

“THAT LOOKS AWESOME! HOW DO WE GET THERE?”:
EXPLORING LEISURE MOBILITY OF MILLENNIALS IN
THE CITY OF NANAIMO

by
Lan Le Diem Tran



VANCOUVER ISLAND
UNIVERSITY

“THAT LOOKS AWESOME! HOW DO WE GET THERE?”:
EXPLORING LEISURE MOBILITY OF MILLENNIALS
IN THE CITY OF NANAIMO

by

Lan Le Diem Tran

Master of Arts in Sustainable Leisure Management

Vancouver Island University

Presented as part of the requirement for the Master of Arts in Sustainable Leisure Management
within the Department of Recreation and Tourism Management at Vancouver Island University

19 October 2017

EXPLORING LEISURE MOBILITY OF MILLENNIALS

DECLARATION

This thesis is a product of my own work and is not the result of anything done in collaboration.

A handwritten signature in black ink, consisting of a vertical line on the left, a curved line, and a long horizontal line extending to the right.

Student signature

I agree that this thesis may be available for reference and photocopying, at the discretion of the University.

A handwritten signature in black ink, identical to the one above, consisting of a vertical line on the left, a curved line, and a long horizontal line extending to the right.

Student signature

Lan Le Diem Tran

EXPLORING LEISURE MOBILITY OF MILLENNIALS

THESIS EXAMINATION COMMITTEE SIGNATURE PAGE

The undersigned certify that they have read, and recommend to the Department of Recreation & Tourism Management for acceptance, the thesis titled “*That Looks Awesome! How Do We Get There?*”: *Exploring Leisure Mobility of Millennials in the City of Nanaimo*” submitted by *Lan Le Diem Tran* in partial fulfilment of the requirements for the degree of Master of Arts in Sustainable Leisure Management.



Dr. Nicole Vaugeois
Co-Supervisor



Dr. Vincent Kaufmann
Co-Supervisor



Elizabeth Williams
External Reviewer

EXPLORING LEISURE MOBILITY OF MILLENNIALS

DEDICATION

To us – the Millennial generation, a generation that has so much to offer to our communities and the world, and is yet to be fully understood. May our voices always be heard and may we successfully lead the world together to a meaningful future that we wish for.

To Nanaimo – the small city with big potential. You are beautiful, and may you thrive and prosper with sustainability in your heart.

To MASLM cohort 2015-2017 – what a strong, perseverant bunch of people! May we continue to stand up for good causes and always be the change agents that we are meant to be.

To Lukas, my love, my best friend, min Schatz, my unofficial research assistant 😊. You may never want to write such a lengthy paper like this one in your lifetime, but the kind of patience, support, advise and encouragement that you gave me from the beginning until the end were just as much as the time, effort and energy that I poured into this piece of work. Thank you so much for having chosen to walk, bike and take the bus alongside me in this chapter of my life. I so look forward to the next one, and many more after that, in which we will (sustainably) explore the life together.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

ACKNOWLEDGEMENTS

Dr. Nicole Vaugeois, who knew that my casual complaint about the public transit system with you would grant me the most exciting academic adventure of my life. For me, you were not just a thesis supervisor, you were a mentor, an inspiration, and a dancing queen. I am eternally grateful for all that supervision, wisdom and encouragement. The world needs strong female leaders such as yourself, and trust me, I do plan to join the Wonder Women club very soon. Thank you for being such an inspiring role model!

Dr. Vincent Kaufmann, it has been such a great honour to be supervised by you. Your vast knowledge and insights enriched my work, and it helped me understand the world better by looking at the topic of transportation in the Canadian context through your lenses. I am aware of how much your work on urban planning and transportation has benefited your people, and I aspire to dedicate my career to contribute just as much. Thank you for your guidance.

Mom and Dad, you gave me this life, which I can spend an eternity to thank and that will never be enough. Moreover, you have been giving me endless opportunities for me to reach as far and achieve as many dreams as I could, no matter how insane and absurd they might be at times. I love you with all my heart, and if there is such a thing as a next life, I will always insist that we are family again.

Dale, my favourite “landlord”, words cannot describe how grateful I am to be a part of your lovely Canadian family. Thank you from the bottom of my heart for all that love and support. Without you, it would have been twenty times more difficult to complete this piece of work. Thank you!

Michelle, thank you for helping me get through all those stats. I spent sleepless nights with them and without your brain cells, I would have spent even more and risked damage some properties in the process due to stress and desperation. To you and Zoey!

Laura, your creative talent is out of this world! I cannot express how grateful I am to have you supporting me with the branding of my project. I could not count how many times I had people coming up to tell me how beautiful the logo and banner were. You deserve not just recognition but tremendous opportunities for that unique talent. I want you to be famous and successful, and I believe that you will.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Sis, thanks for always listening to me and thanks for your dark sense of humour which always brightens my day. I hope that one day you can finally doze off on a metro or bus to work after a night shift at the hospital without having to drive that massive, fuel-hungry beast of yours.

Bambie, John and Oliver, thank you for the red velvet cake. It is not just a cake made with egg and sugar, but a symbol of our life-long friendship. Your Down Under is so far away from everything, yet it brings us even closer than ever. Thank you for always being there for me. I love you just as much as I love velvet cake. OK I love you a bit more, if you bring me the cake.

Linh, thanks for your amazing patience and sense of humour. Your understanding and positivity did get me through my tough time, and for that I am grateful. From North to North!

Madhur, how cool it is to cross paths again after all this long! Your friendship and big smile warm me. Thank you for being such a great big brother to me.

Ian, thank you thank you thank you! I am blessed to have you in my life – a friend, a mentor, a Toastmaster fellow, and a sustainability advocate. You are the living proof that everyone can live life to its fullest meaning regardless of age and stage of life. Your perseverance is admirable, and I will always think of you as an inspiration to stay motivated for the next 80 years.

MASLM cohort 2015-2017, thank you for the amazing bond that we have. Support with thesis aside, all those experience that we went through together kept me strong and motivated. I am proud to be a part of this awesome cohort, and I always will.

Rec & Tour Faculty at VIU, thank you so much for the knowledge and your amazing support. I am grateful!

Alanna, Pam, Ronnie, Leo (from Greater Nanaimo Cycling Coalition), Sarah (from Habitat for Humanity Mid-Vancouver Island), Aubrey, Elissa, Andrew, VIU Recreation & Tourism Association, VIU Environment & Sustainability, Bike to Work Nanaimo, Mount Arrowsmith Biosphere Region, Nanaimo Greens, Nanaimo Design Nerds, Shore Energy Solutions, World VIU, VIU Student Union, and World Leisure Centre of Excellence, I would have never been able to reach this far without your support. Thank you so much!

For many other amazing people out there, if I dare forget to mention your name, please know that it is unintentional and that I am deeply grateful for your kindness and support. If you know that you deserve a mention but your name was not here, please let me know, and your next drink (or cake) will be on me.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

ABSTRACT

Sustainable transportation development is among the many Global Sustainable Development goals and targets recognised by the United Nations. Identifying and understanding leisure mobility styles is one way to achieve this goal, in which the Millennial generation and emerging mid-sized cities play important roles. Nevertheless, there has been a lack of focus on Millennials in smaller cities in the field of leisure mobility research, particularly in Canada. This is a case study which explored leisure mobility styles of the Millennial generation in the City of Nanaimo for two purposes: to contribute to the knowledge base about leisure mobility in the academic world, and to help the city understand Millennials' needs and barriers in accessing leisure in order to attract and retain these young talents. A convergent parallel mixed methods approach was implemented using three data collection methods: an online survey (N = 195 respondents), a Facebook group discussion (N = 16 participants), and a traditional focus group (N = 9 participants). Munafò (2015)'s classification of activities for leisure travel was adopted in this study: compactophile (activities done in urban settings) and naturophile (activities done in natural settings). This classification was used to test Orfeul and Soleyret (2002)'s compensation theory in leisure travel – a theory that refuted the sustainable value of compact cities with efficient public transportation as residents offset their low daily carbon footprint by travelling further away for leisure on the weekend. The results show that Millennials in Nanaimo frequently partook in compactophile activities within Nanaimo while wishing that they could participate in naturophile activities more often. One of the most prominent barriers was transportation. In order to negotiate this leisure constraint, Millennials in Nanaimo relied on social relationships, which created two interrelated leisure mobility styles: the Independents (those with a car) and the Dependents (those depending on friends with a car). The compensation theory in leisure travel within the context of Nanaimo could be neither confirmed nor refuted. However, it was clear that those living in less dense areas of the city were more mobile for leisure purposes than those living in denser areas. The results, together with the suggestions of Millennials themselves, determined that transportation played an essential role in meeting the leisure needs of this generation, which should be one of the city's priorities in its sustainable development strategies.

Keywords: leisure mobility, Millennial, mid-sized cities, Canada, mixed methods, sustainable transportation development

EXPLORING LEISURE MOBILITY OF MILLENNIALS

TABLE OF CONTENTS

DECLARATION-----	ii
THESIS EXAMINATION COMMITTEE SIGNATURE PAGE -----	iii
DEDICATION-----	iv
ACKNOWLEDGEMENTS -----	v
ABSTRACT-----	vii
TABLE OF CONTENTS -----	viii
LIST OF FIGURES, MAPS, IMAGES AND TABLES -----	xii
Chapter 1. Introduction -----	1
1.1. Sustainable Development Goals – The 2030 Agenda for Sustainable Development -----	1
1.2. The Role of Cities in Sustainable Development-----	1
1.3. Sustainable Transportation -----	2
1.4. Leisure: The Conjoint Growth of Fun and Sustainable Development -----	3
1.5. The Millennial Generation: A Brief Introduction -----	4
1.6. Purpose Statement -----	6
Chapter 2. Literature Review -----	7
2.1. Introduction -----	7
2.2. Sustainable Issues in Transportation -----	7
2.2.1. Environmental concerns. -----	7
2.2.2. Social issues. -----	8
2.2.3. Economic problems. -----	9
2.3. Sustainable Transportation: A Brief Global Review-----	11
2.3.1. Worldwide. -----	11
2.3.2. Canada.-----	12
2.3.3. The City of Nanaimo.-----	13
2.4. Distinguishing the Differences between ‘Mobility’, ‘Accessibility’ and ‘Motility’ -----	17
2.5. Transportation as a Structural Constraint to Leisure-----	19

EXPLORING LEISURE MOBILITY OF MILLENNIALS

2.6. Leisure Mobility	20
2.6.1. Introduction to leisure mobility.	20
2.6.2. Compensation theory in leisure mobility – “The barbecue effect”.	21
2.6.3. Different types of leisure mobility styles.	24
2.7. The Importance of Millennials in Leisure Mobility Research	25
2.7.1. Who are Millennials?	25
2.7.2. Millennials: The sustainable future of mid-sized cities.	26
2.7.3. Nanaimo: The new urban dream for Millennials?	28
Chapter 3. Methodology	30
3.1. Introduction	30
3.2. Study Design Overview	31
3.2.1. Adopted classification of activities for leisure travel.	31
3.2.2. Pilot study.	34
3.2.3. Sample selection.	34
3.3. Data Collection Methods	35
3.3.1. Method rationale: Facebook.	35
3.3.2. Promotion of the study.	37
3.3.3. Online survey.	39
3.3.4. Facebook group discussion.	40
3.3.5. Focus group.	41
3.3.6. Generalisability	42
3.3.7. Virtual focus group versus traditional focus group	44
Chapter 4. Findings	46
4.1. Introduction	46
4.2. Description of Millennials Living in the City of Nanaimo	46
4.3. Leisure Mobility of Millennials in Nanaimo	50
4.3.1. “How do they have fun?”: Leisure activities and frequencies of participation.	51
4.3.2. “Where do they have fun?”: Leisure places and spaces.	55
4.3.3. “How do they get there?”: Modes of transportation.	63
4.4. The Role of Transportation in Millennials’ Leisure Repertoire	65
4.4.1. First theme: Latent demand for leisure.	66
4.4.2. Second theme: Transportation as a constraint to leisure	68
4.4.3. Third theme: Leisure/transportation constraint negotiation.	76

EXPLORING LEISURE MOBILITY OF MILLENNIALS

4.5. Findings Summary	80
Chapter 5. Discussions	83
5.1. Introduction	83
5.2. Contributions to Leisure Mobility Research	83
5.2.1. The Compensation Theory in Leisure	83
5.2.2. Leisure Mobility Styles – Independents and Dependents: A New Discovery	85
5.3. Contributions to Sustainable Leisure Management	86
5.4. Looking Forward	88
5.4.1. The Classification of Activities for Leisure Research	88
5.4.2. Potential for Future Research	89
5.4.3. Millennials’ Suggestions for the City of Nanaimo and the RDN	91
FINAL CONCLUSION	95
REFERENCES	96
APPENDICES	118
Appendix A – Sustainable Development Goals (UN DESA, 2016a)	118
Appendix B – Images of the City of Nanaimo	120
Appendix C – Leisure Mobility Styles by Götz et al. (2003)	123
Appendix D – Leisure Mobility Styles by Ohnmacht et al. (2009)	126
Appendix E – Instruction for Feedback for the Pilot Study	128
Appendix F – Recruitment Script	129
Appendix G – Logo and Banner	131
Appendix H – Examples of Promotional Materials on Facebook	132
Appendix I – Examples of Promotional Materials on Twitter	133
Appendix J – Examples of Promotional Materials on Instagram	134
Appendix K – Promotional Poster	135
Appendix L – Infographic about the Study	136

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix M – Thank You Message----- 137

Appendix N – Online Survey Questionnaire ----- 138

Appendix O – Research Consent Form Online Survey ----- 163

Appendix P – Privacy Settings for Facebook Groups----- 165

Appendix Q – Research Consent Form Facebook Group Discussion ----- 166

Appendix R – Questions for Facebook Group Discussion ----- 169

Appendix S – Research Consent Form Focus Group ----- 170

Appendix T – Nanaimo Cycling and Transit Maps ----- 172

Appendix U – Table of Cities where Millennials Spent the Majority of their Life before Moving to Nanaimo ----- 173

Appendix V – Millennials’ Suggestions for Transportation Development ----- 176

EXPLORING LEISURE MOBILITY OF MILLENNIALS

LIST OF FIGURES, MAPS, IMAGES AND TABLES

Figure 1. Frequency of Participation in Each Category of Leisure Activities	Page 52
Figure 2. Chosen Locations for Each Category of Leisure Activities	Page 57
Figure 3. The Differences between the Average Number of Locations Visited	Page 61
Figure 4. Mode of Transportation Chosen to Access Leisure Activities	Page 64
Figure 5. Desired Leisure Activities	Page 66
Figure 6. Percentage of Desired Leisure Activities	Page 68
Figure 7. Millennials' Opinions on the Three Different Statements	Page 71
Map 1. The Regional District of Nanaimo	Page 14
Image 1. Nanaimo Harbour	Page 15
Image 2. Themes Emerged from the Study's Findings and Their Interrelationships	Page 82
Image 3. Top Constraints to Leisure	Page 87
Image 4. The Interrelationship of Leisure Constraints	Page 88
Table 1. Classification of Activities for Leisure Travel	Page 23
Table 2. Classification of Activities for Leisure Travel in Nanaimo	Page 32
Table 3. Possible Locations for Leisure Activities in Nanaimo and its Surrounding	Page 33
Table 4. Summary Table of Millennial Respondents Overview	Page 48
Table 5. Countries where Millennials Lived before Moving to Nanaimo	Page 49
Table 6. Summary Table of Millennials' Access to Transportation Overview	Page 50
Table 7. Type of Areas for Leisure Activities in Nanaimo and Surroundings	Page 58
Table 8. Average Numbers of Leisure Locations Visited per Leisure Area Type per Individual	Page 60



Everybody keeps shouting "Save our trees!",

YET MOST OF THE TIME THE ONLY WAY TO

REACH THOSE TREES AND GIVE THEM A HUG

IS TO DRIVE A CAR.

LAN LE DIEM TRAN

Chapter 1. Introduction

1.1. Sustainable Development Goals – The 2030 Agenda for Sustainable Development

Poverty, obesity, drought, flood, pollution, inequality, animal extinction, economic crisis, global warming, wars. Never before has the world been facing such diverse problems simultaneously, nor has it paid much attention to such issues. The United Nations believed that 2016 presented “an unprecedented opportunity to bring the countries and citizens of the world together to embark on a new path to improve the lives of people everywhere” (United Nations, 2016). Different levels of stakeholders, from world leaders to teenagers, were brought together to build a better world and ensure that no one was left behind. The 2030 Agenda for Sustainable Development was adopted at the United Nations Sustainable Development Summit on September 25, 2015 (United Nations Department of Economic and Social Affairs, 2016a). With 17 Sustainable Development Goals (SDGs) and 169 targets, the agenda is an action plan for people, planet, prosperity, peace, and partnership (United Nations Department of Economic and Social Affairs, 2016a) (see Appendix A for the complete list of goals). There is consensus that almost all SDGs can be achieved in cities, as cities and metropolitan areas are centres of national and global economies and a key node in fostering competitiveness, social inclusion, innovation and environmental sustainability (Banister, 2008; OECD, 2013; Satterthwaite, 2010; United Nations Human Settlement Programme, 2015).

1.2. The Role of Cities in Sustainable Development

Today, most of the world’s population – 54% to be precise – are living in cities (Alonso, Monzón, & Cascajo, 2015; Banister, 2008; Deloitte, 2014a; Revi et al., 2014; United Nations, 2014). According to the United Nations Human Settlement Programme (2015), the world has rapidly urbanised where the urban population outnumbered the rural population for the first time in 2008. By 2050, two-thirds of the world’s population are expected to be living in urban areas, and the number is projected to reach 9.7 billion by then (United Nations Department of Economic and Social Affairs, 2015b).

As a result, with roughly 70% of the world’s gross domestic product generated in urban areas, cities that are poorly designed and managed often pay a high price for “congestion, contamination and large inequalities” (United Nations Human Settlement Programme, 2015, p.1). For instance, cities, especially those in the more affluent parts of the world such as Europe and North America, have long been regarded as major carbon emitters (Kiss, Jansen, Castaldo, &

Orsi, 2015; Satterthwaite, 2010). During the course of daily urban life, three domains of household consumption – food, mobility and housing – account for 75 to 80% of environmental impacts, of which 30% stem from transportation alone (McCormick, Richter, & Pantzar, 2015). Due to the rising population concentration in metropolitan areas, the influence that cities have on the living environment is increasing. Part of that influence is due to a city's transportation system.

1.3. Sustainable Transportation

Despite the frequent attention on energy consumption and industrial activity as the key sectors contributing to greenhouse gas emission (GHG), the role of the transport sector in response to climate change is growing in significance since it is responsible for one quarter of the global GHG emissions (United Nations Department of Economic and Social Affairs, 2016b). Almost a quarter of the world carbon dioxide (CO₂) emissions come from transportation, especially the road sector due to its massive fuel combustion (Mathez et al., 2012; Nicolas & David, 2009; World Health Organisation, 2016a), making mobility one of the largest contributors to global warming along with housing, infrastructure, food and drink (Black, 2010; Dolnicar, Laesser, & Matus, 2010; Høyer, 2010; International Transport Forum, 2011; Mont, Neuvonen, & Lähteenoja, 2014; Nicolas & David, 2009). These are important facts to take into consideration as global warming has become one of the most urgent issues of the modern human society. Sustainable transport is not only essential in tackling climate change, but also important in ensuring social equity and strengthened economies. Target 2 of SDG 11 outlined that all nations should:

“By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons” (United Nations Department of Economic and Social Affairs, 2016b).

A sustainable transportation system provides significant health benefits as it encourages active forms of transportation such as walking and cycling (Bricker, 2014; Gilderbloom, Riggs, & Meares, 2015; Van Dyck, Deforche, Cardon, & De Bourdeaudhuij, 2009; World Health Organisation, 2016b). Besides, poor transportation within cities decreases accessibility to key services and amenities, which then further increases social exclusion among the destitute and the

EXPLORING LEISURE MOBILITY OF MILLENNIALS

vulnerable (Social Exclusion Unit, 2003). In terms of economic growth, sustainable transportation contributes to economic resilience from a personal level to a national scale (Aalto University Professional Development, 2015; Bricker, 2014; Cortright, 2007; Gilderbloom et al., 2015; Speck, 2012; Thompson, 2012).

Therefore, a sustainable transportation system is one that:

1. allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations.
2. is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
3. limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.

(The Centre for Sustainable Transportation, 2002, p. 1)

When looking at the SDGs and the 2030 Agenda for Sustainable Development as a guideline towards building a better world, even though sustainable transportation is not represented as a standalone SDG, its influence reaches across several areas that are crucial to sustainable development, particularly those that are related to food security, health, energy, infrastructure and cities, and human settlements (United Nations Department of Economic and Social Affairs, 2016c). When it comes to health and well-being, leisure plays an essential role.

1.4. Leisure: The Conjoint Growth of Fun and Sustainable Development

Leisure is individually and culturally defined, but mostly revolves around the themes of free time, recreational activities, and even a state of mind or a special spirit (Russell, 2013). It is a basic human right (United Nations, n.d., "Full Text", art. 24) which contributes to life enrichment and meaningful relations (Blackshaw, 2010) while providing potential solutions to many urban social problems (Thibault & Lavigne, 2014). Moreover, leisure is an important attribute to a high quality of life (Social Exclusion Unit, 2003; Witkowski & Kiba-Janiak, 2012). Many types of leisure activities with low carbon emissions are concentrated in cities, such as music, festivals, the visual arts, the enjoyment of historic buildings and quarters, diverse culinary choices, or simply the joy of living in a vibrant environment, where the options for get-togethers

EXPLORING LEISURE MOBILITY OF MILLENNIALS

with family and friends are plentiful (Satterthwaite, 2010). In British Columbia (BC), according to the survey on public opinion on sustainability and the built environment (McAllister Opinion Research, 2016), after greenspace and nature, recreation and leisure amenities as well as social character were mentioned often, yet inconsistently, as the most important feature of the existing built environment across all types of communities (urban, suburban, small town and rural).

However, not everyone can enjoy leisure. For many, mobility is a barrier to accessing leisure (Barton, 2012; Darcy, 2010; Guereño-Omil et al., 2014; Kowalski & Lankford, 2011; Lyu, Oh, & Lee, 2013; Social Exclusion Unit, 2003). Unfortunately, leisure mobility is the most difficult type of mobility to analyse due to the lack of fixed patterns, and therefore is often neglected in sustainable transportation policies (Ettema & Schwanen, 2012; Fuhrer, Kaiser, & Hartig, 1993; Holden & Linnerud, 2011; Ohnmacht, Götz, & Schad, 2009). The consequences that this barrier creates may be larger than expected, especially when looking at the Millennial generation – a generation that already makes up a third of the work force in North America (Janjigian, 2016). This generation has a strong orientation towards work-life balance and spending for experiences that make them feel connected to their communities, other people, and the world (Kane, 2014). Millennials are desired by urban centres, particularly by small and mid-sized cities, due to their significant economic implications in an increasingly aging world.

