrey youth, said he'd take transit downtown to clubs on the weekend if the buses ran late enough; he said his car-owning friends all "still pretty much try to use transit" except at night for social events...

This study, and TransLink's own 2006 study, reveals the willingness of young people to take transit up until their late 20s, as long as it meets their travel needs.

3.3.4 Impacts on youth behaviour

Robert Epstein, in a new book called *The Case Against Adolescence* (2007) argues that teens are far more competent than we assume, and that most of their problems stem from restrictions placed upon them.

Young people can't own things, can't sign contracts, and they can't do anything meaningful without parental permission—permission that can be withdrawn at any time. They can't marry, can't have sex, can't legally drink. The list goes on. They are restricted and infantilized to an extraordinary effect. In recent surveys I've found that American teens are subjected to more than 10 times as many restrictions as mainstream adults, twice as many restrictions as active-duty Marines, and even twice as many as incarcerated felons. (Hara Estroff Marano, in Epstein, 2007, p86)

We call our offspring "children" well past puberty. The trend started a hundred years ago and now extends childhood well into the 20s. The age at which Americans reach adulthood is increasing—30 is the new 20—and most Americans now believe that a person isn't an adult until age 26. In most nonindustrialized societies, young people are integrated into adult society as soon as they are capable, and there is no sign of teen turmoil. Many cultures do not even have a term for adolescence. (Hara Estroff Marano, in Epstein, 2007, p86)

Hara Estroff Marano did studies to develop fourteen areas of competency, such as interpersonal skills, handling responsibility, and leadership. When she administered tests to adults and teens in several US cities, teens were as competent or nearly as competent as adults in all fourteen areas. But when adults estimated how teens will score, they always dramatically underestimated teens (Epstein, 2007, p88). Indeed, a participant in this study raised the issue:

I've been taking transit on my own for ten years but since we moved to Surrey three years ago, my parents always want to give me rides...which is fantastic of them, but sort of stifling. (George, 24, Surrey)

Estroff Marano points out that raw scores of intelligence peak around age 14-15, scores on memory tests peak between ages 13 and 15, perceptual abilities peak at that age, and brain size peaks at 14. Some types of memory are remarkably good in early to mid teens, but practically nonexistent by the 50s and 60s (p88).

Both Epstein and Estroff Marano believe that because we treat them like children, teens spend an inordinate amount of time with their peers, on average 65 hours per week, compared to about four

hours a week in preindustrial cultures (p88). This pattern is certainly evident in this study, where young people generally socialized at night with friends their own age, apart from their families. They also tended to socialize around commercial sites: restaurants, bars, nightclubs, and theatres. While this is partially a response to available activities and social spaces in the region, some psychologists believe that young people consciously choose these "trivial" modes of socialization over more meaningful work or social involvement because they are constantly treated like children. Epstein and Estroff Marano believe that instead, teens should be spending more time with other age groups, learning from older peers, and being treated more like adults. Having every right, privilege, and responsibility an adult has would allow young people to "set aside the trivia of teen culture and work hard to join the adult world." (p89) They caution against simplistic rights (to stay out all night, take drugs, spend money, and be disrespectful) and responsibilities (household chores, homework), saying that responsibility should be tied to significant rights. Supporting youth travel needs could give young people many opportunities to become more independent.

Chapter 4

Towards a youth-oriented transit system

Young people in this study, and in other studies involving participatory action research, have shown their receptivity to transit and willingness to adjust their travel behaviour. Young people are increasingly aware of environmental and planning issues and reluctant to buy cars. Youth in other studies have even become effective advocates for better transit funding and service, which makes them valuable stakeholders in transportation planning.

While youth and young adults face particular challenges in terms of social travel in the GVRD, they share some of their frustrations with transit riders in general. Issues of transit frequency and reliability, weather, planning and coordination of trips are common to all transit users. TransLink, like other transit authorities, conducts surveys and focus groups for long-term planning purposes, exposing these issues so that they can be addressed in future plans and projects.