1.5. The Millennial Generation: A Brief Introduction

The Millennial generation, which are also referred to as Echo Boomers, Next Gen, and Generation Y, are generally people who were born between the early 1980s and 2000 (Howe & Strauss, as cited in Graybill, 2014; Ng, Schweitzer, & Lyons, 2010; Twenge, Campbell, Hoffman, & Lance, 2010). They also posited new perspectives to the understanding of the life course of a person – a concept that is important in comprehending and managing social change (Hendricks, 2012). Representing the youngest part of a population's work force, Millennials are likely to have a profound influence on the structure of economic activity within countries as well as on the pattern of trade between them (Cai & Stoyanov, 2016). This is mainly due to aging societies that experience a decline in the quality and supply of certain cognitive skills required by certain industries, such as memory, multitasking, and the speed of information processing, along with physical strength (ibid.).

According to the World Bank (2016a), the world has been observing a relatively steady increase in the percentage of people aged 65 and above. In Canada, this share doubled from 8%

EXPLORING LEISURE MOBILITY OF MILLENNIALS

in 1965 to 16% in 2015. Meanwhile, the Canadian working population (people aged 15-64) only increased by 15.65% within the same time frame (The World Bank, 2016b). Moreover, the trend for people aged 0 to 14 was the exact opposite of those who are aged 65+. A steeper decline of this population could be seen in Canada as it decreased by 106.25% between 1965 and 2015 (The World Bank, 2016c). These data predict the continuation of a phenomenon that has become common in industrialised countries such as Canada: ageing populations (Christensen, Doblhammer, Rau, & Vaupel, 2009; Franklin, 2015). Even within a country, some communities have an older population than others. In 2011, Vancouver Island had a higher median age (46.5%) than the country (40.6%); the percentage of people aged 65 and above compared to the total Vancouver Island population was also higher (19.82%) than that of Canada (14.77%) (Statistics Canada, 2012b). In the same year, the median age of the city of Nanaimo which was 44.8%, higher than the province (41.9%) and the country (40.6%) (Statistics Canada, 2012c; Statistics Canada, 2012d). In general, the labour participation rate on Vancouver Island was 58.2% –the lowest among all economic regions of the four western provinces (Manitoba, Saskatchewan, Alberta, and British Columbia) (Statistics Canada, 2016).

The high number of retirees migrating to Vancouver Island and Nanaimo is significant owing to the beautiful natural settings and a generally peaceful ambiance of the island (Chipeniuk, 2004). However, an aging population poses several challenges, most notably high old-age dependency ratio and the allocation of a significant portion of national budgets to health and elderly care instead of public services such as education (Christensen, Doblhammer, Rau, & Vaupel, 2009; Kulik, 2014; Lutz, Sanderson, Scherbov, 2008). As much as both local residents and retired migrants attempt to contribute to the protection of the island's environment and community development, without the support of a younger workforce, the efforts might weaken and not be sustained in the long run (J. Ehrlich, personal communication, October 29, 2015; M. Dwyer, personal communication, October 26, 2015).

It is therefore essential to explore the leisure lifestyles of the Millennial generation and how they navigate their ways to access leisure activities and places. Such knowledge is helpful to understand their perceptions about quality of life and what makes a city attractive. Furthermore, given that the birth rate in Canada is decreasing, it is important to attract Millennials not only from other Canadian cities and provinces, but also from other countries as a strategy to manage old-age dependency ratio (Kulik, 2014). However, the attention and focus on examining leisure

EXPLORING LEISURE MOBILITY OF MILLENNIALS

mobility of this generation has not been featured very often in the academic literature. Despite being mentioned lately in books, reports and consumer studies that the auto-centric mentality of baby boomers is being slowly replaced by an increased interest in living in places with efficient public transportation infrastructure among millennials (Deloitte, 2014b; Goldberg, 2014; Speck, 2012), academic research focusing on this trend has remained limited. Furthermore, the knowledge of leisure mobility styles of Millennials would serve as one of the many indicators for the city of Nanaimo to take actions to transform the existing transportation system, since transportation is an integral part of sustainable development. In addition, as the city aims to thrive in the knowledge-based economy, it must plan according to the needs of the people that the city wants to attract – the Millennial generation both from within the country and from abroad.

1.6. Purpose Statement

The purpose of this study was to identify the role that transportation – especially car and its alternatives – played in accessing leisure opportunities for Millennials living in Nanaimo. To gain deep insight into Millennials’ perceived role of transportation in their leisure life, the objectives for this study were to:

1. Describe and classify leisure mobility styles of Millennials.
 - a. Identify which leisure activities Millennials chose to participate in.
 - b. Identify the locations and places where Millennials engaged in leisure.
 - c. Identify what transportation was used to access these activities and/or places.
2. Determine the influence of the city’s existing transportation system/infrastructure on the leisure repertoires of Millennials.
 - a. Explore Millennials’ desired state regarding their leisure repertoires in Nanaimo.
 - b. Investigate whether transportation was identified as a barrier to leisure for Millennials.

Chapter 2. Literature Review

2.1. Introduction

In order to understand the logic and reasoning behind this research, the next chapter looks at the sustainability issues in transportation before providing a brief overview of sustainable transportation development worldwide. The global overview is useful to understand the rationale behind the decision to choose Nanaimo as the context of the case study, which is described in further detail in the methodology chapter. Then, the two terms “mobility” and “accessibility” are distinguished by deciphering their meanings and usage in the literature. Afterwards, mobility is examined to understand how it can be a structural constraint to leisure. Then, the concept of leisure mobility and “the barbecue effect” theory is explored. Finally, the chapter is concluded by highlighting the importance of the Millennial generation in leisure mobility research.

2.2. Sustainable Issues in Transportation

2.2.1. Environmental concerns.

Rapid increases in carbon dioxide heightens global temperature, which adds to the greenhouse effect and consequently retains more heat on the planet (Black, 2010). This results in climate change which was defined by the United Nations Framework Convention on Climate Change as: “A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (as cited in IPCC, 2014, p.5). The risks and impacts of climate change on the urban environment are increasing in various urban centres around the world, affecting both the built environment, people, local and national economies. They include heat stress, extreme precipitation, water scarcity, rising sea levels and storm surges, and inland and coastal flooding among others (ibid).

Along with housing, infrastructure, food and drink, the impacts of mobility on climate change are among the highest (Black, 2010; Dolnicar, Laesser, & Matus, 2010; Høyer, 2010; International Transport Forum, 2011; Mont, Neuvonen, & Lähteenoja, 2014; Nicolas & David, 2009). 23% of the world carbon dioxide (CO₂) emissions come from transportation, particularly through fuel combustion, of which the road sector held the greatest share (Mathez et al., 2012; Nicolas & David, 2009; World Health Organisation, 2016b). This indicates increased car use, of

EXPLORING LEISURE MOBILITY OF MILLENNIALS

which urban areas in Canada are no exception, both in terms of vehicle ownership and the distance travelled (Mathez et al., 2012). In fact, transportation GHG emissions in Canada had increased by 35% between 1990 and 2007 (Terefe, as cited in Mathez et al., 2012).

According to World Health Organisation (2016b), the fact that the transportation sector is the fastest growing contributor to climate emissions has a major bearing on the environment, namely through long-lived emissions, short-lived climate pollutants and urban air pollution. CO₂ emissions are considered long-lived as they remain in the atmosphere for over a century, causing long-term warming effects (IPCC, as cited in World Health Organisation, 2016b). Short-lived climate pollutants such as black carbon and ground-level ozone are the contributors not only to global warming, but also air pollution, which is associated with respiratory and cardiovascular diseases, cancer and adverse birth outcomes, and higher death rates (World Health Organisation, 2016b). The next section discusses the social issues that are related to wellbeing including public health, safety and social isolation.

2.2.2. Social issues.

Human's safety and wellbeing are among the most immediate consequences of an unsustainable transportation system. Road safety remains an issue in the modern world, particularly in developing countries (Welle et al., 2015; World Health Organisation, 2016c). According to World Health Organisation (2016c), road traffic injuries are among the global top ten causes of death with 1.25 million deaths annually, and a further 20 to 50 million non-fatal injuries with long-term or permanent health consequences. In Canada, the average rate of mortality caused by road traffic injury was 6 per 100,000 people in 2013, lower than the world average of 17 per 100,000 and the average of the Organization for Economic Cooperation and Development (OECD) members (The World Bank, 2016d). When taking a closer look into these global statistics, rail and bus travel is generally safer than private motorised transport. The ones most at risk for road traffic deaths are pedestrians, cyclists and motorists due to absent or weak cycling and walking infrastructure along with weak safety regulations (World Health Organisation, 2016c). This is particularly true in urban areas where multiple forms of transportation exist. Unfortunately, they do not usually co-exist, as many cities were built for cars and not people or as stated by Peñalosa (as cited in Montgomery, 2007, para. 16). "a city can be friendly to people or it can be friendly to cars, but it can't be both!". Nearly all city dwellers are affected by traffic safety, with children, the poor, the elderly and the disabled being the most vulnerable (Welle et al.,

EXPLORING LEISURE MOBILITY OF MILLENNIALS

2015). In fact, the leading cause of death among people aged 15 to 29 worldwide is road crashes (World Health Organisation, as cited in Welle et al., 2015). In Canada, people aged between 15 and 34 accounted for the most fatalities and injuries and the highest number of serious injuries and total injuries were recorded among people aged between 25 and 34 (Statistics Canada, 2015; Transport Canada, 2013).

In terms of public health, horizontal patterns of urban development have been proven by previous studies to correlate with a decline in physical activity, such as walking or cycling. This factor attributes to obesity and noncommunicable diseases such as type 2 diabetes, some types of cancer, and cardiovascular diseases (Downward & Rasciute, 2015; Dyck, Cardon, Deforche, & De Bourdeaudhuij, 2011; Ewing, Brownson, & Berrigan, 2006; Gilderbloom et al., 2015; Kondo et al., 2009; Montgomery, 2013; Van Dyck et al., 2009; World Health Organisation, 2016d). Besides lack of physical activity, the high level of noises caused by the volume and speed of traffic also results in adverse health effects among urban residents (Alonso et al., 2015; Dyck et al., 2011; Priester, Miramontes, & Wulfhorst, 2014; World Health Organisation, 2016e). Furthermore, a lack of reliable transportation results in limited of access to numerous services and facilities, namely jobs, education, leisure facilities, and health-care services, all of which are critical social determinants of health (World Health Organisation, 2016f).

Such inaccessibility also leads to social exclusion, as most of the missed opportunities related to transport problems are social and leisure activities, which are one of the keys to ensuring social equity and strengthening social capital (Cass, Shove, & Urry, 2005; Delbosc & Currie, 2011; Miranda, Pinto, & Olmos, 2014; Montgomery, 2013; Social Exclusion Unit, 2003; J. K. Stanley, Hensher, Stanley, & Vella-Brodrick, 2011; J. Stanley et al., 2011). Furthermore, most studies have found that good accessibility to services and amenities along with good pedestrian facilities put off property crimes, murders and violent crimes, which contributes to residents' perceptions of the overall safety and security of a neighbourhood (Gilderbloom et al., 2015; Hong & Chen, 2014). These perceptions, in turn, influence how likely residents are to engage in activities on the streets, which enlivens the communities and increase general life satisfaction among the people (Hong & Chen, 2014; Montgomery, 2013; Speck, 2012).

2.2.3. Economic problems.

Social exclusion due to poor transportation also affects the economy at all levels. (Black, 2010; Cass et al., 2005; Cortright, 2007; Montgomery, 2013; Social Exclusion Unit, 2003;

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Speck, 2012). On the individual level, there is a vicious circle among people who are already on the worse-off spectrum of social equity, as the lack of efficient and affordable transportation means that they can be cut off from jobs, education and training, as well as social and family networks, through which they may find employment opportunities (Cass et al., 2005; Cervero & Satariano, 2011; Miranda et al., 2014; Social Exclusion Unit, 2003). Yet, without a good job, it is even less likely to gain access to transportation which excludes them socially in the first place. Consequently, on a broader scale, businesses in the community may have difficulty hiring employees and suffer from lost customers, while poor accessibility and high levels of traffic can reduce investment in respective urban areas (Social Exclusion Unit, 2003). Moreover, barriers to work caused by poor transportation may contribute to higher benefit payments and reduced tax contributions (ibid.).

Besides the individual and business levels, a city's economy and vitality is constrained by inadequate transportation systems (Montgomery, 2013; Renner, 2016; Speck, 2012). First of all, urban areas that encourage reliance on private motorised vehicles foster expenditures on cars and their related costs, such as gas, insurance, and parking. Money spent on cars and fuels is money that leaves the regional economy (Speck, 2012). Secondly, without people-friendly transportation systems, consumers are less likely to be enticed to purchase local goods, which results in weak economic resilience of the community. Furthermore, it also has a major impact on increasing foreclosures in time of economic recessions (Gilderbloom et al., 2015).

Areas that are walkable or bikeable usually have high real estate prices, values, and rents. However, these areas can be more affordable as families can cut back on household transportation costs by reducing car ownership (Bricker, 2014). In the U.S.A., for instance, federal expenditures on automobile transport still exceed those spent on walking and cycling by 1,000:1 (Southworth, 2005). As a consequence, a typical American middle-income household spends more of their income on transportation (including the purchase of new cars and petrol) than on housing, and a poor family can spend as much as 40% of their income solely on transportation (Aalto University Professional Development, 2015; Thompson, 2012). In the U.S.A.'s 25 largest metropolitan areas, the combined cost of housing and transportation rose faster than incomes in the 2000s (Renner, 2016).

Transportation is a major part of the solution towards the high cost of living in cities such as Vancouver, where housing cost is currently a major issue. However, by reducing the need to

EXPLORING LEISURE MOBILITY OF MILLENNIALS

drive or own a car, residents can save thousands of dollars each year (City of Vancouver, 2012; Montgomery, 2013). In 2010, transportation alone accounted for 13.35% of the total average estimated household expenditures in Nanaimo – higher than the two largest cities in British Columbia, which are Vancouver (12.95%) and Victoria (12.29%) (Economic Development Office of Nanaimo, 2010).

In summary, all the issues caused by unsustainable transportation within cities that have been reviewed in this study are merely the tip of the iceberg. Without actions that incorporate the vision for sustainable development, the price that the environment, the society and the economy have to pay for unsustainable transportation will continue to soar. As part of the global effort to tackle sustainability issues, strategies that embrace the development of sustainable transportation are taking place around the world as well as in Canada.

2.3. Sustainable Transportation: A Brief Global Review

2.3.1. Worldwide.

There have been great efforts in designing and developing sustainable transportation systems around the world. After the Paris Agreement, which was formally adopted by the United Nations, Framework Convention on Climate Change on 12 December 2015 and signed by 175 countries thus far on Earth Day 22 April 2016 (Savaresi, 2016; Schmidt, 2016), there have been even more initiatives created to tackle sustainable issues through transportation. The focus of the Paris Agreement was to “limit the temperature increase to 1.5°C above pre-industrial levels” (United Nations, Framework Convention on Climate Change, 2015, p. 21) in recognition that this would significantly reduce the risks and impacts of climate change. As a response, some countries started to implement transportation-related ideas that help reach that target, such as Paris’ car-free day (Worland, 2015) and Germany’s Bike Autobahn Cycle Network (O’Sullivan, 2016).

There have been best practices prior to the Paris Agreement. In 1964, the world’s first high-speed railway Tokaido Shinkansen in Japan was introduced (Sone, 2015). In the UK, the National Cycle Network was established in 1995. Today, it is a 22,530-kilometre series of safe, traffic-free paths and quiet on-road cycling and walking routes that connect to every major town and city across the UK (Sustrans, 2015). In Switzerland, a national celebration was held on June 1, 2016 for the opening of the 57-kilometre Gotthard Base Tunnel – a grand project that symbolises sustainability and innovation as it shortens rail travel time and protects the sensitive Alpine

EXPLORING LEISURE MOBILITY OF MILLENNIALS

environment from the environmental burden of increasing traffic (AlpTransit Gotthard Ltd., 2012; Brunner, 2016; Ehrbar, 2016). In Southeast Asia, an announcement was made in 2016 for a new high-speed rail project which would go from Malaysia to Singapore in 90 minutes instead of the usual 5-hour car drive and the increasingly crowded air travel (Blackburn-Dwyer, 2016). As the urgency for solutions towards climate change rises, Canada has also developed its own initiatives.

2.3.2. Canada.

In 2011, transportation alone accounted for 24% of Canada's total greenhouse emissions (Transport Canada, 2014). Having recognised transportation as one of the largest sources of air pollutants and GHG emissions (Health Canada, 2013; Transport Canada, 2014), the need for sustainable development came with the desire for progress in sustainable transportation in Canada. However, there has been low institutional integration among the three levels of government and weak regional visions within most urban areas, which hampered the planning and implementation of initiatives related to sustainable transportation (Hatzopoulou & Miller, 2008).

On a federal level, under the newly elected government, it was stated that Transport Canada's vision was a transportation system recognised worldwide for its safety and security, efficient support for economic prosperity and a sustainable quality of life, and respect for the environment (Transport Canada, 2016). Yet, in the publicly consulted and currently reviewed and revised draft for the 2016-2019 Federal Sustainable Development Strategy, there was no written focus on how such a vision can be achieved besides encouraging individual Canadians to support environmental sustainability through "cycling or using public transit more often" (Environment and Climate Change Canada, 2016, p.8).

Despite that, when observing major cities in Canada individually, there have been widespread attention and initiatives regarding sustainable transportation. The city of Montréal, for example, declared to achieve a reduction of 30% of the community's GHG emissions by 2020 during the United Nations Climate Change Conference in 2005 (Mathez et al., 2012). The 2008 Montréal Transportation Plan intended to significantly reduce its citizens' dependence on cars through massive investment in various forms of public transit and active transportation, including metro, bus, train, and pedestrian and cycling facilities (Services des infrastructures, transport

EXPLORING LEISURE MOBILITY OF MILLENNIALS

et environment, 2008). There have also been various case studies examining different topics surrounding this theme from car-sharing behaviour to bicycle thefts in Montréal (Lierop, Grimsrud, & El-Geneidy, 2015; Sioui, Morency, & Trépanier, 2013).

Another example is the Calgary Transportation Plan, which was created to move the city towards a more sustainable future by offering more convenient, affordable and attractive choices for Calgarians, including walking, cycling, transit, high occupancy vehicles (or carpooling) and single-occupant vehicles (The City of Calgary, 2009). However, the intended efficiencies in local and citywide transportation infrastructure were not achieved because some social and urban factors did not support extensive modal shift from the private automobile to walking, cycling or transit use. Those factors include: employment opportunities, extent of commercial, social and cultural activities, and location and form of density (Tsenkova & Damiani, 2009). Notwithstanding, citizen-led non-profit organisations such as Sustainable Calgary continue to advocate for citizen engagement in the planning process to create more active, liveable communities (Sustainable Calgary, 2015).

2.3.3. The City of Nanaimo.

In the province of British Columbia, Vancouver could be considered as the prime example of a city with a sustainable transportation system. Having been ranked as the top city for quality of living in North America for many consecutive years (Mercer, 2016), the city of Vancouver is determined to ensure an inclusive, healthy, prosperous and liveable future for the city through sustainable development strategies, which include the Transportation Plan 2040 (City of Vancouver, 2016). The plan provides directions that were based on best practices around the world, public consultation and ongoing engagement with different levels of stakeholders (City of Vancouver, 2012).

Across the water from Vancouver is Vancouver Island – a jewel of British Columbia with serene coastal waters, majestic wildlife parks and a plethora of flora and fauna (Vancouver Island, 2015). The island's central east coast, which consists of four municipalities and seven unincorporated Electoral Areas with a population of 146,600 people, is governed and serviced by the Regional District of Nanaimo (RDN) (Regional District of Nanaimo, 2015). One of those services are transportation, which connects the communities within the region through BC Transit. Map 1 (ibis.) shows all of the RDN's communities.

EXPLORING LEISURE MOBILITY OF MILLENNIALS



Map 1. The Regional District of Nanaimo.

One of the RDN’s municipalities is the Harbour City of Nanaimo – the second largest municipality on the island and the sixth most populated city in the province (Professional Environmental Recreation Consultants Ltd., 2005; Statistics Canada, 2012a; Vancouver Island, 2016). With its relatively small population of 90,504 people (Regional District of Nanaimo, 2017) low cost of living compared to other urban centres nearby, and proximity to Victoria and Vancouver as well as nature, Nanaimo prides itself as “one of the most desirable, liveable small cities in North America” (Economic Development Office of Nanaimo, 2010, p.iii). Image 1 below shows the Nanaimo Harbour in the downtown area, from which its title as “The Harbour City” derives. More images of the city can be found in Appendix B.



Image 1. Nanaimo Harbour, Downtown Nanaimo.

Nanaimo is very attractive owing to its nature. However, the city still has rooms for improvement as it faces the problem of urban sprawl. Urban sprawl is the development of low-density neighbourhoods that are designed to be well-accessible by cars (De Vos & Witlox, 2013). It is uneconomical and should be halted if growth management and the improvement of quality of life are to be achieved (Cordery, 2011; Gartshore, 2012; Round, 2007; Tucker, 2008). As per the City of Nanaimo (2014), the city's rapid northward expansion during the 80s and 90s resulted in urban sprawl, and commercial, retail, and employment centres stretched along the Island Highway corridor. Such development encouraged increasing car use and decreased walkability, bikeability and commutability of the city. In fact, 88% of the people living in Nanaimo travel by car for their daily needs, whereas only 8.5% choose to walk, 1.0% cycle, and 2.5% use public transit (ibid.). Besides, the abundance of land, the lush nature and the mild climate that the city benefits from are among the social and cultural factors that further supported the general belief in automobile dependence, as pointed out by Newman and Kenworthy (1989/1991; 2000).

Consequently, the daily activities occurring within and around the city are impacted. Section 2.1.2. identifies how unsustainable transportation can easily take lives and livelihood away. It is a global issue, and the general outlook in British Columbia and Vancouver Island is no different (ICBC, 2016a). As a matter of fact, the City of Nanaimo had the second highest numbers

EXPLORING LEISURE MOBILITY OF MILLENNIALS

of car crashes, injured victims and pedestrian crashes on Vancouver Island after Victoria (ICBC, 2016b). Three out of the top ten crash intersections on Vancouver Island happened in Nanaimo, placing the city on the second place after Saanich (ICBC, 2016a). As part of sustainable development, Nanaimo also developed its own Transportation Master Plan (City of Nanaimo, 2014). The vision of the plan was stated as follows:

“Nanaimo’s multi-modal transportation system will connect the City’s residents and businesses to each other, the rest of Vancouver Island and beyond. It will provide inclusive transportation choices that are safe, comfortable, and accessible for people of all ages and abilities. A system of interconnected facilities and services will provide affordable mobility while supporting a shift towards a more sustainable mix of transportation alternatives. The transportation network will seek to create and support a vibrant, liveable, healthy and sustainable community for residents, businesses and visitors alike” (City of Nanaimo, 2014).

The plan consists of thorough details on how to realise this vision. It was not ambitious enough however. According to the plan’s targets, the proportions of the trips accommodated by car is projected to fall from 88% to 76% by 2041 (City of Nanaimo, 2014). Looking at the bigger picture, the RDN was also unambitious. In 2014, the RDN developed its Transit Future Plan which envisions the RDN transit network in 2040 (Regional District of Nanaimo, 2014). With transit accounting for approximately 2.7% of all trips to work in the regional district, the plan’s ridership target for the RDN is to “set an overall transit mode share target of five percent for the region within 25 years” (ibis., p. 53). It is comprehensible that cars provide some benefits in the current context of Nanaimo, but as outlined in section 2.2., if the city insists that “the car will still be part of [the] transportation mix in the future” (ibid., p. 85) and aims to reduce only 8% of the trip proportions made by private vehicles within 27 years (2014-2041), sustainable development will remain a target, not a reality. In addition, Nanaimo will already have been left far behind in the global and regional competition for Millennial talents.

On the one hand, it is very crucial that the city and the regional district realise that strong actions are required to improve its transportation system as part of sustainable development. On the other hand, developing the city based on the needs of the Millennials instead of general and vague visions is vital for the region in general and the city in particular to grow in the knowledge-based economy.

2.4. Distinguishing the Differences between ‘Mobility’, ‘Accessibility’ and ‘Motility’

There are many aspects of transportation that need to be discussed, and in this study, leisure mobility was chosen to be the heart of the discussion. Before moving on to discuss leisure mobility, it is important to differentiate ‘mobility’, ‘accessibility’, and ‘motility’. Mobility and accessibility are the two basic concerns in transportation (Silvia, 2014). Most research conducted on the topics of transportation, particularly those that concern the influences it has on various social aspects, commonly used both terms ‘mobility’ and ‘accessibility’ indiscriminately and sometimes even as synonymous (Alonso et al., 2015; Cass et al., 2005; Cheng & Chen, 2015; Grieco, 2015; Leslie et al., 2007; Preston & Rajé, 2007; Reisi, Aye, Rajabifard, & Ngo, 2014; Social Exclusion Unit, 2003). Dictionaries define ‘mobility’ as the ability to move or be moved freely and easily (Oxford University Press, 2016a), and ‘accessibility’ as the quality of being able to be reached or entered (Oxford University Press, 2016b). Since ‘transportation’ is defined as a system or means of transporting people or goods (Oxford University Press, 2016c), it can be understood that it supports ‘mobility’ and consequently influences ‘accessibility’. Finally, ‘motility’ is a term that was conceptualised by Kaufmann (2012), which is “the way in which a person or a group uses the travel possibilities available from the transport supply” (para. 2). As mentioned in the Feasibility Stage Report of the World Bank (2010), a major outcome of urban transport is “both accessibility to work places, to schools, to health centres, and social networks, and the mobility to reach these places” (p. 6).

The concept of ‘mobility’ can be operationalised with ease through common indicators which measure “if, how, and how much travel is performed” (ibid, p. 5). In contrast, ‘accessibility’ is far more ambiguous, as it depends on a wide range of factors: the characteristics and distribution of activities and destinations, the characteristics and time available of the participants, and the performance of the transportation system, among others (Cass et al., 2005; Silvia, 2014; The World Bank, 2010). Silvia (2014) distinguished ‘mobility’ and ‘accessibility’ as follows: “[M]obility represents the choice[s] people make, while accessibility represents the choice[s] people have, of which only some will actually be made”. This distinction considers ‘accessibility’ as “potential for mobility (in short, potential mobility)” (p.5). By the same token, Ferreira, Beukers, and Brömmelstroet (2012) saw ‘mobility’ as the means with which people achieved ‘accessibility’ to various activities occurring in spatially disjointed places. Meanwhile, according to Kaufmann (2012), ‘motility’ refers to three things: the social conditions required to access

EXPLORING LEISURE MOBILITY OF MILLENNIALS

transportation supply – available technical systems of transport and telecommunications; the skills needed to utilise this supply such as driving or language skills when travelling abroad; and the mobility projects – or goals – that can be realised by using transportation supply.

As discussed in section 2.2.2, transportation disadvantages can lead to limited mobility and consequently lack of accessibility, which ultimately results in social exclusion. Social exclusion is briefly mentioned again in order to clarify that it is not purely about income-based deprivation, but rather a lack of “participation in civil society” (Preston and Rajé, p.152). This is in part determined by access to many basic services and amenities which include leisure activities and facilities – the focus of this study. Similarly to Preston and Rajé (2007), Ettema and Schwanen (2012), and Ohnmacht, Götz and Schad (2009) also believed that social relationships, such as those tied to families and friendships, should not be decoupled in leisure travel analysis. Thatcher and Yeow (2016) stressed that humans were the key to ensuring a sustainable future, as their expansion and lifestyles negatively impacted the very natural and social environments in which they resided. Human beings are social animals, as the great philosopher Aristotle (trans. 1999) proclaimed:

“[...] the individual, when isolated, is not self-sufficing; and therefore he is like a part in relation to the whole. But he who is unable to live in society, or who has no need because he is sufficient for himself, must be either a beast or a god [...]. A social instinct is implanted in all men by nature [...].” (p. 6)

Therefore, on the one hand, the values generated by leisure trips, which are inherently tied to social relationships (Ettema & Schwanen, 2012), are essential to human beings (J. K. Stanley et al., 2011). On the other hand, such trips, which are responsible for about half of the total distance of passenger-related travel, can have significant impacts on sustainability issues (Ettema & Schwanen, 2012; Götz, Loose, Schmied, & Schubert, 2003). It is hence important to understand that sustainable transportation initiatives should focus on improving the quality of the trips rather than reducing its quantity (J. K. Stanley et al., 2011). In order to increase accessibility to leisure, exploring the different types of leisure mobility can become the key to developing sustainable leisure travel (Ettema & Schwanen, 2012; Götz, Loose, Schmied, & Schubert, 2002; Ohnmacht et al., 2009). Furthermore, as explored in the next section, leisure mobility styles play an essential role in understanding and examining the compensation theory in leisure.

2.5. Transportation as a Structural Constraint to Leisure

Almost thirty years ago, Crawford and Godbey (as cited in Godbey et al., 2010) presented the hierarchical leisure constraints theory that was widely adopted in the world of leisure research. Their model is seen as an important tool to evaluate and understand leisure behaviour. In this model, leisure constraints exist at three levels: intrapersonal, interpersonal, and structural (ibid.). In their original work, Crawford and Godbey (as cited in Crawford, Jackson, & Godbey, 1991) posited: “Structural barriers represent constraints as they are commonly conceptualized, as intervening factors between leisure preference and participation” (p. 311). According to their hierarchical leisure constraints model, structural constraints were the last barrier after interpersonal and intrapersonal constraints. Since structural constraints can be any external factor such as lack of time, limited financial resources, and lack of required knowledge or skills for participation, lack of accessibility to leisure due to transportation can also be considered as a structural barrier to leisure participation.

Many studies found that mobility was often considered as one of the barriers that hindered leisure participation. The most isolated and vulnerable become more disadvantaged when sustainable transportation is not in place (Social Exclusion Unit, 2003). For example, in the case of people with disability, even when a person is highly extraverted, their negotiation efforts and motivations to participate still meet a roadblock which is structural leisure constraints such as inappropriate transportation (Lyu et al., 2013). Young people also have major disadvantages with mobility. Barton (2012) found that transportation was among the items identified by youths in Colorado as issues that prevented them from visiting parks and public lands. In the context of cross-border leisure between France and Spain, Guereño-Omil et al. (2014) also came to a similar conclusion when the mobile youths, which consisted mostly of students who were mainly single and had little or no income, cited “uncomfortable and insufficient transport means” as a constraint to their cross-border leisure activities (p. 558). Becoming aware of and focusing on transportation as a structural constraint to leisure participation is therefore one of the solutions to lift the many existing barriers. And in order to do that, understanding what leisure mobility is and identifying the different types is the next important step.

2.6. Leisure Mobility

2.6.1. Introduction to leisure mobility.

As Guereño-Omil, Hannam, and Alzua-Sorzabal (2014) mentioned in their work, leisure mobility over shorter distances have been increasingly analysed since the publication of *The Theory of the Leisure Class* by Veblen back in 1899, particularly in the field of tourism research (Hannam, 2006). In recent years, researchers have considered the importance of lifestyles as determinants of decisions in leisure participation, which also influences leisure mobility styles (Ettema & Schwanen, 2012; Götz et al., 2002; Ohnmacht et al., 2009; Orfeuill & Soleyret, 2002). The classification of different types of leisure mobility styles can be first seen in the work of Götz et al. (2002). In contrast to Veblen who linked leisure to labour mobility (as cited in Guereño-Omil et al., 2014), Götz et al. (2003) defined leisure traffic as “the residual amount of the traffic volume, or traffic expenditures, after other traffic purposes – jobs, training, and businesses as well as shopping – have been separated” (p. 16).

Despite the significant growth of leisure-related travel in Western countries, there is still limited attention to leisure trips as daily activities (Ettema & Schwanen, 2012), in particular to the roles that social influence and social networks play in leisure travel research within urban areas (Ohnmacht et al., 2009; Wheeler & Stutz, as cited in Ettema & Schwanen, 2012). The majority of leisure mobility studies have been done in Europe (Ettema & Schwanen, 2012; Götz et al., 2002; Ohnmacht et al., 2009). In Canada, there has been research on walkability, sustainable urban planning, and leisure-time physical activities, as well as some attempts to explore the links between the three (Thielman, Rosella, Copes, Lebenbaum, & Manson, 2015). However, similar studies that focus specifically on leisure mobility still could not be identified.

When it comes to sustainable transportation and leisure, most studies considered active transportation as physical leisure activities (de Sa & Ardern, 2014; Downward & Rasciute, 2015; Gilderbloom et al., 2014; Kondo et al., 2009; Sundquist et al., 2011; van Dyck et al., 2008) rather than a mean to access other leisure activities such as consumptive activities (shopping, attending markets and fairs, etc.) (Johnson, 2013), social activities (dining occasions, gatherings, etc.) (Ettema & Schwanen, 2012), and art-related activities (theatre, museum, concerts, operas, etc.) (Satterthwaite, 2010). Furthermore, and most importantly, there was a lack of focus on the Millennial generation. Most research on transportation and urban planning in general and leisure

EXPLORING LEISURE MOBILITY OF MILLENNIALS

mobility in particular either focused on the general public or pay attention to the older demographic. This gap created an exciting opportunity to contribute to the conversation of leisure mobility through the lens of Millennials. Before going into further detail about the importance of this generation, the compensation theory in leisure mobility and the different leisure mobility styles are reviewed.

2.6.2. Compensation theory in leisure mobility – “The barbecue effect”.

When mobility is discussed, the urban settings, particularly urban density, also needs to be mentioned. As much as humans claim to love nature and promise to protect it, the human species is destructive, especially when they live in sparsely populated areas (Aalto University Professional Development, 2015). For example, as observed on the interactive CoolClimate Maps (University of California, Berkley, n.d.), metropolitan New York had an average annual household emission of approximately 30 metric tons CO₂, of which about 16.7% were accounted for by transportation. Meanwhile, rural Old Westbury village in the same state had a staggering carbon footprint of 95 metric tons of CO₂ per annum, the majority of which came from transportation alone (ibid).

When population density and the resulted daily mobility are considered, the carbon footprint of residents living in densely populated urban centres are lower than those in rural and more dispersed communities. Hence, the denser the city, the more sustainable it is, as Newman and Kenworthy (1989/1991) pointed out after having conducted their study to examine the correlation between energy consumed for travel and urban density in 30 different cities around the world. Despite being criticised for the quality of data used in the study (Mindali, Raveh, & Salomon, 2004), Newman and Kenworthy’s findings founded a theoretical basis that is often cited in studies focusing on energy consumption through transportation and land-use policy. A major gap in Newman and Kenworthy (1989/1991)’ study is, however, that they only took daily work commute into account and ignored other types of travel, namely leisure (Munafò, 2015). As mentioned in Section 1.4, travel for leisure purposes is the most difficult to quantify due to its spontaneous nature (Ettema & Schwanen, 2012; Fuhrer et al., 1993; Holden & Linnerud, 2011; Ohnmacht et al., 2009). Nevertheless, when the carbon footprint stemming from transportation is measured, scholars argued that urban city dwellers offset their lower environmental impacts by travelling further and more intensively during the weekends and holidays for leisure compared to their rural, small-town counterparts. This theory was founded based on a study conducted by

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Orfeuill and Soleyret (2002), in which three travel market segments (local weekday, local weekend, and long-distance) in the Greater Paris Region were analysed and compared. It was known as the ‘compensation effect’ in leisure, or ‘the barbecue effect’ – a term coined by Munafò (2015). According to Orfeuill and Soleyret (2002) and other scholars (Kaufmann, 2017; Munafò, 2015; Strandell & Hall, 2015), the ‘compensation effect’ occurred when residents living in dense city centres travelled to alternative environments for leisure in order to escape their daily, habitual and often congested surroundings in large cities. These environments were greener and more tranquil. In other words, they sought places that were spacious enough for a barbecue, hence the term ‘barbecue effect’. This effect hence cancelled out Newman and Kenworthy’s belief in the sustainability characteristic of dense cities.

The link between urban density and the compensation effect varies depending on the city, which leads to the theory being confirmed among some researchers (Næss, 2006; Strandell & Hall, 2015) and rejected by some others (Adamiak, Hall, Hiltunen, & Pitkänen, 2016; Munafò, 2015; Muñiz, Calatayud, & Dobaño, 2013). Nevertheless, scholars generally agreed that the compactness of cities, when properly planned, remained an important key towards sustainable development. Among the literature that refuted the compensation theory in leisure, researchers found that the carbon footprint generated from such occasional leisure trips were not efficient to offset the positive effects that compact cities have on transport-related carbon footprint and automobile dependency (Adamiak et al., 2016; Muñiz et al., 2013; Næss, 2006). In order to restate the compensation hypothesis, Munafò (2015) categorised the activities for leisure travel listed in the Swiss Transport Micro-census (MRMT) database into two types – compactophile and naturophile. The third type “Others” was also included to distinguish activities that were either unclassifiable or combined from different types. While ‘compactophile’ mobilities offered the advantage of proximity in compact cities such as access to restaurants and cultural events, ‘naturophile’ mobilities provided the opportunities to participate in leisure activities that were best done in less populated areas such as outdoor sports and, of course, barbecue (Table 1). This categorisation of leisure travel types was based on the type of destinations most ideal for the leisure activities (Munafò, 2015). In addition, it helped understand whether people preferred to “escape” the compact cities for greener grass, or embraced the urban cultures offered by cities.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Table 1

Classification of Activities for Leisure Travel (Munafò, 2015, p. 118)

Category	Activities for leisure travel	Comments/Justifications
<u>Compactophile</u>	Restaurants, bars	Just like other businesses, the concentration of the dining and drinking establishments increase when urban density increases.
	Visits and in-door activities	In theory, high urban density is also synonymous with a high concentration of potential social contacts. A compact city therefore has more potential destinations for this type of activity.
	Cultures, hobbies and passive sports	Like other service activities, there are theoretically more cinemas, theatres, operas, museums, event halls, arenas or stadiums when the urban density is high.
	Volunteer, association, religion	These activities usually take place indoors. The number of destinations of this type therefore theoretically increases as urban density increases.
	Shopping	Shopping and impulse purchases share the same logic as other activities that are linked to commercial offers, in which urban density is synonymous with greater supply.
<u>Naturophile</u>	Non-sportive outdoor activities	In the MRMT database, grouped under this item are activities like gardening or walking a dog. For these activities, a high urban density is not considered to offer particular advantages, or is not sought by individuals.
	Active sports	In Switzerland, the most practiced sports are cycling, swimming, skiing, snowboarding, jogging, tennis and football. For these activities, the outdoors and wide spaces are rather sought. The compact city therefore offers no particular advantages for them. The benefits of urban density can, however, involve activities such as fitness, gymnastics and weight training which takes place indoors instead. These activities are, however, fewer and less practiced than the first in Switzerland, justifying our choice.
	Hiking, bike ride, picnic	These typical outdoor activities are rather perform outside the dense urban settings.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Excursions, holidays, well-ness	This item includes wide enough, in our view, the activities that are rather related to rest, relaxation and escape. The dense city here seems to rather include some attributes that were not often researched here, particularly in terms of noise and air quality.	
<u>Others</u>	Others	The unclassified activities by respondents or the combination of subunits are grouped in this category.

Within the context of the compensation theory, it is essential to understand and identify leisure lifestyles, which have gathered increasing attention among scholars as being central to leisure mobility research (Ettema & Schwanen, 2012). This trend is important, because the systems underlying leisure participation and mobility have been poorly understood (Ettema & Schwanen, 2012). As complex as leisure mobility research can be, it is essential to understand that various types of leisure mobility styles exist, and that it is important to identify them in order to better understand mobility behaviour in the context of leisure.

2.6.3. Different types of leisure mobility styles.

Before moving on to the discussion of the different leisure mobility styles across the literature, it is worth noting that there is a delineation of leisure and tourism. Tourism can be defined as ‘leisure travel’ and all the related activities at or during the journey towards the destination (Götz et al., 2003). In addition, tourism is synonymous “neither with vacation, as a part of vacation can be spent without travelling, nor with leisure mobility, as a part of leisure mobility is integrated with the non-vacation daily life” (ibid, p. 9). Nevertheless, tourism is still linked to mobility from the beginning. Therefore, it is considered as an aspect of leisure mobility.

In Götz et al. (2003)’s interdisciplinary national research project in Germany, transport behaviour of different lifestyle groups as well as the environmental effects of each group were identified. It was also the first time that the concept of mobility styles was applied in leisure traffic research (ibid). In recent literature, there were many other different types of leisure mobility styles. For instance, Guereño-Omil et al. (2014) identified four, which were time conscious workers, French shoppers, mobile youth, and older less mobile. Those styles were specific for the case of cross-border leisure mobility in the Basque Eurocity corridor between France and Spain. Other leisure mobility types identified were more comprehensive as they include a wide range of different sociodemographic backgrounds across the countries being studied, which were

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Germany and Switzerland (Götz et al., 2003; Ohnmacht et al., 2009). In the study of Götz et al. (2003), there were five segments of lifestyle that influenced leisure mobility styles: fun-oriented, modern-exclusives, overburdened family-oriented, disadvantaged, and traditional domestic (see Appendix C for a detailed description). Ohmacht et al. (2009) also categorised four different types: sporty, fun and distraction seekers, culture-oriented, and neighbourly home-lovers (see Appendix D for a detailed description). All studies confirmed that socio-demographic characteristics, values, attitudes and lifestyles had an influence on leisure orientations, which affected mobility styles.

2.7. The Importance of Millennials in Leisure Mobility Research

Section 1.5 briefly identifies members of the Millennial generation and their economic role in an increasingly ageing world. In this section, further characteristics as well as the general attitude of Millennials towards sustainability portrayed through mobility preferences are outlined to better understand the significance of placing these young people at the centre of leisure mobility research.

2.7.1. Who are Millennials?

First, there are slight differences across existing literature regarding the exact period in which this generation was born. This can range anytime between the early 1980s and 2000 (Credo, Lanier, Matherne, & Cox, 2016; Polzin, Chu, & Godfrey, 2014). Some researchers believed that the specific years were between 1982 and 2002 (Howe and Strauss, as cited in Graybill, 2014), between 1980 and 1999 (Ng et al., 2010), between 1992 and 1999 (Twenge et al., 2010), or between 1982 and 2001 (Martin, 2009). All the more, Barton (2012) further disaggregated them into two cohorts: Generation Y (1978– 1990) and Generation Z (1991–present). Even the labels used to describe this generation vary: Generation Y, Nexters, the Nexus Generation, Millennials, Echo Boomers, Next Gen, Generation Me (GenMe) (Graybill, 2014; Ng et al., 2010; Twenge et al., 2010). In addition, according to the ‘Millennial series’ (Universum, 2016a) – the first and largest independent study of how Millennial attitudes and actions varied across the globe by surveying 16,000 Millennials in 42 countries, the Millennial generation was born between 1984 and 1996. In order to keep up with the popular literature and for the purpose of this study, as well as in regard to the recognition of this generation’s role in the future economy and sustainable development, the term ‘Millennials’ was chosen, and the years in which they were

EXPLORING LEISURE MOBILITY OF MILLENNIALS

born range from 1984 to 1996. Therefore, that made the oldest 32 years old and the youngest 20 at the point that this paper was written.

Considering their birth years and the technological transition within the past few decades, the Millennials belong to the first generation that grew up with “technology integrated into their lives” (Martin, 2009, p. 20). Not only are they technologically savvy (Barton, 2012; Winograd & Hais, 2014), but they also are typically defined as family-oriented and highly educated compared to previous generations (Barton, 2012). Due to such affinity for digital technologies, Lou (as cited in *ibid.*) criticised Millennials for their rising disconnectedness with nature and the outdoors, which was among the most popular stereotypes attached to this generation. Such a stereotype was refuted, however, as Barton (2012) found out that as much as the Millennials admitted their attachment to technologies, they recognised the irreplaceability of the true outdoor and expressed a desire to be connected with nature more often.

2.7.2. Millennials: The sustainable future of mid-sized cities.

Millennials’ interest in sustainability is often reflected in this generation’s definition of purposeful work, which is the commitment to make the world a better place and to improve people’s lives (Global Shapers Community, 2016; Ng et al., 2010; Universum, as cited in Pervez & Hutt, 2016; Winograd & Hais, 2014). Furthermore, they believe in diversity and harmonious relationships (Graybill, 2014; Winograd & Hais, 2014), are generally positive that they will enjoy a higher standard of living than their parents (Twenge et al., 2010; Universum, 2016b), and most importantly, place great importance on work/life balance (Deloitte, 2016; Ng et al., 2010; Winograd & Hais, 2014), as well as understand the values of leisure and prefer experiences to material possession (Twenge et al., 2010; Winograd & Hais, 2014; Bloomberg, 2016).

For post-industrial North American cities, particularly small and mid-sized cities, Millennials are a strong economic development force. They are interested in urban living (Benfield, as cited in Morckel & Rybarczyk, 2015). Yet, interestingly, Millennials no longer focus solely on megacities. Berger (as cited in Janjigian, 2016) started tracking job search behaviour of this generation in the U.S.A. on LinkedIn – the world’s largest professional network – and found out that many of them were in favour of mid-sized cities. As mentioned in section 1.5., the aging population means that cities should make an effort and recruit young talents. Economic and per capita real wage growth can also be sustained by this productive workforce (Yves, 2014). Furthermore, and most importantly, these young people can accelerate knowledge spill-overs through their

EXPLORING LEISURE MOBILITY OF MILLENNIALS

horizontal and vertical interactions with both the local economy and beyond (ibid.). Considering the importance of the millennial generation as the driving force for development (United Nations Human Settlements Programme, 2013), it is essential to understand their needs and wants. As Florida stated: “Find what attracts [these] workers, and a city can become a magnet for creative and technology industries” (as cited in Yves, 2014, p. 219).