However, a couple of issues are specific to youth and young adults. Because of their tendency to travel in the evening and at night, poor frequency and reliability at these times affect young people disproportionately. Social activity corridors in Vancouver draw youth from all over the region, so better evening and night service to distant residential areas is crucial in the maintenance of youth social networks. Since youth and young adults are a significant demographic group in the region and in transit ridership, TransLink should support their travel needs. Since this study and TransLink's 2006 study both involved small sample sizes, future quantitative research would help in the identification of travel patterns. Youth (17-21) and young adults (22-25) could easily be included as

specific demographic groups in future surveys. Online surveys, advertised by e-mail or text messaging, could help address the problem of youth and young adult recruitment. Ongoing monitoring of the U-Pass program to determine the post-graduation travel choices of young adults would also be a significant source of information. Youth and young adult travel patterns would then be analyzed and compared to other age groups. If further research supports the findings of this study, strategies to support youth travel could be developed. These might include:

- The establishment of a youth planning committee at TransLink (this could be online)
- The development of a participatory teaching module for high schools and universities
- Increased bus frequencies from 9pm to 12am
- Increased reliability for buses
- More accessible schedules (online or text message) including a simple "last bus" feature
- The redefinition of Night Bus service, so that it extends from the end of evening to the beginning of morning bus services
- The creation of new Night Bus services to, and within, fast-growing municipalities such as Surrey and Maple Ridge, linking their town centres and main routes
- The creation of new east-west Night Buses along 25th (King Edward), 41st and 49th Avenues

These strategies would benefit not only youth and young adults, but also other transit users who work evenings or nights.

Young people in this study were greatly affected by transportation modes, particularly transit. Limiting their social activities and socializing along transit corridors are a couple of the modifications they made to their social activities. Long travel distances make socializing at night problematic, and limit walking and cycling as viable transportation options. Transit frequency and reliability makes it difficult to meeting friends in the evening, travel to night classes and access part-time jobs. Evening and night service impacts young people's travel patterns significantly, with decreased bus frequency, increased unreliability, and little late night service. Young people make extraordinary sacrifices, such as staying at friends' houses over night and walking home long distances late at night, when they use transit for their social trips.

Yet surprisingly, young people showed a remarkable awareness of broader issues surrounding transportation, a desire to continue using transit, and a reluctance to own and drive cars. Future quantitative research on youth and young adult travel patterns could lead to the development of

strategies to support these demographic groups. A more youth-oriented transit system could provide a viable transportation option for this group, slow the rate of growth of car ownership in the region, and allow young people to make an easier transition to adult life.

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Appendix



School of Community and Regional Planning

433 – 6333 Memorial Road
Vancouver, BC Canada V6T 1Z2
www.scarp.ubc.ca
Tel: 604. 822. 3276
Fax: 604. 822. 3787

Contact Letter for Participants

To Whom it May Concern:

You are being contacted in order to invite you to participate in a research project entitled, "The Social Travel Patterns of Youth and Young Adults", undertaken for the completion of a Master's graduate thesis in the School of Community and Regional Planning at the University of British Columbia. You have been selected for participation because you indicated, during our initial phone call, that you are a young person using public transportation.

If you choose to participate, you will be part of a small focus group of approximately six to eight participants. We will meet at a location that is convenient for the group and spend about two hours talking about your travel patterns and using a mapping technique.

The purpose of this research is to collect information on how young people travel for social purposes such as visiting friends, playing sports, going to movies and other social events. The main goal of this study is to determine to what extent transportation influences the social networks of young people. For example, can you travel when and where you would like to go for shopping? Is it easy or difficult for you to visit friends in the same neighbourhood, or in a different neighbourhood? Are there main areas or streets in the city where you and your friends go to eat out, go to movies, or hang out with friends? These are the sorts of questions that the research hopes to answer.

You should be aware that you can withdraw your agreement to participate at any time during the research process.

The focus groups will be audiotaped, with your consent, and the tapes maintained for a period of 5 years before they will be securely destroyed.

In order to defray the inconvenience and cost of transportation to the focus group location, you receive an honorarium in the amount of \$40.