In addition, Millennials are no longer as attracted to driving and owning motorised private vehicles as the previous generations (Cheng & Chen, 2015; Goldberg, 2014; Focas & Bézaguët, 2016; Polzin et al., 2014; Sivak & Schoettle, 2012a, 2012b, 2013; Speck, 2012). The decline in the ownership of driver’s license among young people have been identified by various studies done by Schoettle and Sivak (2013; Sivak & Schoettle, 2011, 2012a, 2012b, 2013). One reason that is often outlined in research is technology, namely smart phones and social media (Ng et al., 2010; Sivak & Schoettle, 2013). The virtual interaction enabled by technology decreases the needs for physical interaction. As a result, it decreases the need to travel for social purposes. Sivak and Schoettle (2013) also found out that the reasons for the large reduction in the ownership of a driver’s license among young people in the U.S.A. were the economic downturn, which negatively influenced the possibility of car ownership due to the initial expenses, and the move of young people to large cities with reasonable public transportation. In Europe, the rising costs required to obtain a driver’s license also results in the declining use of car (Kaufmann, 2013). Another reason was, perhaps, because “young people tend[ed] to be on the forefront of concern about the environment” (ibid., p. 659).

This tendency towards sustainable living was also similar to the findings obtained from the Global Shapers Community (2016)’s survey. “Young people and global development are two sides of the same coin” (Iyer, as cited in ibid, p. 16). A few other studies also confirmed the fact that they were driving less and considered that efficient transportation could further improve their social lives and participation in leisure activities (Barton, 2012; Garthwaite, 2011; Social Exclusion Unit, 2003). Nevertheless, there is still little focus on the Millennial generation in leisure mobility research. Most research on transportation chose a very general sample of the population, which were usually any adults above the age of 18 (de Sa & Ardern, 2014; Sundquist et al., 2011) or sometimes even older due to the demographic characteristic of the location (Kondo et al., 2009). Therefore, with such a gap in literature combined with the fact that the key to innovation lies within the hands of Millennials, it is important to understand what they do for leisure,

where they do it, and how they navigate their ways to access those leisure activities and places. Such knowledge can serve strategic development plans for mid-sized cities such as Nanaimo.

2.7.3. Nanaimo: The new urban dream for Millennials?

As discussed in section 1.2., cities can be either centres of innovation and prosperity or sources of unsustainability. Therefore, efforts that make cities and their transportation systems more sustainable are increasing. Large cities tend to attract all the attention and resources due to their great economic advantages (Puissant & Lacour, 2011). However, simply focusing on major cities also means forgetting about the urban population that still lives in mid-sized cities and towns (Christiaensen, 2016; Puissant & Lacour, 2011) as well as people who are spilling out of big cities.

According to Bell & Jane (as cited in Puissant & Lacour, 2011), populations have changed their lifestyles by shifting their interests towards mid or small urban scales. The reasons can vary. Large cities are the hubs of talents, invention and knowledge. However, living in big cities means facing issues such as higher rents, spatial congestion and dislocation (Puissant & Lacour, 2011). Capello and Camagni (as cited in Puissant & Lacour, 2011) highlighted mid-sized cities as having “greater endogenous capacity to keep social, economic and environmental costs under control” (p. 435). Not only do the urban populations find mid-sized cities more attractive as a lifestyle option, but businesses can also envisage them as winning locations since these cities may combine talents to win elements of competitiveness (ibid.). Considering how Vancouver became the city with the largest housing bubble in the world according to the UBS Global Real Estate Bubble Index 2016 (UBS Switzerland AG, 2016), a spillover was predictable, and has already been happening. Being Vancouver’s island neighbour, can Nanaimo realise its untapped potential, move beyond its current reputation as the paradise for retirees and a transit point between the mainland and other areas on the island, and become the new place to be for Millennials?

In Nanaimo, the proportion of people approaching retirement was larger than the proportion of labour market entries – a gap that was projected to grow until 2020 (Nanaimo Economic Development, 2016). Moreover, the city’s labour growth was negatively influenced by the downturn in the forest sector, which resulted in the closure and/or reduced operations of local mills (ibid.). As a consequence, skilled-labour shortages may occur and worsen, unless migration patterns change; that is, in order to thrive, Nanaimo needs to attract and retain talented workers. Yet,

EXPLORING LEISURE MOBILITY OF MILLENNIALS

mid-sized cities often struggle in the battle for talents against metropolitans. Polèse and Shear-mur (as cited in Meric et al., 2014) pointed out that in Canada, such urban areas usually faced the loss of their own home-grown talents to other Canadian regions. They also tended to be unable to attract and retain national and international well-educated individuals. However, mid-sized cities' smaller size can "make for a good career incubator for young professionals" (Yves, 2014, p. 230). In exchange, these professionals can help develop the local economy and add diversity and vibrancy to the city by travelling to other metropolitans for training, conferences, and events, then return and mobilise their new knowledge, ideas and experience vertically and horizontally throughout the region (Yves, 2014). On a global scale, the fastest growing cities are the small and medium-sized with a projected population growth of 32% between 2015 and 2030, as opposed to 26% in large cities and metropolitans (Birkmann, Welle, Solecki, Lwasa, & Garschagen, 2016). Nanaimo has great potential. In order to uncover such possibilities, the city of Nanaimo needs to shift its focus to sustainable transportation development as one of its core strategies. It is also equally important to understand the needs of the Millennial generation.

In summary, the lack of focus on the Millennial generation in leisure mobility research and the lack of studies on leisure mobility in mid-sized cities and in Canada created a gap in the literature of leisure mobility research. As the City of Nanaimo focuses on sustainable development as well as the attraction and retention of talented Millennials, the city made a suitable context for this study. Therefore, this thesis aimed to fill the gap in the literature of mobility research by describing the leisure mobility styles and exploring the role of transportation in the leisure repertoire of Millennials in the city of Nanaimo.

Chapter 3. Methodology

This chapter describes the methodology that was utilised in this study, which attempted to describe and classify the leisure mobility styles of the Millennial generation in Nanaimo, and to identify if transportation was a barrier to accessing leisure. The study design is first reviewed before presenting a comprehensive overview of the data collection methods along with the rationale for such choices.

3.1. Introduction

The roles of leisure and leisure trips are increasing in many societies. Existing research has been able to identify the different leisure mobility styles based on demographic factors and personal lifestyles. However, there was a lack of focus on the Millennial generation in leisure research. Millennials seek an ideal work-life balance (Deloitte, 2016), and this generation is taking over the role of leading the world towards a sustainable future (United Nations Human Settlements Programme, 2013). Understanding how Millennials navigate for leisure is therefore important. As there is an apparent trend of this generation moving away from metropolitan areas to mid-sized cities (Janjigian, 2016), understanding this aspect of their lifestyles becomes one of the keys to attract and retain them.

The purpose of this study was to identify the role that transportation – especially car and its alternatives – played in accessing leisure opportunities for Millennials currently living in Nanaimo. To gain deep insight into Millennials’ perceived role of transportation in their leisure lives, the objectives for this study were to:

1. Describe and classify leisure mobility styles of Millennials.
 - a. Identify which leisure activities Millennials chose to participate in.
 - b. Identify the locations and places where Millennials engaged in leisure.
 - c. Identify what transportation was used to access these activities and/or places.
2. Determine the influence of the city’s existing transportation system/infrastructure on the leisure repertoires of Millennials.
 - a. Explore Millennials’ desired state regarding their leisure repertoires in Nanaimo.
 - b. Investigate whether transportation was identified as a barrier to leisure for Millennials.

The case study approach within the context of the City of Nanaimo was chosen for the investigation. The City of Nanaimo has great potential for growth and development. In an era

EXPLORING LEISURE MOBILITY OF MILLENNIALS

where there is a trend of talent spill-over from big cities to mid-sized cities, it is increasingly important that Nanaimo realise the opportunity to position itself as a potential hub for Millennial talent. The next section provides an overview of the study design, starting with defining how a case study approach fit the study's purpose, followed by how Munafò (2015)'s classification of leisure mobility styles was adopted into this study, and how the samples were selected. Afterwards, section 3.3. details the data collection methods employed for this research, which included online survey and focus groups – both virtual (Facebook group discussion) and traditional.

3.2. Study Design Overview

Case study design was chosen as the approach to this research with the purpose of understanding how transportation influences the leisure access of Millennials in Nanaimo. According to Yin (as cited in Baxter & Jack, 2008), two of the four conditions for a case study approach to be considered are when: (1) the study's focus is to answer "how" and "why" questions; and (2) the behaviour of those involved in the study cannot be manipulated. What Millennials did for leisure and how they travelled to access them were a part of the lifestyles that they decided for themselves. There were many factors that can influence such decisions, and it was the researcher's intention to identify if transportation was one of them. The unit of analysis for this study was the transportation system assessed through Millennials' leisure experience within the city of Nanaimo. It was an intrinsic case study, as the purpose was not to understand some abstract construct or generic phenomenon, nor to build theory, but rather because the researcher genuinely wished to better understand the case, as "in all its particularity and ordinariness, the case itself [was] of interest" (ibid., p. 548). In addition, the case was also utilitarian, as it could help the City of Nanaimo understand the needs of its Millennial residents, which could enable the city to attract and retain these young people.

3.2.1. Adopted classification of activities for leisure travel.

In order to gain a comprehensive understanding of the type of leisure activities that Millennials of Nanaimo participate in, Munafò (2015)'s classification of activities for leisure travel was adopted. The classification, as seen in Table 1, comprises three different categories: (1) compactophile, which includes activities that can be best enjoyed in an urban environment such as dining, social gatherings and visits, cultural activities, religions, and shopping; (2) naturophile, which includes activities that are best done in nature such as outdoor activities (both sportive and

EXPLORING LEISURE MOBILITY OF MILLENNIALS

non-sportive), excursions, hiking, and picnicking; (3) others, which are activities that either cannot be classified or are a combination of both compactophile and naturophile activities. The activities for the first two categories were used as guidance to design questions for the online survey. For the Facebook group discussion and the traditional focus group, participants reported their own leisure activities without the activities list, and the classification was used as a tool to categorise those activities afterwards.

This classification was designed using the activities for leisure travel listed in the Swiss Transport Micro-census (MRMT) database (ibid.). Therefore, it was adopted with slight adjustments in order to fit the Canadian context of the study. Table 2 shows the classification of activities for leisure travel used to design the study:

Table 2

Classification of Activities for Leisure Travel in Nanaimo

Category	Activities
<u>Compactophile</u>	Visiting family, friends, neighbours, etc. Restaurants, cafes, bars Indoor activities Indoor sports Art & cultural activities Volunteering/engaging with associations outside of work/school Shopping (exclude grocery shopping)
<u>Naturophile</u>	Relaxing in nature Outdoor activities Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland)
<u>Others</u>	Unclassified or a mix of the other two categories

To fully comprehend the leisure mobility of Millennials in Nanaimo, besides the classification of leisure activities, other measurement tools were also utilised to explore where those leisure activities took place, and how Millennials accessed those activities. Regarding the locations of leisure activities, a list of possible locations for leisure in Nanaimo was developed based on the city design and the type of leisure amenities available in Nanaimo and its surroundings (Table 3). It is worth noted that in Canada, malls have become “a familiar part of the urban land-

EXPLORING LEISURE MOBILITY OF MILLENNIALS

scape” in most cities (Simmons, 1991, p. 232), where they include not only stores and merchandise but also service outlets and entertainment providers, ranging from art exhibits and video arcades to restaurants and movie theatres (Bloch, Ridgway, & Dawson, 1994). Therefore, malls and shopping plazas were included as an essential part of the urban fabric of Nanaimo. Vancouver Island University (VIU) was also included as a separate entity, since it offered leisure amenities such as the gymnasium, the Malaspina theatre, the Japanese gardens, and initiated various leisure activities and programmes on campus that often welcomed both faculty, students, and the Nanaimo community. It is important to understand that some naturophile activities might occur in places that were traditionally reserved for compactophile activities due to its mixture of urban setting and green spaces, such as the Maffeo Sutton Park at the waterfront in Downtown Nanaimo, or the lush green spaces and gardens across the campus of VIU.

Table 3

Possible Locations for Leisure Activities in Nanaimo and its Surroundings

Category of leisure activities	Possible Locations
<u>Compactophile</u>	Downtown Nanaimo Malls/Shopping plazas in Nanaimo Vancouver Island University The suburb/At home Other cities/towns within a 30-min drive Other cities/towns beyond a 30-min drive
<u>Naturophile</u>	Natural spaces in Nanaimo Natural spaces within a 30-minute drive from Nanaimo Natural spaces beyond a 30-minute drive from Nanaimo

The modes of transportation used to access leisure opportunities were chosen based on the diversity of possible locations and distances within and around Nanaimo. Since Nanaimo is located on an island, the modes of transportation available included sea-crossing services such as ferry and seaplane, which connected Nanaimo with other surrounding islands and urban centres on the mainland. The reason why only seaplane and not airplane was selected as an option of transit mode was because of the very short duration of all the seaplane flights (20 minutes) (Harbour Air Seaplanes, 2017a; Seair Seaplanes, 2017) and the lack of the lengthy pre-boarding security check (Harbour Air Seaplanes, 2017b), which made it comparable to other transit modes.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

The railway option was not included as commuter rail service on the Southern Railway of Vancouver Island had ceased to exist since 2011, and the effort to restore the railway project was ongoing (Island Corridor Foundation, 2017; “No Vancouver Island railway deal”, 2014; VIA Rail Canada, 2017). As a result, the transit modes available to access leisure activities include: (1) Driving (alone); (2) Driving (carpool); (3) Taxi; (4) Bus/Coach; (5) Walking; (6) Biking; (7) Ferry; (8) Seaplane.

3.2.2. Pilot study.

In order to ensure the smooth run of the study, the researcher conducted a pilot study prior to the launch of the data collection. This was done with six individuals who previously agreed to assist with the pilot study. These individuals were selected based on the diversity of their demographic characteristics such as educational level and cultural background to ensure that the final survey would be comprehended by the greatly diverse community of Millennials in Nanaimo. The link to the test questionnaire was first sent through email to an individual who completed the questionnaire and provided feedback based on a given instruction (see Appendix E). The questionnaire was then adjusted and forwarded to the next individual until all six volunteers had done testing the survey. The appropriate changes were made to the online survey, which included word choice, grammatical corrections, the order of questions, the simplification of some questions, and clearer explanations for certain items. Finally, the adjusted survey was reviewed and approved by the co-supervisors of the researcher before being launched officially on January 23, 2017 on the study’s Facebook page. The open-ended questions used for both the Facebook group discussion and the traditional focus group were taken directly from the qualitative component of the survey. This convergent parallel mixed methods approach allowed the researcher to confirm and cross-validate the data later on as suggested by Creswell (2014).

3.2.3. Sample selection.

Since the study focused on the experience of Millennials living in Nanaimo, the population consisted of anyone who was between the ages of 20 and 32 at the point of the data collection. This age range was consistent with the current literature and ensured that those individuals under the age of 19 were excluded, which was convenient as many of them still did not have a full driver’s license or ownership of a car on a legal basis. It was important because the study aimed to include Millennials who could make transportation decisions based on every mode of transportation legally available to them. Furthermore, the Millennials to be studied must have

EXPLORING LEISURE MOBILITY OF MILLENNIALS

been residing in Nanaimo for a minimum of six months. It was believed that six months were long enough to allow Millennials to explore the places and spaces, and establish a leisure lifestyle in Nanaimo.

The sampling frame included both Millennials who were working in the community, and younger Millennials who were students of the city's only university – VIU. Besides being centres of learning, innovation, and knowledge-creation processes, universities are recognised talent pools for a region since they serve as local portals to national and international labour markets (Meric et al., 2014; Power & Malmberg, as cited in Tara, 2014). The university also boasted a population of 16,000 students, with over 1,900 international students from more than 80 countries (Vancouver Island University, n.d.; 2016). Such diversity exposed Nanaimo to potential domestic and international Millennials looking to relocate. Considering the limited resources available for a large-scale study, including time, funding, and research experience, nonprobability sampling was chosen. Given the highly specific characteristics of the study population that served the study's purpose, a two-pronged purposeful sampling approach combined with the snowball sampling approach was used to identify this sample (Salkind, 2010).

3.3. Data Collection Methods

An online survey, a Facebook group discussion, and a traditional focus group were the data collection methods. The online survey was utilised to help outline the general picture of leisure mobility of Millennials in Nanaimo, as it allowed the researcher to observe which styles of leisure mobility these young people adopt. This contributed to the theoretical discussion surrounding “the barbecue effect” from the viewpoint of a mid-sized city. The survey also contained open-ended questions to collect qualitative data, similarly to the Facebook group discussion and the focus group. These qualitative methods allowed Millennials to share their stories, which uncovered their perceptions of transportation related to their leisure activities. Before continuing on to describe each method in detail, the next section explains the rationale for choosing Facebook as a tool for data collection, recruitment and promotion.

3.3.1. Method rationale: Facebook.

Despite the fact that the majority of Millennials might belong to the student community of VIU, the use of the announcement feature on D2L (Desire to Learn) – VIU's online learning platform – and student email lists for the purpose of recruiting participants for student research

EXPLORING LEISURE MOBILITY OF MILLENNIALS

projects was not allowed (A. Weighill, personal communication, November 8, 2016). The researcher therefore considered that it would be most effective to use an online social networking site as the main tool for the promotion of the study and the recruitment of the participants. This online social networking tool would also need to be efficient and valid to be utilised as a data collection tool. As of December 2016, there were 1.86 billion monthly active users worldwide on Facebook and 1.23 billion daily active users on average for that month (Facebook, 2017), making Facebook the most popular social network in the world. It was also the most popular in Canada (Vincos Blog, n.d.). Younger people were among the most active users on Facebook, who had 11 times more friends than older users (McAndrew & Jeong, 2012; Wilson, Gosling, & Graham, 2012). Furthermore, a study conducted by Moreno, Grant, Kacvinsky, Moreno and Fleming (2012) revealed that young people perceived the use of Facebook in a research study positively. Publicly available Facebook profiles of young people were also viewed as public spaces by both young people themselves and the legal system (ibid.). Besides, Facebook's mission is to allow its users to "express what matters to them" (Facebook, as cited in Power, 2015, p. 196). These facts confirmed the site's strong validity and efficiency as a promotional and data collection tool. Hence, the researcher selected Facebook for the purpose of the study.

There is a widely held assumption that social networks such as Facebook are used to create and communicate idealised selves (Manago, Graham, Greenfield, & Salimkhan, as cited in Back et al., 2016). This implies that the data gathered from Facebook would fail to accurately reflect the reality. However, this theory was refused by Back et al. (2016), who discovered that social networks might be "an efficient medium for expressing and communicating real personality" (ibid., p. 374). Therefore, it is safe to assume that stories shared by participants in the Facebook group discussion were as valid and true as those collected in a traditional focus group. Another belief held in social sciences research is that findings from Facebook studies become obsolete every time Facebook changes its features or when new kinds of users sign up (Wilson et al., 2012). There is, however, little supporting evidence for several reasons. First of all, despite all the constant feature updates, the changes are largely additive, and the core Facebook experiences, such as interacting with other members, had remained largely unchanged since the beginning. Secondly, Facebook's network organisational structure, in which users are grouped in network of friends, mitigates its users from most changes to the overall demographics of the broader Facebook population (ibid.). Finally, "culture shifts with time", and so does the way people use

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Facebook, which makes it essential for researchers in social sciences to recognise both the importance of measured change and the limitations intrinsic to the study of Facebook over time (ibid., p. 208). These reasons support the long-term value of this study's findings in the field of leisure mobility research in particular, and in social sciences in general.

3.3.2. Promotion of the study.

A Facebook page titled "Fun on the Move" was created as the main source of information and updates about the ongoing study, as well as the main tool to generate related posts and communicate with potential participants and interested parties. It is important to understand that a Facebook page is different from a Facebook group. A Facebook page is often used as a marketing tool for products and services. The researcher could communicate and post using the identity of the Facebook page instead of her personal Facebook account, which allowed the researcher to remain neutral towards the general public. The Facebook group had to be created separately using the researcher's personal Facebook account and not through the study's Facebook page. Due to the ethical consideration, the Facebook group was closed after the data collection was completed. However, the Facebook page remained open as it contained no data and was used to share the study's results with the community after the study was completed. Further information about the Facebook group are discussed later on in section 3.3.4. A friend assisted the researcher with the branding of the study by designing the logo and banner for the Facebook page (see Appendix H for the design).

The researcher identified friends and acquaintances fitting the criteria of the study and asked them to participate in the study and share it within their Facebook networks. Promotional tools such as boosting posts to promote to Facebook users who fit the study's predetermined criteria within Nanaimo were also utilised in order for the study to reach beyond the researcher's immediate Facebook network. Besides Facebook, the researcher also used other online social networking applications such as Instagram, Twitter and LinkedIn to promote the study and recruit potential participants. With around 150 million daily active users on Instagram (Statista, 2017a) and 319 million monthly active users on Twitter as of the fourth quarter of 2016 (Statista, 2017b), those two social networking applications were effective as promotional tools for the study with the aid of visuals and relevant hashtags (see Appendix I, I and J for some examples of promotional materials used on Facebook, Instagram, and Twitter). Similarly, LinkedIn helped draw attention to the study among young working professionals in Nanaimo as it was the world's

EXPLORING LEISURE MOBILITY OF MILLENNIALS

largest professional network with 500 million users across 200 countries and territories (LinkedIn, 2017). The researcher created an article on LinkedIn using her personal LinkedIn profile to recruit participants for the study.

In addition, different associations and organisations within VIU and the Nanaimo community were contacted in advance to help share the study's Facebook page and online survey on their Facebook pages. The organisations and associations that helped share the survey on their Facebook pages were: (1) VIU Recreation & Tourism Association; (2) VIU Environment & Sustainability; (3) Bike to Work Nanaimo; (4) Mount Arrowsmith Biosphere Region; (5) Nanaimo Greens; (6) Worldviuiss; (7) Nanaimo Design Nerds; (8) Shore Energy Solutions; (9) Vancouver Island University Master of Community Planning; (10) World VIU. The World Leisure Centre of Excellence at Vancouver Island University also shared the survey's link using its Twitter account. The study was also shared by the researcher on the Facebook pages of "A Better Nanaimo", "Nanaimo Rant & Rave", and "Nanaimo Talk". With over a thousand members in each of these groups (and over 10,000 members in "Nanaimo Rant & Rave"), it was an effective way to spread the words to the Nanaimo community.

Finally, besides online promotion, the researcher also pinned physical posters on several notice boards across campus (see Appendix K for the promotional poster). The posters were displayed in the Faculty of Management building, the Education/Social Sciences building, the Arts & Sciences building, the Centre for International Education building, and the upper cafeteria. The researcher was also allowed to have a brief presentation about the study in several classes of the undergraduate Recreation & Hospitality programmes and the Master of Community Planning programme. The promotional campaign commenced a week before the launch of the online survey with the use of an infographic to help the public understand the background and purpose of the study, as well as learn about ways to participate (see Appendix L for the infographic).

An incentive was used in order to increase the response rate. The researcher received support from Parks, Recreation and Environment Nanaimo, which provided 50 two-for-one admission passes for the swimming, skating and drop-in gymnasium session at Oliver Woods Community Centre. Survey respondents who wanted to enter the draw to win one of these passes entered their email addresses at the end of the survey. Participants of the focus group and Facebook group discussion were entered automatically. The promotion for the study continued until the entire data collection phase closed with a thank-you message being posted on the different social

EXPLORING LEISURE MOBILITY OF MILLENNIALS

media sites used during the study, and sent by emails to individuals and organisations that had been helping with the promotion (see Appendix M for the message). 50 random respondents and participants in the study were selected using Excel. The winners were announced on March 7, 2017, allowing them up to almost two months to use the passes since the expiration date was April 30, 2017.

3.3.3. Online survey.

The online survey was open for a total of six weeks from January 23 to March 6, 2017. Overall the survey was completed by N = 195 Millennials. It was designed to measure variables that helped gain understanding of the Millennials' leisure mobility styles and their perception of transportation's role in leisure access. Since it was important to understand both the actions and perceptions of Millennials living in Nanaimo through the lens of leisure mobility, the online survey collected both quantitative and qualitative data by using structured and unstructured questions. Structured questions included ordinal questions and the use of Likert response scales, and unstructured questions were open-ended. While structured questions helped collect the data required to answer the study's objectives, the unstructured questions allowed the respondents to express their own opinions without being restricted or reinforced by the study's pre-determined context. This allowed new perspectives to be uncovered. The variables that were in the survey include:

- the frequency of participation in different leisure activities;
- the transportation modes used to access these activities;
- the frequency of visit to the different locations in and around Nanaimo to spend leisure time;
- the transportation modes used to access these places.

Further variables included comments and opinions on leisure and the role of transportation in accessing leisure opportunities in Nanaimo. Latent demands in the context of accessing leisure were also included in order to identify whether or not transportation was a barrier towards leisure.

The online survey was designed and implemented through the software Survey Monkey. The questionnaire contained 29 questions in total which were divided into three parts: (1) leisure mobility styles, (2) perception of transportation in leisure access, and (3) demographic information (see Appendix N for the complete questionnaire). Respondents were required to agree to

EXPLORING LEISURE MOBILITY OF MILLENNIALS

the consent form before taking the survey (see Appendix O for the research consent form for the online survey). The first part contained questions that asked each respondent to identify how often they participated in different leisure activities and visited different locations within and around Nanaimo through matrix questions. They were also asked to select all the transportation modes used to access these activities and places. These factors played an important role in assisting with the analysis and understanding of the different leisure mobility styles that would be identified later on. In the second section, respondents were asked to rank their agreement with provided statements. Respondents were also asked to identify, if any, a leisure activity or place that they desire to engage with but have difficulty accessing, along with the reason(s) for such inaccessibility. This allowed the researcher to later compare the current demands with the latent demands for leisure, and explore if transportation was an obstacle to fulfilling the latter. This section also let the respondents express their thoughts and opinions of their current leisure repertoires and the role of transportation in this context. The final section of the survey gathered demographic information such as age, level of education, employment status, current study programme or current career sector, and the length of residency in Nanaimo thus far. Additionally, respondents were also asked to identify the cities and countries in which they previously resided or had spent the most part of their lives in. This information helped construct the geographical backgrounds of the respondents, which could then be used to identify the different leisure mobility styles.

3.3.4. Facebook group discussion.

A Facebook group titled “Fun on the Move: Group Discussion” was created and used as the platform for the virtual discussion on the topic of transportation in accessing leisure opportunities in Nanaimo. The researcher decided that it was a closed group (see Appendix P for a detailed description of different levels of privacy of a Facebook group). This means that anyone could ask to join or be added or invited by a group member. Non-members could also see other information such as group’s name, list of group members and group description. However, only members were permitted to see posts in the group. This privacy setting allowed the researcher to ensure that the participants of the Facebook group discussion fit the study’s criteria, and to add a layer of confidentiality and privacy to the virtual discussion.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

A note titled “Research Consent Form for Facebook Group Discussion” was added to the Facebook page. The note was the virtual consent form (see Appendix Q for a detailed description). In order to be added to the Facebook group, participants must comment “I agree” underneath this note. 16 Facebook users who fit the study’s criteria consented and were added to the Facebook group discussion. These Facebook users were young professionals working in the community and VIU students in both undergraduate and graduate levels. The Facebook group discussion was launched a week after the start of the online survey, and remained opened for two weeks. A question was posted each week, to which group members answered and could also comment on other participants’ answers. The two questions posted were the same as the open-ended questions asked in the online survey (see Appendix R for a detailed description). The discussion nature of the Facebook group, however, helped obtain more data that would not have been revealed otherwise. The first question encouraged each participant to identify two leisure activities: one in which she or he frequently participated, and one in which she or he wished to participate more often. Participants were then asked to discuss the reason(s) why they did not participate in the latter more often. The second question prompted the participants to share their thoughts and opinions on the role of transportation in accessing leisure opportunities in Nanaimo.

After the Facebook group discussion was over, all the participants were removed from the group, and only the researcher remained as an active member. This allowed the researcher to back up the data, and nobody besides the researcher could see the discussion. After the study was completed, the researcher also left the group which automatically deleted the group permanently.

3.3.5. Focus group.

After the Facebook group discussion was closed, the focus group took place on February 24, 2017 in room 138, building 180 on VIU’s Nanaimo campus. All participants were asked to read through and sign a consent form in order to participate (see Appendix S for a detailed description). The focus group lasted around one hour and forty minutes with 9 participants, and consisted of two parts: map marking and group discussion. In order to understand where Millennials spend their leisure time in Nanaimo and how they access these places and spaces, each participant was provided with a Bicycle and Transit Route Map 2015 of Nanaimo along with a marker (see Appendix T for the map). Using the first question of the Facebook group discussion, participants were asked to map two leisure journeys to reach two different leisure activities: one

EXPLORING LEISURE MOBILITY OF MILLENNIALS

in which they most frequently participated and one in which they wished they could have participated more often. Participants were asked to note down the transportation modes involved in each of the journeys on the maps. Afterwards, the second question used in the Facebook group discussion were reused in order to facilitate the second part of the focus group. The focus group discussion was recorded using the researcher's mobile phone, tablet and laptop. The data collected from the maps were transferred to Google Map. The use of a virtual map did not only assist in analysing the findings, but also allowed the researcher to share the highlights of the results with the public later on.

Limitations

3.3.6. Generalisability

There were some limitations in the study design that influenced the generalisability of the findings. First of all, the questionnaire design was inefficient due to its length and complexity. There were 29 questions, and 3 of them were matrix questions. The matrix questions were placed at the beginning of the questionnaire, which resulted in a low completion rate as respondents quitted the survey after the first or second matrix question. There were 336 responses, but only 195 were valid to be included in the study. As a result, the findings were not generalizable. If the questionnaire was designed differently, there would have been a better completion rate, which could have potentially yielded findings that were more representative of the Millennial population of Nanaimo. Besides, the researcher could not implement random sampling, which made the sample not representative of the Millennial population in Nanaimo. Furthermore, as the author could not obtain specific demographic statistics for the population aged 20 to 32 living in Nanaimo, it was challenging to calculate the data base to obtain a representative sample of the target population, especially in regard to the gender ratio.

Secondly, the definition of some items in the questionnaire was not specific enough, which led to respondents interpreting the answers differently from what the researcher intended. For example, two of the potential location types for leisure activities were "other towns/cities within a 30-min drive from Nanaimo" and "other towns/cities beyond a 30-min drive from Nanaimo". These two types were supposedly locations for compactophile leisure activities. However, as the findings in chapter 4 indicated, Millennials who travelled to these locations partook in more naturophile leisure activities than compactophile leisure activities. A possible explanation for the popularity of naturophile leisure activities in these assumingly compactophile

EXPLORING LEISURE MOBILITY OF MILLENNIALS

locations is that many communities in Canada in general and on Vancouver Island in particular are relatively rural and remote. Therefore, despite having a community of habitants that offers some compactophile leisure amenities similar to big cities such as restaurants, cafés, arts and culture, these locations are mainly known for their great diversity of outdoor activities due to their world-renowned natural surroundings, such as Tofino.

Thirdly, for the focus group, the study attracted the participation of mostly Millennials who did not have access to a car. This was perhaps because the tone of the study and the way the researcher promoted and tried to approach potential participants were public-transit-oriented. The reason for this was due to the researcher's bias, which was the lack of experience as a driver, since the researcher did not have a full driver's license and never drove before. Those who never used any other modes of transportation besides a private motorised vehicle therefore did not feel like they could contribute much to the study, and hence the lack of their participation. The findings obtained from the study could help answer the research questions. However, it would have been beneficial as well to be able to include the viewpoints of young people who only knew driving as the only way since cars also belonged to the transportation picture.

Next, during the focus group, the researcher provided the Nanaimo Bicycle and Transit Map 2015, which only included locations within the City of Nanaimo. The researcher did not ask participants if they also participated in leisure activities outside of Nanaimo. As a result, it was not possible to observe and understand the participants' participation in leisure activities outside of the city, if any. Another limitation was the use of both SPSS and Excel for quantitative data analysis. While it helped the researcher overcome her limitation in experience and knowledge of quantitative data analysis, it allowed some possibilities of inconsistencies.

Finally, the correct age range of the Millennial generation was debateable. The age range defined in this study was between 20 and 32. However, during the data collection phase on the study's Facebook page, some interested individuals argued that the oldest Millennial should have been 34 and not 32. There were scholars who agreed with that argument, such as Howe and Strauss (as cited in Graybill, 2014) and Martin (2009). The researcher's choice of age range created a missed opportunity as there were some community members between 32 and 34 years of age who were genuinely interested in contributing to the study.

3.3.7. Virtual focus group versus traditional focus group

In this study, the researcher implemented two focus groups that occurred in two different environments: on a social media site and in real life. The advantages of having a virtual focus group were the flexibility and convenience that it provided for both the participants and the researcher. All they needed was access to the internet to contribute to the discussion on Facebook from the comfort of their own home at any hour within the required two-week length of the discussion. As opposed to this convenience, a traditional focus group required more planning because it involved setting up a physical space where the discussion could take place. Both the researcher and participants needed to travel to the appointed venue at the appointed time, and as a result, participants in the traditional focus group were all VIU students, since the room provided for the focus group was on campus and could only be used during working hours on a work day. Meanwhile, besides VIU students, some participants in the Facebook group discussion were community members or young professionals.

When it came to the depth of the discussion, both types of focus group provided interesting angles of the conversation. From the researcher's observation, since the Facebook group discussion took place entirely online without any physical interaction, the researcher's bias as well as the psychological influence that participants might have had on each other were less present. As mentioned earlier, one of the limitations in this study was the researcher's bias towards pro-public transportation, which was reflected through the way the researcher branded the study and approached participants. The consequence was the low participation of Independents. Even during the traditional focus group, the Independents tried to contribute by speaking about their past experience using public transit and active transportation without mentioning their car use for leisure purposes. The reason could be because the majority of participants were Dependents who steered the conversation towards public transit more than anything else. Not until the researcher directed questions about their car use did the Independents shared their experience as drivers.

Despite all that, the topics covered during the traditional focus group were diverse, and the researcher could fully explore them in further details by asking follow-up questions that obtained immediate responses. Follow-up questions were also used in the Facebook group discussion. However, they were not always answered by the participants. A potential explanation could be because the participants saw the question when they were occupied with other real-life tasks, and forgot to follow up afterwards. Another reason could also be because since everything was

EXPLORING LEISURE MOBILITY OF MILLENNIALS

virtual, the participants did not feel the need to fully immerse in the discussion. Another point worth mentioning was the use of emoji – a small digital image or icon used to express an idea or emotion – and the “Like” button by the participants. The researcher took notice of the participants’ use of these two features, but did not utilise them in the qualitative analysis process. The reason was due to the researcher’s lack of knowledge and experience in the psychology behind the use of these features on a social media site and how it could be used in qualitative analysis.

In conclusion, both virtual focus group and traditional focus group have their advantages and disadvantages. Depending on the purpose and sample of a study, one may benefit a researcher more than the other. Nevertheless, as the world is becoming digitalised, it is important to experiment and study about the use of technology for research in social science.

Chapter 4. Findings

4.1. Introduction

The purpose of chapter 4 is to describe the findings that emerged from the study. This chapter is organised as follows: The Millennial population in Nanaimo who participated in the study is described based on their demographic backgrounds, their access to transportation, and how important leisure was to them in deciding where to live. Then, there are two sections, each provides findings which answered the study's research objectives. The first section provides answers for the first objective, which is to describe the leisure mobility of Millennials in Nanaimo by identifying what they did for leisure, where they participated in leisure, and how they accessed those locations. Each sub-section reports the findings emerged from the quantitative data, followed by those from the qualitative data. The second section presents findings from both types of data simultaneously to answer the second objectives, which is to determine the influence of the city's existing transportation system/infrastructure on the leisure repertoires of Millennials.

Munafò (2015)'s classification of activities for leisure travel was adopted in this study. There are two categories of activities: compactophile and naturophile. The findings are presented using this classification to understand the leisure mobility of young people in Nanaimo, and to test the compensation theory of leisure. The research results showed that the majority of Millennials participated most frequently in compactophile leisure activities and wished that they could have participated more in naturophile leisure activities. Most leisure locations were within the City of Nanaimo, with Downtown Nanaimo being popular for compactophile activities, and green spaces within the city being chosen for naturophile leisure activities. Travelling with a private motorised vehicle was the most prominent way for Millennials to access their choices of leisure. Transportation was identified as a barrier to accessing those desired activities. In order to negotiate this constraint, two interrelated leisure mobility styles were formed among Millennials in Nanaimo: Independents and Dependents.

4.2. Description of Millennials Living in the City of Nanaimo

There were 195 valid responses from the online survey, 16 participants in the Facebook group discussion, and 9 participants in the focus group. In the Facebook group, 4 out of 16 participants were working professionals, and the rest was students at VIU. Among these students, 9 of them were enrolled in Master's programmes. 5 Facebook users were Canadian, of which 1 came from the City of Nanaimo. The rest of the group came from outside of Canada. In the focus

EXPLORING LEISURE MOBILITY OF MILLENNIALS

group, all 9 participants were students at VIU, with only 1 participant being enrolled in an undergraduate programme. One third of the focus group came from Canada, and the rest of the group came from different parts of the world.

Over half of the respondents to the online survey were self-identified as female and were between the ages of 20 to 24. The majority of respondents were educated, with 37% having received a high school diploma or equivalent, and 36% having obtained a Bachelor's degree. Many of them were full-time students with 27% not working and 21% working alongside their study. Many others were employed full-time (more than 20 hours per week) (24%). Finally, more than a third of respondents had been living in Nanaimo for somewhere between one and three years. 28% had lived in Nanaimo for more than 3 years, and 16% were quite new to Nanaimo as they had lived in the city for more than 6 months but less than a year. Only 18% of the respondents were born and raised in Nanaimo. Table 4 provides a summary overview of the demographic backgrounds of the respondents.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Table 4

Summary Table of Millennial Respondents Overview

Characteristics	Frequency	%
<u>Gender</u>		
Female	116	68
Male	50	29
Transgender Female	1	1
Gender Variant/Non-conforming	4	2
<u>Age</u>		
20 to 24	87	51
25 to 29	60	35
30 to 32	25	15
<u>Educational Qualification Obtained</u>		
High school graduate, diploma or equivalent	64	37
Trade/Technical/Vocational training	15	9
Associate degree	13	8
Bachelor's degree	63	36
Master's degree	16	9
Professional degree	2	1
<u>Current Employment Status</u>		
Employed full-time (more than 20 hours per week)	41	24
Employed part-time (20 or less hours per week)	22	13
Participating in an internship or practicum placement	5	3
Full-time student, working	37	21
Full-time student, not working	46	27
Part-time student	7	4
Not employed, looking for work	7	4
Not employed, NOT looking for work	8	5
<u>Living Time in Nanaimo</u>		
6 months - less than 1 year	28	16
1 - 3 years	65	38
More than 3 years	49	28
My whole life	31	18

Total Valid Responses N = 173

EXPLORING LEISURE MOBILITY OF MILLENNIALS

In the online survey, respondents were not asked about their origins. Instead, they were asked to indicate the cities where they spent the majority of their life before moving to Nanaimo. The researcher believed that where they were born and where they experienced the majority of their life were not necessarily the same. It was more important for the City to know where Millennials had lived before choosing Nanaimo as their next destinations. Almost 80% of the respondents had lived in other Canadian cities prior to Nanaimo. Many came from Vancouver, followed by those coming from Calgary and Port Alberni (see Appendix U for a detailed breakdown of all the cities). About 7% of the respondents had lived in India, and 5% had lived in China. The rest was equally distributed across different countries located in different continents from Europe to Africa. Table 5 lists those countries.

Table 5

Countries where Millennials Spent the Majority of their Life Before Moving to Nanaimo

<u>Country</u>	<u>Frequency</u>	<u>%</u>
Belize	1	1
Bhutan	1	1
Canada	103	76
China	7	5
Colombia	1	1
Curacao	1	1
Equatorial Guinea	1	1
Germany	2	1
Hong Kong	1	1
India	9	7
Kuwait	1	1
Oman	1	1
Pakistan	1	1
Russia	1	1
Saudi Arabia	1	1
Sweden	1	1
Switzerland	1	1
United Arab Emirates	1	1
US	1	1

Total Valid Responses N = 136

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Regarding access to transportation, the majority of respondents had a driver's license (84%) and access to a car (74%). Over half of them also had access to a bicycle (56%), and close to 90% of respondents lived close to a bus stop. Table 6 summarises the overview of Millennials' access to transportation.

Table 6

Summary Table of Millennials' Access to Transportation Overview

Access/Ownership	Frequency	%
<u>Driver's license ownership</u>		
Yes	156	84
No	30	16
<u>Access to a car</u>		
Yes	136	74
No	49	26
<u>Access to a bicycle</u>		
Yes	104	56
No	82	44
<u>Live close to a bus stop (within 10-min walk)</u>		
Yes	164	88
No	22	12

Total Valid Responses N = 186

Finally, more than half of the respondents (64%) either agreed or strongly agreed with the statement “Being able to access leisure places influences where I decided to live”. This helps understand how important it was for Millennials to be able to access leisure places when deciding where to live. The next sections describe how Millennials accessed leisure, and whether or not transportation was a barrier.

4.3. Leisure Mobility of Millennials in Nanaimo

Before moving on to highlighting the leisure repertoires of Millennials, it is important to understand that compactophile and naturophile are two different categories of activities that generate leisure travel. In order to answer the three sub-questions of the study's first objective, the focus is on these categories as activities rather than groups of people. There are three reasons for this decision: First of all, almost every respondent and participant of the study participated in both groups of leisure activities. As a result, it was challenging to strictly segregate the sample into groups of compactophile-oriented and naturophile-oriented individuals. Secondly, there

EXPLORING LEISURE MOBILITY OF MILLENNIALS

were 7 activities in the compactophile category but only 3 activities in the naturophile category, which would result in the majority of Millennials always being more compactophile-oriented than naturophile-oriented. Finally, despite the fact that the first objective was to classify leisure mobility styles, it was challenging to do so using the findings for this objective alone due to the lack of complete demographic information for all the survey respondents (only N = 173 respondents provided this information) and the imbalance in gender distribution (almost 70% were self-identified as female). Demographic information plays an important role in classifying leisure mobility styles (Götz et al, 2003; Munafò, 2015). The leisure mobility styles of Millennials in Nanaimo did emerge, but not until the findings for the second objective were revealed.

Due to this decision, instead of using N = 195 respondents to describe quantitative findings and perform statistical tests, as a first step, the researcher used Excel to calculate the average number of times an option was selected for each leisure category based on the reported amount of times a leisure activity of that category was selected (e.g. number of frequencies of participation, number of locations, number of transportation modes chosen to reach the activity). It is important to notice that the findings for the first sub-question in section 4.3.1. was analysed using the average number of respondents instead of the average number of times an option was selected like in sections 4.3.2 and 4.3.3. The reason was because of the questions' design in the survey: All three questions were matrix, but for the first question, respondents could only choose one option for each leisure activity, whereas for the other two questions, respondents could choose all that applied for each leisure activity. Further clarification is described in further detail in each of the following sections.

4.3.1. **“How do they have fun?”: Leisure activities and frequencies of participation.**

This section answers objective 1.1, which was to identify what Millennials did for leisure in Nanaimo. In general, Millennials participated in compactophile leisure activities more often than naturophile leisure activities. The majority of activities were carried out with friends or in group settings, regardless of their categories.

4.3.1.1. *An aggregate statistical view.*

Each respondent could choose to indicate their frequency of participation in ten different leisure activities. The number of leisure activities they could choose was between 0 (question skipped) and 10 (all activities selected). For each of these activities, they could, however, only choose one frequency of participation among these options: “Daily”, “More than once a week”,

EXPLORING LEISURE MOBILITY OF MILLENNIALS

“Once a week”, “Once a month”, “One a year”, “Never”. There were 1877 frequencies of participation selected by N = 195 respondents. In order to observe the frequency of participation based on categories, the researcher calculated the average number of respondents for each frequency of participation in each leisure category.

For any given leisure activity in the compactophile category, there was an average of 17 respondents who did it on a daily basis. Meanwhile, for any given leisure activity in the naturophile category, the average number was 13. In general, there were more respondents who participated in a compactophile leisure activity than in a naturophile leisure activity for “more than once a week”, “once a week”, and “once a month”. The exceptions were for the participation frequency of “never” and “once a year”. In fact, for any given naturophile leisure activity, there were 21 respondents who self-reported to have never participated in it compared to 15 for the compactophile category. The difference was higher for “once a year”, as there were 41 respondents who participated in any given naturophile leisure activity annually compared to only 19 for the compactophile category. Figure 1 illustrates the results.