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433 – 6333 Memorial Road
Vancouver, BC Canada V6T 1Z2
www.scarp.ubc.ca
Tel: 604. 822. 3276
Fax: 604. 822. 3787

Informed Participant Consent to participate in a research project entitled:

The Social Travel Patterns of Youth and Young Adults

Principal Investigator

Dr. Penelope Gurstein
Professor, School of Community and Regional Planning
University of British Columbia
Phone: (604) 822-6065 Fax (604) 822-6164 [E-mail gurstein@interchange.ubc.ca](mailto:gurstein@interchange.ubc.ca)

Co-Investigator

Ms. Ren Thomas
Master of Arts, Community and Regional Planning (candidate)
University of British Columbia
Phone: (604) 676-9006 [E-mail rae.thomas@gmail.com](mailto:rae.thomas@gmail.com)

The Co-Investigator is a Masters student at UBC who is undertaking this research as part of her thesis. The thesis will be a public document available at the UBC library upon its completion.

Purpose

The purpose of this research is to collect information on how young people travel for social purposes such as visiting friends, playing sports, going to movies and other social events. The main goal of this study is to determine to what extent transportation influences the social networks of young people. For example, can you travel when and where you would like to go for shopping? Is it easy or difficult for you to visit friends in the same neighbourhood, or in a different neighbourhood? Are there main areas or streets in the city where you and your friends go to eat out, go to movies, or hang out with friends? These are the sorts of questions that the research hopes to answer.

Methods

If you choose to participate, you will be part of a small focus group of approximately six to eight participants. We will meet at a location that is convenient for the group and spend about two hours talking about your travel patterns and using a mapping technique. A discussion guide is included with this form. You will use markers on a large map of Vancouver showing where you live, where your friends live, where you go for social activities, and where you go to shop. You will also be encouraged to draw the routes taken to the various destinations right on the map.

The focus groups will be audiotaped, with your consent, so that the investigators can listen to the tapes later to transcribe what was said. If you do not participate, you will not be taped.

Confidentiality

Your name will be kept confidential in the data through the use of an assigned code. Only the investigators and research committee will have access to this information, and no names will be included in the final report. Study documents will be kept in a locked filing cabinet in the Co-Investigator's office and all computer files will be password protected. There is no guarantee of your confidentiality during the focus groups; you will be asked to keep the information discussed confidential.

Compensation

In order to defray the inconvenience and cost of transportation to the focus group location, you receive an honorarium in the amount of \$40.

Contact for information about this study

If you have any questions or need any further information about this study, please contact Dr. Penny Gurstein or Ms. Ren Thomas at the above contact numbers or e-mail.

If you have any questions about your treatment or rights as a research subject, please contact the Research Subject Information Line at the UBC Office of Research Services, (604) 822-8598.

Consent

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time.

Your signature below indicates that you have received a copy of this consent form for your own records. Your signature indicates that you have chosen to participate in this study. If you are below 19 years of age, your parent/guardian must also sign this consent form.

Name of participant (please print)

Participant signature

Date

I consent to my child's participation in this study.

Parent/Guardian signature

Date

Discussion Guide

1. What are some of the patterns you notice on the map?
2. What's going on in this area here? (areas on the map with a concentration of social activities)
3. When you want to get there, do you take a bus/bike/walk/get a ride? Why?
Time of day?
Weather?
The location?
Do your friends take a bus/bike/walk/get a ride?
4. What are some popular places to go after school? At night?
5. Which places on the map are easiest to get to? Which are the most difficult?
6. When does traveling by bus/bike/walking get you frustrated? When is it fun?
7. Is there anywhere you'd like to go within the city that you can't get to?
8. Would socialize differently if you could get to these places more easily?
9. How do you think traveling (by bus, by bike, by foot, by car) affects your social life?

Focus Group Materials

Social activity location key used in the social mapping exercise:

Social activity location	Marker colour
Home	Dark blue
School/Work	Dark green
Shopping: Groceries, clothing, health/beauty, music, DVDs, games, electronics	Turquoise
Entertainment: Movies, restaurants, nightclubs, bars, live music, theatre, comedy clubs, sporting events	Red
Homes of closest friends	Pale green
Sports: Gym, community centre	Purple

Line type key used in the social mapping exercise:

Mode of transportation	Line type
Walking	— — — — —
Cycling
Transit	—————
Car (passenger or driver)	— . — . — . — . — . — . — .