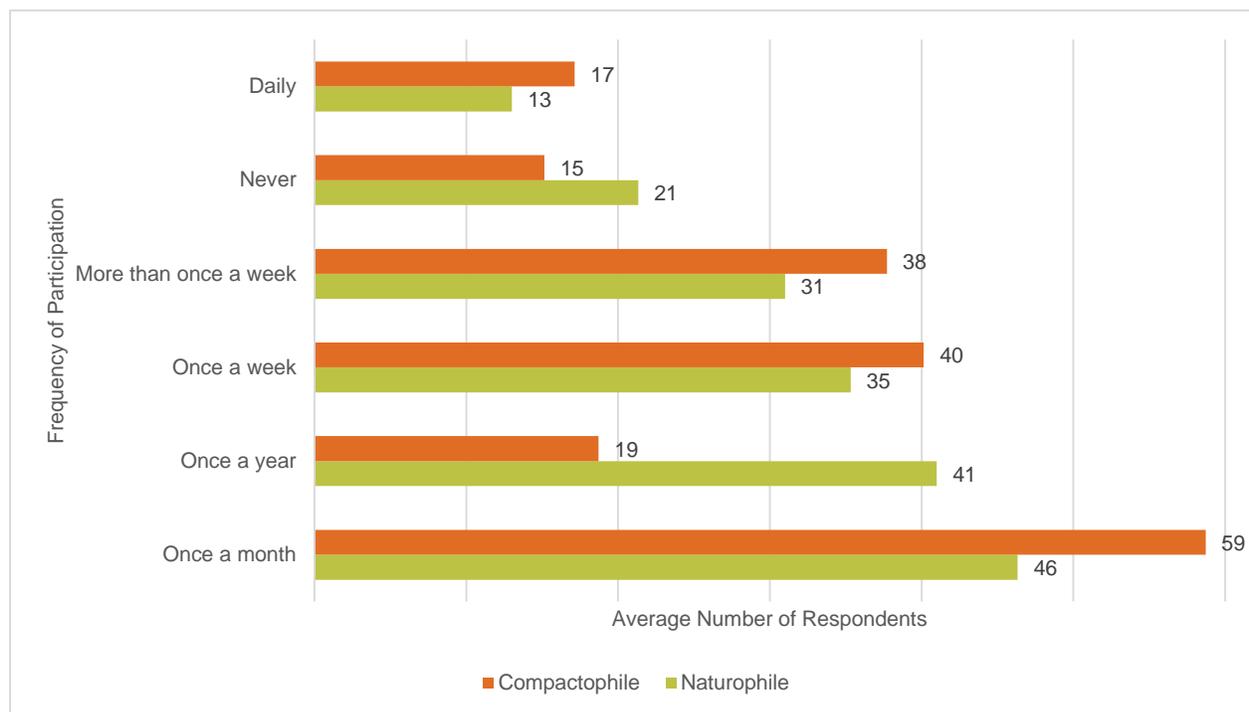


Figure 1. Frequency of participation in each category of leisure activities based on the average number of respondents who chose any given activity of that category. There was a total of 1877 leisure activities selected by N = 195 respondents. The order of the frequency of participation is organised according to the increasing average number of respondents in the naturophile category.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

In order to explore if there was a difference in the participation frequencies between compactophile and naturophile leisure activities, a paired sample t-test was performed. The respondents ($N=195$) reported 1365 participation frequencies for compactophile activities and 585 for naturophile activities. Since there were more frequencies reported for compactophile activities than for naturophile activities due to the higher number of activities in the compactophile category, a random sample of $n = 585$ was generated from the total reported participation frequencies of compactophile activities for the t-test. The frequency was coded as follows: 1 = Daily; 2 = More than once a week; 3 = Once a week; 4 = Once a month; 5 = Once a year; 6 = Never. Survey respondents reported to have participated slightly more frequently in compactophile activities ($M = 3.46$, $SD = 1.368$) than in naturophile activities ($M = 3.73$, $SD = 1.440$). This means that in average, Millennials in Nanaimo were more likely to participate in compactophile leisure activities on a weekly basis than naturophile leisure activities, which seemed to be carried out more on a monthly basis. Compactophile leisure activities elicited a statistically significant small increase in participation frequencies compared to naturophile leisure activities, $M = 0.267$, 95% CI [0.137, 0.398], $t(545) = 4.016$, $p < 0.001$.

Considering how nature breaks and wellness retreats with a minimum stay of 2 nights were not activities that could be done often in reality, the researcher calculated averages for a second time. Therefore, in this calculation, the participation frequencies of the leisure activity “Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland” were not considered, which left only two activities in the naturophile leisure category. The new averages showed that when nature breaks and wellness retreats were taken out of the equation, naturophile leisure activities seemed to be done a bit more frequently than compactophile leisure activities. In fact, there was an average of 52 respondents who participated in a naturophile activity once a week, and 45 respondents who did so more than once a week. There were 19 respondents who took part in a naturophile activity daily, which were 2 respondents more compared to the compactophile category. Besides, there was an average of only 7 respondents who never participated in a naturophile activity as opposed to 15 in the compactophile leisure category.

Those averages were more or less aligned with the results for the second paired sample t-test. With the nature breaks and wellness retreats being disregarded, the participation frequencies in naturophile leisure activities went down to 393. Therefore, a second random selection was

EXPLORING LEISURE MOBILITY OF MILLENNIALS

generated for compactophile leisure activities to match the number of participation frequencies with those of naturophile leisure activities. In contrast to the first paired sample t-test, survey respondents reported to have participated slightly more often in naturophile leisure activities ($M = 3.10$, $SD = 1.252$) than in compactophile leisure activities ($M = 3.54$, $SD = 1.389$). Therefore, when nature breaks/wellness retreats were removed, naturophile leisure activities elicited a statistically significant small increase in participation frequencies compared to compactophile leisure activities, $M = -0.433$, 95% CI [-0.615, -0.251], $t(357) = -4.684$, $p < 0.001$.

In general, the overall participation frequencies of compactophile leisure activities and naturophile leisure activities were almost similar, with compactophile activities occurring slightly more often than naturophile activities. However, the reverse was true when the less regular leisure activity of “nature breaks and wellness retreats” were not considered. The statistics which showed higher frequent participation in compactophile activities were aligned with the qualitative data collected from the focus groups despite the lack of activities similar to “nature breaks and wellness retreats” during the qualitative discussions.

4.3.1.2. Shared stories of Millennials.

For the survey data, the researcher used frequencies to determine the types of leisure activities that Millennials usually participated in. In contrast, for Facebook group discussion and focus group, the researcher focused mainly on identifying the usual leisure activities that were mentioned throughout the discussions as participants were not given a list of leisure activities like in the survey.

Compactophile leisure activities were dominant in both discussions. The majority of these activities were highly social-oriented. Activities that had a direct social purpose such as “hanging out with friends” were often combined with other leisure activities due to the context in which they took place, such as at a restaurant, a pub, or with an association or group at the university. Some participants would also participate in art and cultural activities in a social context, such as “play[ing] my guitar/keyboard at UCM [University Christian Ministries/church] events at school” or “perform[ing] on the stage with my dance group”. Some indoor sports activities were also group-oriented, such as indoor soccer or kickboxing and women defense classes. A few compactophile leisure activities could be done alone, such as “reading”, “watching Netflix shows at home”, “doing exercise in the gym”, “[watching movie at the] cinema” and “working

EXPLORING LEISURE MOBILITY OF MILLENNIALS

out at home”. Social leisure activities were also merged with naturophile activities, such as “going out on nature on hikes” or “[playing] disc golf” with friends. However, when naturophile leisure activities were mentioned, most participants did not specify whether or not these activities were done with other people, and many of these activities could be done alone, for example: “snowboarding, hiking, diving, and looking for new resorts on the island, surfing and paddling”, “go[ing] for a walk in [the] forest to get more oxygen as leisure”, “running”, “walk[ing] in my neighbourhood, or tak[ing] a dog for a walk”, etc.

In general, most participants seemed to enjoy more leisure activities in the compactophile category than in the naturophile category. Participants also mentioned more specifically that most of these compactophile leisure activities were done with friends. The quantitative and qualitative results to answer the first objective of “Identifying which leisure activities Millennials choose to participate in” were mainly similar. Even though Millennials seemed to participate more in naturophile activities when “nature breaks and wellness retreats” were disregarded, findings from both survey and focus groups pointed towards a tendency of a more frequent participation in compactophile activities.

4.3.2. “Where do they have fun?”: Leisure places and spaces.

This section provides findings for the second sub-question of the first research objective, which was to identify the places and spaces where Millennials carried out their leisure activities. There were various types of locations identified with a clear preference for locations within the City of Nanaimo with Downtown Nanaimo being the most popular choice for any given compactophile and naturophile leisure activity due to Maffeo Sutton Park which was located in the downtown. Most respondents chose locations that were close to their homes for leisure, and those living in neighbourhoods with more green spaces were more mobile and flexible in their choice of leisure locations than those living in more dense areas.

4.3.2.1. *An aggregate statistical view.*

Like the frequency of participation in leisure activities, the number of leisure activities respondents could choose was between 0 (question skipped) and 10 (all activities selected). For each leisure activity, a respondent could choose more than one type of location, e.g. outdoor activities could take place either at natural spaces in Nanaimo or at natural spaces within a 30-min drive from Nanaimo. The number of locations that could be selected for each activity was between 0 (leisure activity skipped) and 9 (all locations selected). Therefore, there were 3421 times

EXPLORING LEISURE MOBILITY OF MILLENNIALS

when locations were selected by $N = 195$ respondents. For each location, the average number of times a location was selected was calculated based on the category of leisure activities. In general, Downtown Nanaimo was most popular for compactophile leisure activities, with an average selection of 74 times for any given compactophile activity. For naturophile leisure activities, natural spaces in Nanaimo were the most preferred locations as for any given naturophile leisure activity as there was an average of 104 times green spaces within the city were selected by respondents. Interestingly, “other cities/towns within a 30-min drive” and “other cities/towns beyond a 30-min drive” were initially assumed to be potential locations for compactophile leisure activities. However, the results showed that these places were chosen more for naturophile leisure activities. For example, “other cities/towns beyond a 30-min drive” were selected 50 times in average for naturophile activities compared to only 36 times for compactophile leisure activities. Figure 2 shows the average number of times a location was selected for each leisure category.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

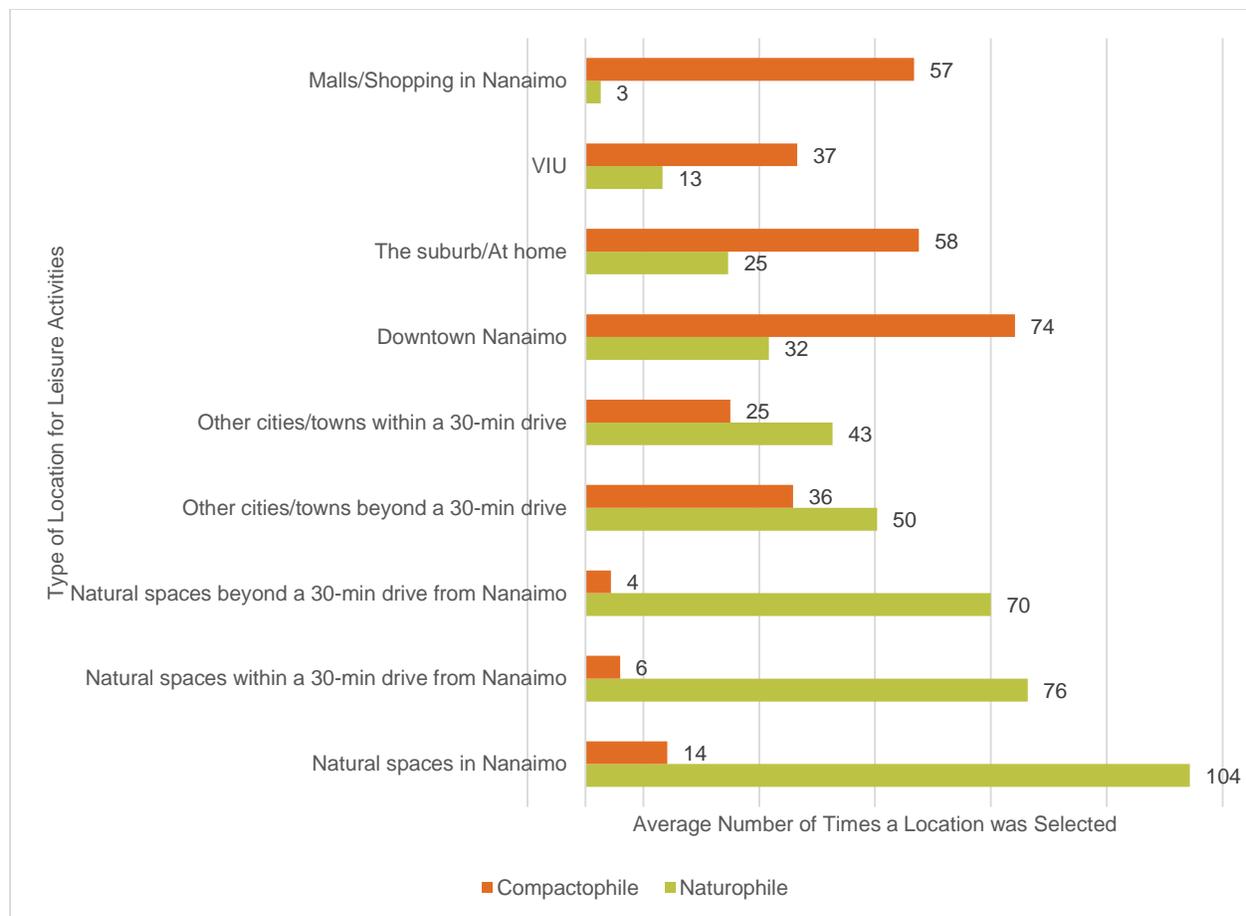


Figure 2. Chosen locations for each category of leisure activities based on the average number of times those locations were selected for any given activity of that category. There was a total of 3421 times when locations were selected by N = 195 respondents. The order of the locations is organised according to the increasing average number of times a location was selected in the naturophile category.

Millennials' choices of leisure locations were also analysed based on the neighbourhood that they were living in. In order to do so, the average number of leisure locations per leisure area type visited per individual living in each neighbourhood was calculated using Excel. The calculation was as follows: First, the 9 possible locations for leisure activities in Nanaimo and its surrounding were grouped into 4 area types: (1) Areas for compactophile activities in Nanaimo, (2) Areas for compactophile activities outside of Nanaimo, (3) Areas for naturophile activities in Nanaimo, and (4) Areas for naturophile activities outside of Nanaimo. The grouping can be seen in Table 7.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Table 7

Type of Areas for Leisure Activities in Nanaimo and Surroundings

<u>Locations</u>	<u>Area Types</u>	<u>Abbreviation</u>
Malls/Shopping plazas in Nanaimo	Areas for compactophile activities in Nanaimo	COMPIN
The suburb/At home		
VIU		
Downtown Nanaimo		
Other cities/towns within a 30-min drive	Areas for compactophile activities outside of Nanaimo	COMPOUT
Other cities/towns beyond a 30-min drive		
Natural spaces in Nanaimo	Areas for naturophile activities in Nanaimo	NATURIN
Natural spaces within a 30-min drive from Nanaimo	Areas for naturophile activities outside of Nanaimo	NATUROUT

The numbers of leisure locations selected by each respondent were summed up based on area type. Next, respondents' answers were organised according to where they live. There were 17 neighbourhoods in Nanaimo, from which respondents could choose. For each leisure area type, the numbers of leisure locations selected by all respondents living in the same neighbourhood were summed up. This sum was then divided by the sum of designated location types per leisure area type (e.g. There were 2 designated location types for NATUROUT and 4 for COMPIN). Finally, the result for each leisure area type was divided by the sum of all respondents living in the neighbourhood. The calculation for the average number of leisure locations per leisure area type visited per individual living in each neighbourhood could be written as follows:

$$\frac{\sum \text{leisure locations visited per neighbourhood}}{\sum \text{respondents living in the neighbourhood} \times \sum \text{locations per area type}} = \langle \text{leisure locations visited by each resident in the neighbourhood} \rangle$$

The city of Nanaimo has a good mix between urban areas and green spaces. Some neighbourhoods have a higher urban density with many urban structures and facilities, while others have a greater share of parks and lakes. Therefore, the average numbers of leisure locations per leisure area type visited per individual living in the neighbourhood were sorted according to their characteristics. The average number of locations visited per individual per leisure area type for

EXPLORING LEISURE MOBILITY OF MILLENNIALS

all urban neighbourhoods was also calculated by summing up the total average of all urban neighbourhoods and then dividing it by the total number of urban neighbourhoods. The same calculation was done for green neighbourhoods. Among the 17 neighbourhoods in Nanaimo, 11 were urban and 6 were green.

On average, a Millennial living in a greener neighbourhood visited 2.38 naturophile locations in Nanaimo while a Millennial living in an urban neighbourhood visited 2.16 locations. The slight difference was the opposite for compactophile locations in Nanaimo. Each resident of an urban neighbourhood visited 2.43 compactophile locations in average compared to 2.13 locations visited by a resident of a green neighbourhood. Interestingly, residents living in a green neighbourhood visited more compactophile locations outside of Nanaimo (1.92 locations in average) compared to those living in an urban neighbourhood (1.57 locations in average). Similarly, green neighbourhoods' residents also travelled to more naturophile locations outside of Nanaimo (1.25 locations in average) than urban neighbourhoods' residents (1.18 locations in average). Table 8 demonstrates the average numbers of leisure locations visited per leisure area type per individual according to their lived neighbourhoods.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Table 8

Average Numbers of Leisure Locations Visited per Leisure Area Type per Individual

Neighbourhood	Type of Leisure Area			
	<u>COMPIN</u>	<u>COMPOUT</u>	<u>NATIN</u>	<u>NATOUT</u>
<u>Urban</u>				
City Centre/Protection Island	2.17	1.94	2.11	1.83
Departure Bay	2.17	0.89	2.44	0.72
Diver Lake	2.00	0.88	1.25	0.63
Dover	2.39	1.79	1.86	0.93
Harewood	2.31	1.50	1.86	1.40
Newcastle	3.13	1.25	2.00	0.50
Northfield	2.45	1.36	2.18	1.05
North Slope	2.38	0.75	2.50	1.25
Old City/VIU	2.68	1.83	2.52	1.35
Pleasant Valley/Turner	2.80	3.30	3.00	1.90
Townsite	2.25	1.81	2.06	1.38
<u>Avg. of all urban neighbourhoods</u>	2.43	1.57	2.16	1.18
<u>Green</u>				
Cedar	1.54	1.75	1.83	0.50
Hammond Bay	2.44	1.78	2.56	1.61
Linley Valley	2.13	0.25	4.50	1.00
Long Lake	2.09	3.31	1.75	1.88
Southend/Duke Point/Chase River	2.33	2.08	2.17	1.58
Westwood	2.25	2.33	1.44	0.94
<u>Avg. of all green neighbourhoods</u>	2.13	1.92	2.38	1.25

Total Valid Responses N = 168

For each leisure area, the difference in percentage between the average number of locations visited by each resident of urban and green neighbourhoods was calculated by subtracting the average number of locations visited by each resident of green neighbourhoods from the average number of locations visited by each resident of urban neighbourhoods. The result was then divided by the sum of the average number of locations visited by all residents before multiplying by a hundred. The calculation could be written as follows:

EXPLORING LEISURE MOBILITY OF MILLENNIALS

$$\frac{\langle \text{locations visited by urban neighbourhoods} \rangle - \langle \text{locations visited by green neighbourhoods} \rangle}{\langle \text{locations visited by urban neighbourhoods} \rangle + \langle \text{locations visited by green neighbourhoods} \rangle} \times 100$$

$$= \% \Delta \langle \text{locations visited per resident} \rangle$$

Overall, Millennials living in green neighbourhoods were more mobile as they visited more leisure locations than those living in urban neighbourhoods. In average, they visited natural spaces within the city and outside of the city respectively 5% and 3% more. Interestingly, the difference was the greatest when it comes to leisure locations that hosted compactophile leisure activities: green neighbourhoods' residents visited 10% more compactophile locations in average than urban residents. The only exception was for compactophile locations within the city, where residents of urban neighbourhoods went for compactophile leisure 7% more than those living in neighbourhoods. Figure 3 visualises the differences.

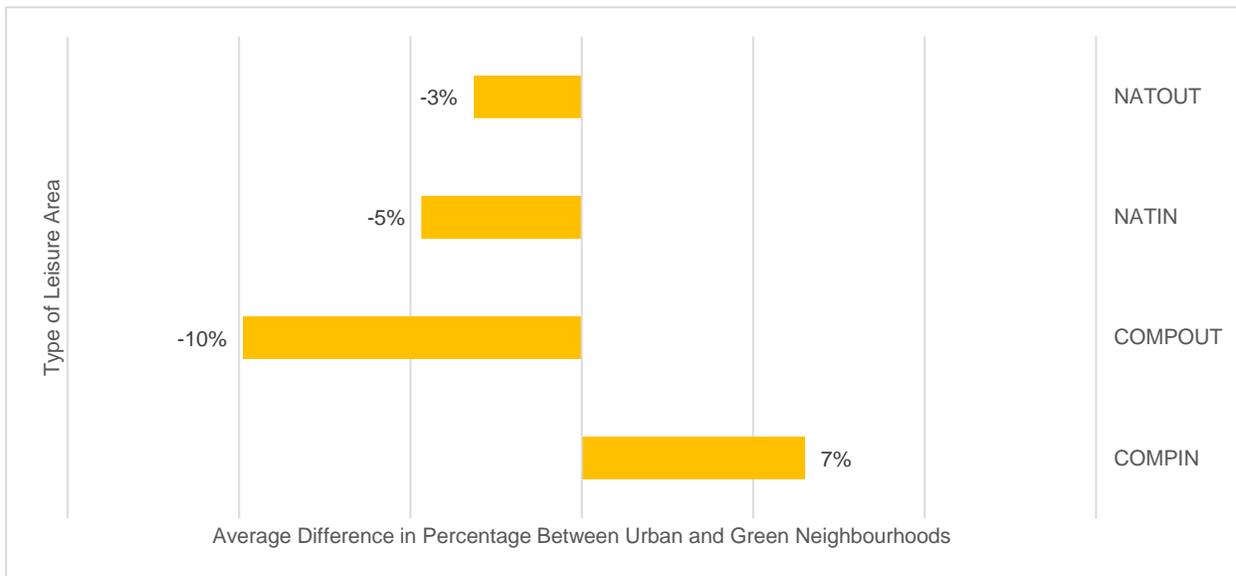


Figure 3. The differences in percentage between the average number of locations visited by each resident of urban neighbourhood and the average number of locations visited by each resident of green neighbourhoods. There were $N = 168$ respondents who indicated their lived neighbourhoods.

The quantitative results for this question were similar with the qualitative results. During the discussions, specific locations were identified. Some insights about why they chose certain locations were also discovered.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

4.3.2.2. Shared stories of Millennials.

The use of a physical map during the focus group helped visualise all the possible locations which Millennials chose for their leisure activities. For compactophile leisure activities, VIU was the only location that was selected by multiple participants. The other locations were chosen by one participant each. They included: Downtown Nanaimo, the Old City Quarter, Avalon Cinema at Woodgrove Mall, and a friend's house at a residential area in northern Nanaimo. For naturophile leisure activities, Maffeo Sutton Park in downtown was a popular choice with two participants often going there for its green space and waterfront. The other options were marked by one participant each and scattered across the city: Colliery Dam Park, Westwood Lake, Linley Valley Park, Bowen Park, and Departure Bay Beach.

The Facebook group discussion did not obtain as much detailed information about the chosen locations of frequent activities as the focus group. On the few occasions of the locations being mentioned, they were mostly for compactophile leisure activities. Those locations were at home, in the neighbourhood around home, at the university, and in downtown. One participant had multiple locations for her dancing activity that ranged from places inside Nanaimo such as the Port Theatre, Bowen Centre and Beban Social Centre to other towns such as Parksville. The two naturophile activities of cycling and outdoor running also had flexible locations, as the participant could run “near my house, at the university where I study or even where I work as well... since Nanaimo is full of parks and walking trails”, and cycle “everywhere in Nanaimo” since biking was “also my primary form of transportation rain or shine”.

For the qualitative data, locations for the third type of leisure activity were identified because participants had the freedom to describe their leisure repertoire without a fixed list of items. “Others” are either a mixed of both compactophile and naturophile leisure activity or cannot be identified clearly. In this case, some locations were marked as “Others” because participants carried out both compactophile and naturophile leisure activities there. Downtown was chosen by two participants, who enjoyed “[having] drinks with friends”, eating, reading as well as “exercis[ing]” and “hav[ing] short walks by the waterfront”. The other location was at a participant's home area near Long Lake, as this participant often “walk[ed], [ran] around in home area” and also did “workout at home”.

In general, downtown Nanaimo was often mentioned across all three categories of leisure activities in both discussion groups, particularly for compactophile leisure activities. This finding

EXPLORING LEISURE MOBILITY OF MILLENNIALS

was aligned with the statistics which showed the downtown's popularity for this type of leisure activities. The qualitative data did not, however, identify locations that were outside of the city of Nanaimo. As one participant in the focus group put it: "Wherever you go for leisure activities for me was highly dependent on where I live." Likewise, another participant without access to a car who used to live near downtown and had then moved to the Long Lake neighbourhood shared her story as follows:

"It does depend on where you live, too. That was a good point earlier, is that, I didn't mean to live where I lived last year, but I went downtown a lot more and did things I enjoyed because it was walking distance. Like 30 minutes 40 minutes, I'd still walk it. Now I don't think I've been downtown, maybe once since I got back here in November. Now I just go to the local pub down the road, and there is not much variety, in my area. I become a regular, so embarrassing!"

As observed in this participant's experience, where Millennials enjoyed their leisure depended on where they lived and also on the mode of transportation available to them. How they travelled to their chosen destinations for leisure activities is discussed in the next section.

4.3.3. "How do they get there?": Modes of transportation.

This section provides answers to the last sub-question of the first objective, which is to identify how Millennials travel to access leisure opportunities. Overall, Millennials relied mainly on private motorised vehicles to reach their leisure choices regardless of the category.

4.3.3.1. *An aggregate statistical view.*

Like the types of chosen locations, survey respondents could choose every mode of transportation available to access any leisure activity on the list, e.g. shopping could be done either by driving alone or taking a bus. There were 8 different modes of transportation available to access each leisure activity. Therefore, there were 3375 times transportation modes were selected by N = 195 respondents. Similar to the other two sub-questions, for each mode of transportation, the average number of times a transportation mode was selected based on leisure category was calculated. In average, travelling with a car was the most popular option to access both categories of leisure activity. On the one hand, "driving (carpool)" was most often selected by Millennials to access any naturophile leisure activities with up to 105 times. On the other hand, "driving (alone)" was the most prominent choice to access compactophile leisure activities. In average,

EXPLORING LEISURE MOBILITY OF MILLENNIALS

there were 96 times “driving (alone)” was selected to access any given compactophile leisure activity. “Walking” was the most preferred option after driving, and there were more times when respondents walked to access naturophile activities (80 times selected in average) than compactophile ones (62 times selected in average). “Bus/coach” was the third popular mode of transportation to access leisure activities with an average of 38 times when respondents chose it for compactophile leisure purposes, and 29 times for naturophile leisure purposes which was the same as for “Ferry”. The average number of times “Ferry” was chosen to access compactophile leisure activities was the same as that of “Biking”, which was 14. “Biking” as a way to access naturophile activities were not so popular, as there were only 19 times when it was selected in average. “Seaplane” and “Taxi” were the least popular options. Figure 4 demonstrates the results.

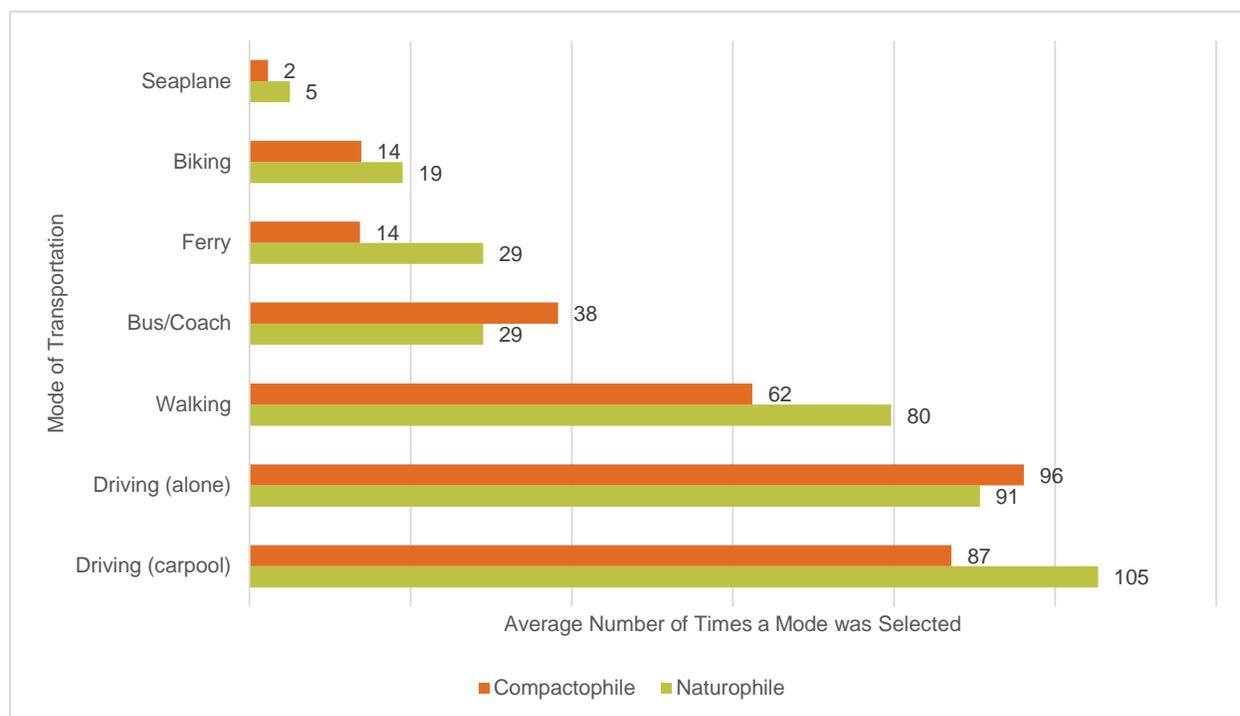


Figure 4. Mode of transportation chosen to access leisure activities based on the average number of respondents who chose any given activity of that category. There was a total of 3375 times modes of transportation were selected by N = 195 respondents. The order of the transportation modes selected is organised according to the increasing average number of times a mode was selected in the naturophile category.

The quantitative results more or less reflected the findings obtained from the qualitative discussions. However, while the figures provided a better big picture of the way Millennials in

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Nanaimo chose to navigate for leisure purposes, the insights shared by participants in the qualitative discussions provided a different angle of the transportation story.

4.3.3.2. Shared stories of Millennials.

It is important to notice that there were more than two occasions when participants mentioned how it was very easy to reach downtown, and most participants who marked downtown as the location for their frequent leisure activities took a bus or walked there. For other leisure spots across Nanaimo, most participants also either used public transit, biked, or walked to the places. These participants did not drive because they did not have access to a car. The few participants who had access to a car almost always drove to reach their leisure locations. Sometimes these participants drove alone, and sometimes they took friends with them. When their chosen leisure places were right next door, they opted for alternative modes of transportation. For instance, a participant often went running around Westwood Lake also lived in the Westwood neighbourhood. Therefore, he could combine walking and running straight from his house to the lake instead of driving. Participants without access to a car often chose leisure places that were in close proximity to where they lived. A participant on the Facebook group discussion claimed that “I live near downtown so for me transit isn't too much of an issue since everything I generally do is downtown”.

Compared to the quantitative data obtained from the survey, the data obtained from conversations that occurred on Facebook and during the focus group focused more on the role that transportation has in accessing leisure opportunities rather than simply listing out which modes of transportation were used. As the experiences shared during these discussions highlighted how transportation could be a barrier, these stories are explored in the next section with emerged themes that were both expected and unexpected.

4.4. The Role of Transportation in Millennials' Leisure Repertoire

This section starts by identifying the latent demand for leisure of Millennials living in Nanaimo – that is, leisure activities that Millennials desired to participate in more often. Afterwards, constraints on accessing desired leisure activities are examined with the sole focus on transportation. Through the discussions with Millennials about the role that transportation plays in their leisure repertoire, three themes were identified: latent demand for leisure, transportation as a constraint to leisure, and Millennials' leisure constraint negotiation. Within the third theme, the leisure mobility styles of Millennials in Nanaimo are uncovered.

4.4.1. First theme: Latent demand for leisure.

For the survey, respondents could choose as many desired activities as they wanted, which ranged anywhere between 0 (question skipped) and 10 (all selected) for each respondent. As a result, there were 751 desired leisure activities selected by N = 195 respondents. Figure 5 shows the percentages of each activity compared to the total number of selections by Millennial respondents. According to these percentages, “Nature breaks, wellness retreats” were the most desired leisure activity with 19.71%, and “Shopping” was the least desired with 2.26%. In general, each naturophile leisure activity was selected by at least 15% of the respondents, except for “Outdoor activities” which were selected by 11% of respondents – the same as “Visiting family, friends, neighbours, etc.”. Finally, “Indoor sports” were selected by 15% of respondents, making it the most desired activity in the compactophile category.

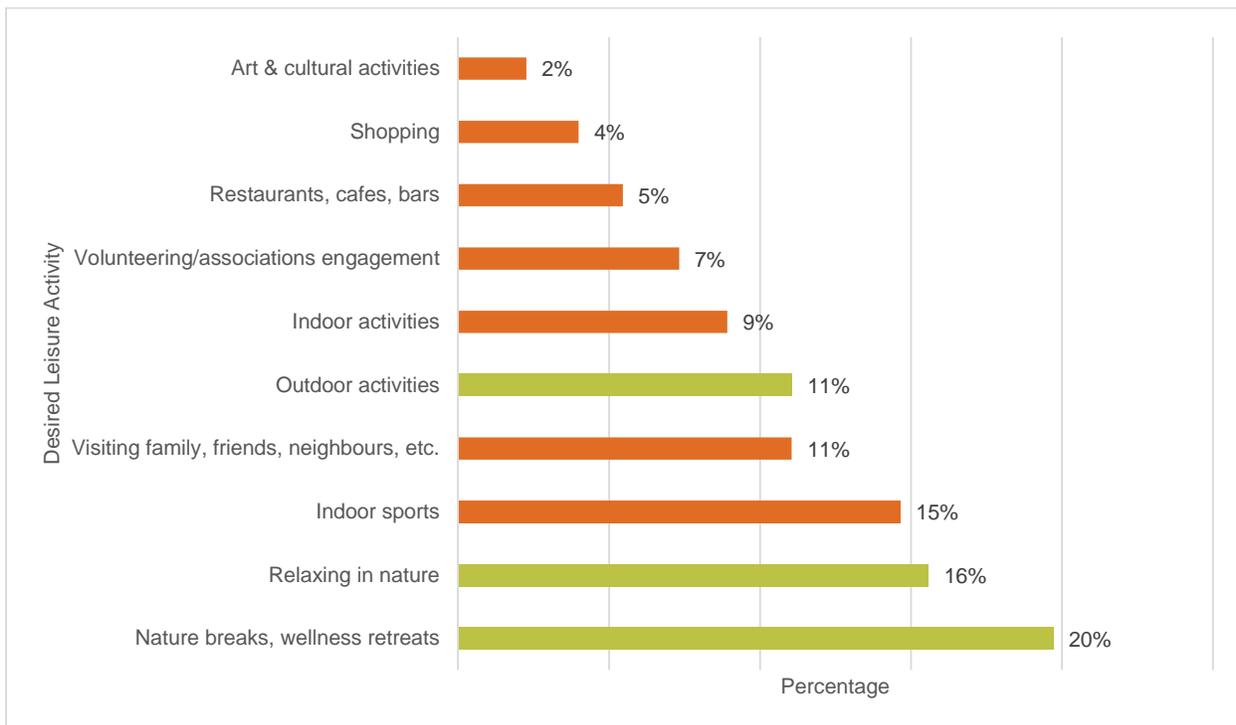


Figure 5. Desired leisure activities based on the percentage of respondents. There were 751 activities selected by N= 195 respondents. The order of the desired leisure activity is organised from least selected to most selected.

These findings were further reflected during the discussions with Millennials both on Facebook and in the focus group. When asked to express their wishes for leisure, participants men-

EXPLORING LEISURE MOBILITY OF MILLENNIALS

tioned different activities that they were interested in, which were both compactophile and naturophile. The wish to participate in compactophile leisure activities were, however, mentioned much less than naturophile leisure activities. In the Facebook group discussion, one participant mentioned: “The one activity I wish I could participate in is dancing, I know a really good dance club, and I really want to join it”. Another participant shared that “One leisure activity I wish I could participate more often in would be travelling to Victoria. It’s a lovely and lively city, and would not even be too far away”. The wish to visit Victoria was also confirmed by another participant, who commented: “I’ve been here for almost 3 years, I got to enjoy Victoria maybe 3 times at most! 😞 I always enjoy that city, it reminds me of Europe! 😊”.

During the focus group, two participants also marked on their maps their desired leisure activities which were categorised as compactophile because they occurred in places that belonged to the urban infrastructure of the city. One activity was “swimming” at the Nanaimo Aquatic Centre, and the other was “wheelchair basketball” at the Oliverwoods Community Centre. In comparison, there were 18 marked locations where desired naturophile leisure activities took place. The locations scattered across Nanaimo, and some locations were marked by many respondents. The most desired location was Westwood Lake with 5 respondents wishing to go there for a hike. The second most popular was Newcastle Island (3 respondents), followed by Protection Island (2 respondents) and Colliery Dam Park (2 respondents). The rest of the locations were marked by one participant each, including: Buttertubs Marsh, Bowen Park, Ammonite Falls, Mount Benson, Neck Point Park, and Piper’s Lagoon.

In order to observe if the same dominance also occurred in the quantitative data, the average number of respondents for each item in each category of leisure activities was calculated. The total number of respondents who chose the 7 compactophile leisure activities were summed up before being divided by 7, and the same was done for the 3 naturophile leisure activities. The results were aligned with the qualitative data: In average, there were 54 respondents who selected a compactophile leisure activity as desired, and more than twice the average number of 125 respondents who wished to participate in one naturophile leisure activity more often. In percentages, only 30% of respondents wished to participate in compactophile leisure activities more often while up to 70% of them wanted to partake more often in naturophile leisure activities. Figure 6 illustrates the results.

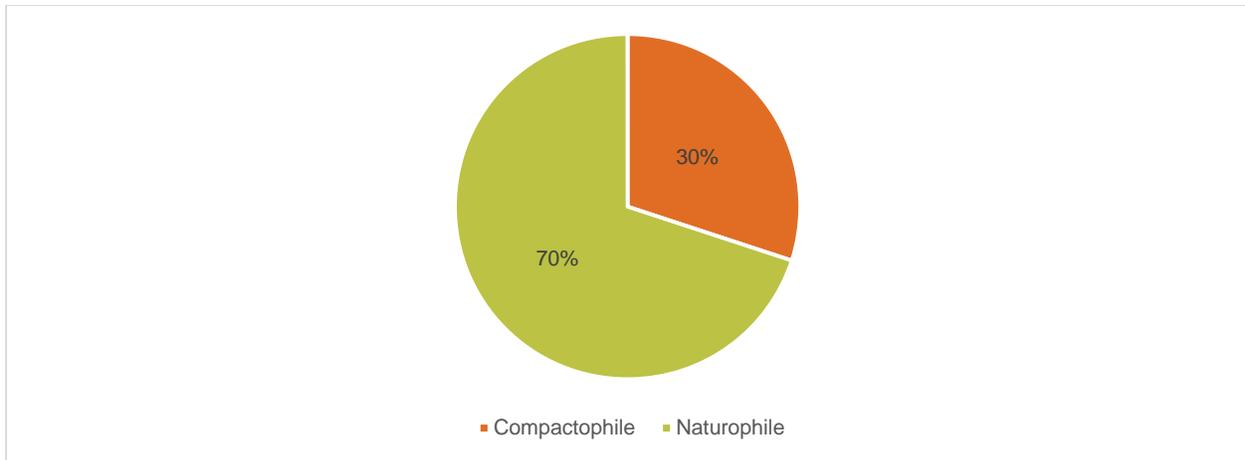


Figure 6. Percentage of desired leisure activities based on the average number of respondents. There were 751 desired activities selected by N = 195 respondents.

Interestingly, Millennials’ latent demand for leisure was observed not only through shared stories of the study’s participants themselves, but also by what the participants learned from their peers and acquaintances. One participant in the Facebook group discussion wrote:

“I’m actually mind blown sometime when I talk with students at VIU realizing a lot of them who are not from Nanaimo have rarely had the opportunity to see Victoria or even Tofino! Unless you have your own way to travel (which has to be a vehicle), it is very limiting. Alternate options are just so few that I feel so many people don’t have the opportunity to take in the island!”

This limitation is examined in the next sub-sections as the role of transportation in accessing leisure opportunity is explored and uncovered.

4.4.2. Second theme: Transportation as a constraint to leisure

Before starting the discussion about the role of transportation in Millennials’ leisure repertoire and how it was a constraint to accessing leisure, other constraints to leisure identified by Millennials are discussed briefly. The reasons were because (1) it was important to understand what hindered Millennials to fulfil their leisure needs as part of the study’s purpose to understand this generation, and (2) some of these other constraints were related to transportation, and their relationships are discussed further in chapter 5.

4.4.2.1. A general overview of other constraints

Both participants in the focus groups and respondents to the survey were asked to identify the reason(s) why they could not participate in the leisure activities that they desired more often.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

The discussions, particularly the focus group, focused more on transportation as a barrier, while survey respondents could state all the reasons there were without necessarily focusing on the topic of transportation. Using the word frequency query in NVivo 11, the top ten words that stemmed from the qualitative answers in the survey, that is, the top ten leisure constraints, were identified. “Time” was the most mentioned constraint to leisure, followed by both “money” and “work”. The order for the rest of the constraints were: “school”, “busy”, “schedule”, “weather”, “transportation”, “cost”, “accessible”. These ten constraints could be categorised into four different groups: (1) time (“time”, “work”, “school”, “busy”, “schedule”); (2) weather (on its own); (3) transportation (“schedule”, “transportation”, “accessible”); (4) finance (“money”, “cost”). “Schedule” was placed in both time and transportation because it was mentioned equally in the contexts of “transit schedule” and “having no time”. All of these four categories of leisure constraints were often mentioned together, especially the categories of Time and Finance.

Regarding time, most Millennials found themselves too occupied with either work, school, or both to have any time spare for leisure. Some Millennials also carried the responsibilities of taking care of small children, particularly as single mothers who could not afford child-care. Many respondents were aware that they were “working too much” and could not “find time to live life at full”. Regarding the weather, those who mentioned it did not specify further, except one respondent who wrote that she/he was “waiting for warmer weather”. In the case of finance, most simply mentioned “cost” or “lack of money”, with only a few respondents who explained in further detail. One respondent wrote: “The cost for going to most cultural events is outside my budget.” Another respondent was even more specific:

“The restaurants, cafes and bars experience in Nanaimo are often not up to par for me to want to spend money there. I come from Vancouver where the eating out scene is so alive and supported. I just can't justify spending money on lackluster attempts at the dining experience here. Plus, I'm a vegan and there's pretty much no plant-based food movement here - it sucks. Art & culture is often the first cut from my schedule when things get busy or we're too exhausted at the end of the day.”

Despite not being in the top ten, other leisure constraints that were worth mentioning were: lack of motivation, lack of company/social circle, lack of information on the leisure opportunities in the city, “lack of decent events happening”. One respondent also mentioned: “Most places are not wheelchair accessible even when they say they are they are really not that easy”.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Finally, Transportation as a constraint to leisure is discussed in the next sections, which also include the elements of “schedule” and “accessibility”.

4.4.2.2. *The role of transportation in accessibility to leisure.*

4.4.2.2.1. Statistical findings.

In the survey, a Likert-scale question was designed to provide direct answers to some of the questions that the researcher sought to answer using different statements on different topics regarding the role of transportation in accessing leisure. One statement was “Transportation is a barrier to accessing my leisure”. In general, opinion seemed to be divided with regard to whether or not transportation was a barrier to accessing leisure. Among the $N = 183$ respondents who expressed their opinions to this statement, many (45%) expressed strong agreement or agreement, and a slightly lower percentage (34%) indicated that they agreed or strongly agreed ($Md = 3.00$, $IQN = 2$).

There were other statements in the Likert-scale questions which helped provide a closer look. The two statements “I can easily reach the places where I participate in leisure activities in Nanaimo” and “I can easily reach the locations of any leisure activities outside of Nanaimo on Vancouver Island” indicated the ease of accessing leisure activities within Nanaimo and outside of Nanaimo. These two statements could be considered, to a certain extent, as being contradicting to the statement “Transportation is a barrier to accessing my leisure”. However, opinion about ease of leisure travel within and outside of the city did not reflect that contradiction. Similar to the opinion with regard to the idea of transportation being a constraint, respondents’ opinion for the statement “I can easily reach the locations of any leisure activities outside of Nanaimo on Vancouver Island” were also divided. Among the $N = 183$ Millennials who responded to this statement, 46% agreed that leisure travel outside of Nanaimo and on the island was easy, while about 35% disagreed with that ($Md = 3.00$, $IQN = 2$). However, when it comes to leisure travel within the city, most Millennials indicated agreement with the statement “I can easily reach the places where I participate in leisure activities in Nanaimo”: Out of $N = 187$ respondents, almost 60% agreed and only 20% disagreed ($Md = 2.00$, $IQN = 1$). Figure 7 illustrates the results of all three statements. In order to visually emphasise the great differences between the different opinions across the statements, “Strongly agree” and “Agree” were grouped together as “Agree”, “Strongly disagree” and “Disagree” were grouped together as “Disagree”, and “Neither agree nor disagree” remained separate.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

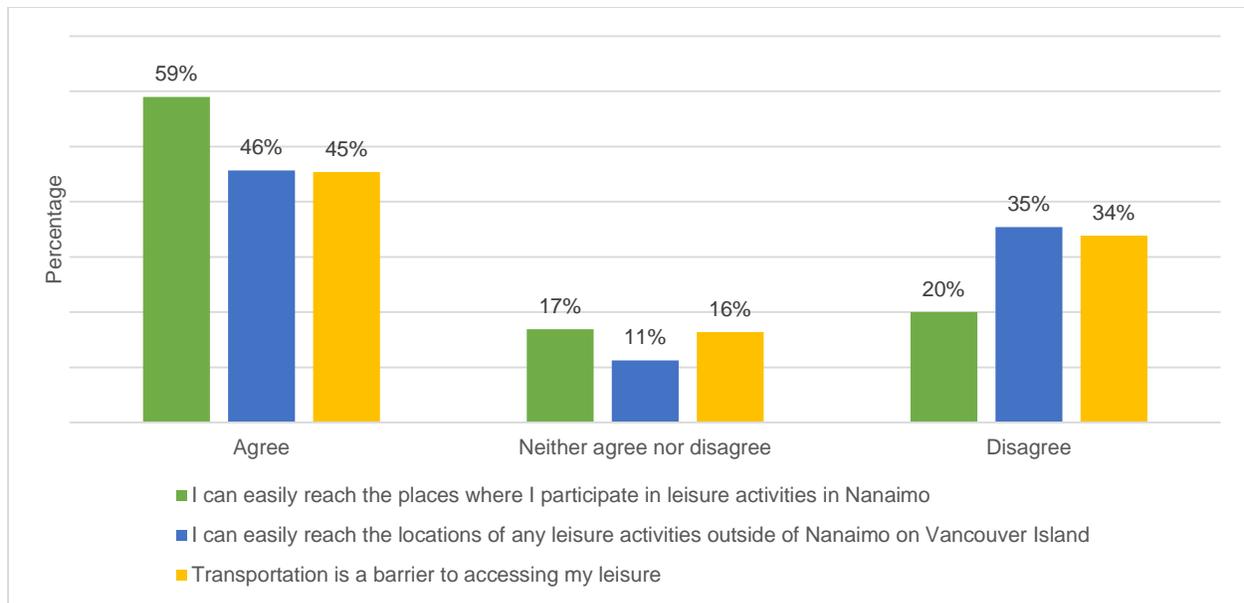


Figure 7. Millennials' opinions on the three different statements regarding the role of transportation in accessing leisure activities based on the percentage of respondents. There were N = 187 valid responses for the statement "I can easily reach the places where I participate in leisure activities in Nanaimo", N = 180 valid responses for the statement "I can easily reach the locations of any leisure activities outside of Nanaimo on Vancouver Island", and N = 183 valid responses for the statement "Transportation is a barrier to accessing my leisure".

To better understand this contradiction, a cumulative odds ordinal logistic regression with proportional odds was run to determine the effect of having access to a car, a bike, and living close to a bus stop (within 10-min walk) on the belief that accessing leisure places in Nanaimo was easy. The odds of Millennials who had access to a car considering that it was easy to access leisure places in Nanaimo was 7.627, 95% CI [3.771, 15.424] times that of those who did not, $\chi^2(1) = 31.969$, $p < .001$. The odds of Millennials who had access to a bicycle agreeing to the same statement was 1.452, 95% CI [.816, 2.586] times that of those who did not, $\chi^2(1) = 1.609$, $p = .205$. Finally, the odds of Millennials who lived close to a bus stop agreeing to the statement was 2.864, 95% CI [1.217, 6.741] times that of those who did not, $\chi^2(1) = 5.802$, $p = .016$. This means that, young people who had access to a car were about 7.5 times more likely to consider accessing leisure in Nanaimo very easy than those who did not have access to a car. Similarly, Millennials who had access to a bike were almost 1.5 times more likely to share such opinions

EXPLORING LEISURE MOBILITY OF MILLENNIALS

than those who did not, and so were the ones living close to a bus stop, who were close to 3 times more likely to agree to the statement than those who did not have such access.

The same test was done for the next statement “I can easily reach the locations of any leisure activities outside of Nanaimo on Vancouver Island”. The odds of Millennials who had access to a car and consider that it leisure travel to locations outside of Nanaimo on Vancouver Island was 21.926, 95% CI [9.643, 49.856] times that of those who did not have access to a car, $\chi^2(1) = 54.273$, $p < .001$. The odds of those who had access to a bicycle agreeing to this statement was .554, 95% CI [.305, 1.006] times that of those who did not, $\chi^2(1) = 3.771$, $p = .052$. And the odds of Millennials who lived close to a bus stop having it easier to travel for leisure outside of Nanaimo was 1.304, 95% CI [.555, 3.065] times that of those who did not live close to a bus stop, $\chi^2(1) = .370$, $p = .543$. This means that, when it comes to whether or not it was easy to reach leisure places outside of Nanaimo on Vancouver Island, Millennials who had access to a car were almost 22 times more likely to find it true than those who did not have access to a car. Those who did have access to a bicycle, however, were less likely to agree to the same statement than those who did not have a bicycle. Finally, there was no difference in opinion between those who lived close to a bus stop and those who did not.

Next, the statement “Transportation is a barrier to accessing my leisure” was examined using the same independent variables of having access to a car, a bike, and living close to a bus stop. The odds of young people who had access to a car agreeing to the statement was .092, 95% CI [.044, .191] times that of those who did not have such access, $\chi^2(1) = 40.534$, $p < .001$. The odds of Millennials with access to a bicycle sharing the same thought was 1.277, 95% CI [.720, 2.267] times that of those who did not, $\chi^2(1) = .699$, $p = .403$. And the odds of respondents who lived close to a bus stop agreeing to this statement was .596, 95% CI [.251, 1.416] times that of those who did not live close to a bus stop, $\chi^2(1) = 1.375$, $p = .241$. In other words, Millennials with access to a car were a lot less likely to consider transportation as a barrier to accessing their leisure than those who did not. Similarly, those who lived close to a bus stop were almost half less likely to think that transportation was a constraint than those who did not. Young people who had access to a bike, however, were almost likely to share the same opinions about this statement as those who did not have access to a bike.

From these statistical findings, it could be concluded that having access to a car was a determining factor to whether or not transportation was a barrier to accessing leisure opportunities

EXPLORING LEISURE MOBILITY OF MILLENNIALS

for Millennials living in Nanaimo. As observed, those who did not have access to a car had a much higher chance of finding it difficult to access their leisure activities. Having access to a bike and living close to a bus stop also made it less likely that transportation could be a leisure constraint. These influences were relatively of minor importance compared to that of having access to a car however. Such findings were similar to those obtained from the online and offline discussions with Millennials. The next section provides an in-depth understanding of Millennials' viewpoints regarding this topic.

4.4.2.2.2. Millennials' insights and experience.

When asked about how transportation influence leisure accessibility, participants responded by sharing their related stories and experiences. The discussions focused on different modes of transportation available in Nanaimo, particularly cars, bikes and public transit. Many of the experiences were related to the participants' use of public transit. One participant highlighted the advantage of travelling with the bus: "I wouldn't mind [...] shuttle bus (to get to enjoy the scenery and enjoy the opportunity to be driven by other, I think most people that drives often would want this opportunity!)". However, the rest of the comments about the system were negative. Participants pointed out the many aspects of Nanaimo's public transit that made it impossible for them to access their preferred leisure places, including the limited frequency of buses, the lack of punctuality, the limited routes and options, and the inflexibility of the fare system.

Regarding the limited frequency of buses, many participants agreed that Nanaimo's bus system was not at all scheduled for leisure, especially in the case of students as one participant pointed out:

"Since we're all students, we're usually busy Monday to Friday. And on the weekends, it's when we have leisure activities. But if you would have noticed that the frequency of buses during the weekend is lesser than the weekdays. That happens as well. Also on Sundays the buses are... the last bus is at 7 and the frequency between 2 buses is almost an hour."

The lack of buses on Sunday was confirmed by another's opinion:

"They don't focus that much on the weekend here. For them the weekend is usually Friday night and Saturday only. I think that Sunday is like... the weekend is already gone. Like so it's like Sunday is like dead and if you wanna go out on Sunday and you cannot do anything and you just wanna stay at home."

EXPLORING LEISURE MOBILITY OF MILLENNIALS

The lack of bus frequency did not only limit Millennials' desire to participate in naturophile leisure activities, but also in compactophile ones. One participant said:

“I remember I always wanted to go to the cheap night uh... movie theater... a cheap night, and it's like Tuesday nights but it was always like too late. It'd end... the movie would end too late so then I'd have been stranded so I was like you can't get over there...”

The infrequent schedules made it even more difficult when it was combined with the lack of punctuality. As one participant put it: “The difference between my buses sometimes is just 5 minutes, so when one of the buses is late, I am late for the second one, and have to wait for about an hour for the next one. It is terrible.” This point was backed up by a Facebook participant, who commented: “The drivers are unreliable (either late or really early) causing people to be late and miss busses.” Besides infrequent schedules, many leisure opportunities, especially naturophile ones, were inaccessible also because of the limited bus routes. Even for those who already lived close to a park, they still wished to explore the city's other green spaces which was a challenge. One participant living close to Westwood Lake commented in the Facebook group discussion:

“The bus route doesn't cover most of the leisure attractions from my experience ... it only covers the areas with in downtown and areas around it... which also restricts me from participating in leisure activities. For example to get to Pipers Lagoon park from Westwood lake it takes about 1:25hrs via public transit and if you want go to [Jack Point near Duke Point] there is no public transit going there so u have to have a car or take a taxi!!!”

Westwood Lake was marked by many participants as their desired destination where they could go for a hike and explore nature. It remained desired because “if I wanna go to Westwood Lake it's for somewhere it takes a lot of time definitely on the bus”. It was more challenging for destinations outside of Nanaimo as one participant shared her perspective:

“I always would like to go more often to you know more natural spaces [...] outside Nanaimo. But yes, the public transportation is just within the city, the urban area. Yeah it's not just time it's like literally you don't have like good connection and good routes to go there.”

The limited routes and the infrequent schedules increased the total travel time which was often mentioned in the discussion. One participant described it as “It always feels like you're going on a huge journey whenever you want to go somewhere here”. Some participants chose other options rather than the bus because it was practically the same duration:

EXPLORING LEISURE MOBILITY OF MILLENNIALS

“I have to walk to the bus stop for 5 minutes and then wait for the bus for at least 10 minutes and uh... I could just walk to the university for 15 minutes if it's less than half an hour walk, I would rather walk than wait for the bus and back.”

Some others decided not to engage in a leisure activity at all because it was not worth the time, as one participant told her shopping story:

“For example, if I wanna go to Woodgrove but I only wanna spend about 20 minutes there, like, I know what I want when I go to Woodgrove and that's the only place that I can get it. From my home, the bus would take 50 minutes, but if somebody would have picked me up it would take 12 minutes. So if I'm going 50 minutes there and then 50 minutes back, that's practically 2 hours just for something that can take half an hour if it's 20 plus 10 you know. So it's just like a huge waste of time and then I wonder do I even really need this item like I don't wanna spend... you have the wait time too so it really ends up being more than 2 hours. [...] It's hard sacrificing your time like 50 minutes for something that you know only takes 10 if you have a vehicle. [...] These routes are just so inefficient, it's frustrating.”

Finally, some participants mentioned the inflexible bus fare, which contributed to their general frustration with the public transit system. One Facebook user commented:

“Also the fare system sucks! You can only transfer busses once! In any other city you have 1.5 - 2 hours to take as many busses as you want in any direction. Here it's just 2 and only in one direction.”

Due to this fare system, some participants found it expensive to travel with the bus. One participant shared: “If I do wanna go somewhere more than one or twice a week it's still ten bucks to get me outside somewhere far from my house”. In order to avoid all the issues that Nanaimo's bus system had, some participants sought other alternative modes of transportation. One participant shared a creative transportation solution which did not work out in the long run:

When I was living on residence, I didn't have a bike or anything and the bus... I don't ride it, but I decided to roller blade. That was a bad idea. There was like... because of all the hills right? I thought it was a great idea but I'm like... [...] going down was when I got wiped out. But like... yeah I wasn't... and then... that's like not an option.

Many other participants chose the bicycle. The clear advantages of a bike were that biking was “fresh and exercise” and “sustainable”. The greatest advantage of the bicycle was “just

EXPLORING LEISURE MOBILITY OF MILLENNIALS

simply to avoid the buses”. However, similarly to the bus system, the findings revealed more disadvantages than advantages when riding a bike. One Facebook participant who was an avid biker pointed out Nanaimo’s “narrow ill-planned road or street”. All the inconveniences that bikers mentioned could be neatly summarised by another Facebook participant’s comment. Interestingly, biking was also one of the leisure activities that he wished he could do more often. The participant wrote:

“The activity i wish i could participate more often ..is biking .. Where can i bike .. well everywhere.. i can bike to work, to the university .. for leisure.. and i bike to most of the places in Downtown Nanaimo... some of the reasons i am not able to bike more often is that ... Nanaimo is very hilly .. especially if you are staying on the top of a hill and there is no bus going up&down .. its difficult biking up everyday. Secondly bikes are very expensive to maintain. Thirdly the weather .. in Nanaimo .. we have lot of rainy days and its difficult to keep dry while biking ... and finally bike thefts .. after loosing 2 bikes at the university .. i am a bit hesitant to buy a third bike at the moment.”

It is worth mentioning that this participant noticed how here in Nanaimo, he considered bike “as a luxury”, which could cost “600, 1000, 2000-dollar”. Moreover, there were others who mentioned their lack of experience in maintaining and repairing a bike. The same participant compared Nanaimo with his hometown:

“(…) we have pop-up shops everywhere to fix bikes and coming here, you need to know and here, people have bags, they know how to fix them and I don't know even how to pump in the air so I don't bike so often and bikes are not cheap as well.”

With all the difficulties there were for biking, some participants eventually turned to the best transportation option there was in Nanaimo, which was the car. Together with the findings that transportation was a barrier to accessing leisure, the discussion around the use of car in accessing leisure revealed a new theme: leisure/transportation constraint negotiation.

4.4.3. Third theme: Leisure/transportation constraint negotiation.

In this study, transportation was identified as a constraint to leisure by Millennials living in Nanaimo. This finding answered the research question. Interestingly, despite not being incorporated into the study’s purpose and research question, the theme of leisure constraint negotia-

EXPLORING LEISURE MOBILITY OF MILLENNIALS

tion strongly emerged during the discussions, particularly during the focus group. A few Millennials did not negotiate and as a result, did not continue what was previously their favourite leisure activities as one participant commented on Facebook:

“The activity I wish I could do more is running. I fell out of it when I returned to Nanaimo and I haven't picked it up. I miss running the rural road that I had up in Black Creek. Uneven sidewalks are frustrating to run on, and trails are often too far out of the way, especially since I cycle everywhere nowadays. The track is nice, but it can get really boring.”

Those who tried to overcome their leisure barriers fell into two groups, which were identified as the two different leisure mobility styles of Millennials living in Nanaimo: the Independents and the Dependents.

4.4.3.1. Independents.

The Independents were Millennials who had access to a car. Those identified in this study were all car owners. Most of them moved to Nanaimo from a different place for educational pursue. When they first moved to the city, they did not own a car and therefore had used other transportation options, which were mainly public transit and bike. However, due to the inefficient bus system and the difficult biking conditions, they eventually resorted to purchasing their own vehicles. As one Independent shared his transitioning experience:

I use almost all modes of transportation before I finally gave up on being healthy and being sustainable and finally bought a car. (...) I think most of the students I think kind of... like lot of people wanna use public transport and do other things but it forces them to after a couple of months to buy a car.

Another Independent also stated: “I don't use the transit system anymore because for me it was worth the extreme cost of a vehicle to avoid this system.” The Independents did not purchase a car just to pursue leisure, as the current bus system did not even serve work schedules efficiently as one Independent pointed out: “Many people who use bus systems don't work a 9-5 Monday to Friday job having limited evening and weekend routes severely hampers people who work evenings/early mornings”. In term of leisure, transportation was not an issue, as the Independents did have absolute freedom in where and when they wanted to go for leisure participation.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Millennials with this leisure mobility style did not only negotiate the leisure/transportation constraint on their own by purchasing a car, but they also helped their friends - the Dependents – to overcome the same barrier. Findings about what Millennials did for leisure revealed that many of their frequent leisure activities, both compactophile and naturophile, were highly social-oriented, that is, they either had to be done in groups (e.g. soccer), or were often done with the accompany of friends. This automatically created a relationship between the Independents and the Dependents when both groups attempted to negotiate the leisure/transportation constraint, as one Independent put it:

“If we wanna do something, I won't just going to do it by myself maybe? I'll automatically think of bringing them along because I don't have that... I maybe... it just becomes habit like... I don't think I necessarily like "I should help them!" but like... it's just like... this is what we do. If we're gonna do something it's like automatically that I'm gonna drive, which like I got used to because I know what it's like to not have a car and I don't really... mind I guess.”

As seen in this Independent's viewpoint, the fact that most Independents used to live without a vehicle prior to their car ownership enabled them to sympathise with their peers who did not have access to a car and automatically assumed their roles as ‘the drivers’ when it came to planning leisure together in a group. Sometimes, however, some Independents preferred to enjoy their car-granted freedom on their own, but not without some guilt as one Independent confessed:

“I'm not as much as I don't wanna be really nice and everything, there is a certain time but... you have only one hour yes, then... because you have your own time going so... as much as I want to do with some friends and everything, I'd rather... don't say to anyone I just go and do it.”

Besides the freedom to participate in their chosen leisure activities, there were also constraints that came with a car. The most prominent one was the high cost of owning a vehicle. Even though “you definitely pay for freedom”, the costs associated with a car, such as gas, insurance and travelling on the ferry with a car besides the initial cost of purchasing a vehicle, were still viewed by the Independents as a disadvantage. Cars were very beneficial to access leisure in Nanaimo, especially naturophile activities. However, for compactophile activities, it might become costly due to the parking fee around downtown and/or at the university which apparently

EXPLORING LEISURE MOBILITY OF MILLENNIALS

costed “50 bucks a month”. Furthermore, not all Independents enjoyed being behind the wheel all the time as one Independent shared:

“I went to Tofino on Monday and just in a group chat I assumed that I would be the one driving, but there is another girl, she was like "Oh no I have a car!" and I was like "Oh, that's nice!"”

Despite the disadvantages of car ownership, some Independents were already “used to the convenience and the freedom that... giving that up now would be really hard”. Interestingly, many other Independents shared that if the public transit system was improved, they would consider reducing their car use and would not even “mind selling [their] car[s]”. One Independent commented on Facebook:

“It will significantly reduce my personal vehicle use. And if travelling by bus is cheaper without sacrificing convenience I will utilize this service more. Plus I'll have extra money to spend on things I love doing! Like wildplay or attending events at the port theatre .. or ice cream at the waterfront.”

The wish for a better transit system was also shared by many Dependents – the other leisure mobility style in this leisure constraint negotiation.

4.4.3.2. Dependents.

For the Dependents, the optimal solution to transportation barrier was “friends with a car that [could] drop [them] to places that [they] wanna go”. Most members of this group identified in the study consisted of university students, especially international students. The majority of Dependents’ most frequent leisure activities were compactophile, and all of them wished that they could participate in naturophile leisure activities more often.

There was a sense of guilt among the Dependents regarding asking their Independent friends for a ride. One Dependent said: “I feel guilty and I don't wanna keep always asking the same people "Hey can you help me out?"”. Because of this guilt, all Dependents were greatly aware of their dependent role when carpooling. This automatically created a mentality in this group which eventually changed their leisure behaviours. As a Dependent described: “My leisure life is actually, you know, centres around other people's”. This group of leisure mobility style did not only depend on their peers to negotiate their leisure/transportation constraint, but by overcoming this barrier, their leisure choices also depended on those of the Independents. This behaviour was identified as a new constraint by the Dependent themselves as one said:

EXPLORING LEISURE MOBILITY OF MILLENNIALS

“We used to make plans saying that OK, ehm... “Where are you planning to go and can I come, can I tag along?”. That's not the most desired place that you wanted to go but you change your eh... like... that is a constraint yes? Because maybe I wanna go to, for example, like, downtown but I couldn't go because on Sunday there's no public transit, so then I go with my friends to some other parks or... that also plays a huge role in how your leisure activities are, like, done.”

Besides the “where”, the Dependents also had to manage the “when” for their leisure activities according to the Independents’ schedules. One Dependent explained: “If we want to go somewhere we have to manage according to the friends' timing if they're available like if they're driving us”. Some Dependents ended up transforming their leisure constraint from “transportation” to “difficulty planning with friends”. When asked to identify leisure constraints in the survey, a Dependent wrote: “Lack of a full driver’s license. Friends tend to have conflicting schedules and a lack of coordination to be able to plan these activities”.

When asked if the Dependents would consider purchasing a car given that cars and their associated costs were reduced significantly, some Dependents did not hesitate to say yes. There were others who had a different viewpoint. Similar to the Independents, they would prefer public transit to private motorised vehicles if the public transit system was more efficient. They believed that “a spotless public transport system is a requirement no matter what”, and it was about sustainability because it was “our planet right in the end”. One Dependent shared: “Even VIU has too many cars. As a prominent university on the West Coast and on Vancouver Island, we should promote a more environment friendly mode of transportation.”

Both of these leisure mobility styles took form during the leisure/transportation negotiation process. The Independents overcame the transportation barrier with a high monetary cost, particularly because most of them were still full-time university students. The Dependents did so with less freedom and flexibility regarding where, when and what they could do for leisure.

4.5. Findings Summary

The study’s results fulfilled the objectives set out to gain a deep insight into Millennials’ leisure repertoire and their perception of the role of transportation in their leisure life. First of all, Millennials living in the City of Nanaimo participated in compactophile leisure activities more often than naturophile leisure activities. They did so mainly in locations within the city, particularly in downtown or around their homes and neighbourhoods. Secondly, those who lived in less

EXPLORING LEISURE MOBILITY OF MILLENNIALS

dense areas within the city were more mobile – that is, they visited more leisure locations both inside and outside the city in average. Most importantly, Millennials reached leisure opportunities most prominently with a private motorised vehicle either on their own or with others for both compactophile and naturophile leisure activities.

One of the several leisure constraints identified by young people was transportation. Millennials in Nanaimo found the city's public transit system and biking infrastructure challenging to rely on. Interestingly, in an attempt to negotiate this constraint, two interrelated leisure mobility styles emerged: Independents and Dependents. The Independents purchased their own private motorised vehicles to overcome the transportation barrier at high financial expenses, and the Dependents counted on their Independent friends to access leisure opportunities that were not necessarily their preferred choices. Image 2 illustrates the themes and their relationships that emerged from the findings.

Running head: EXPLORING LEISURE MOBILITY OF MILLENNIALS

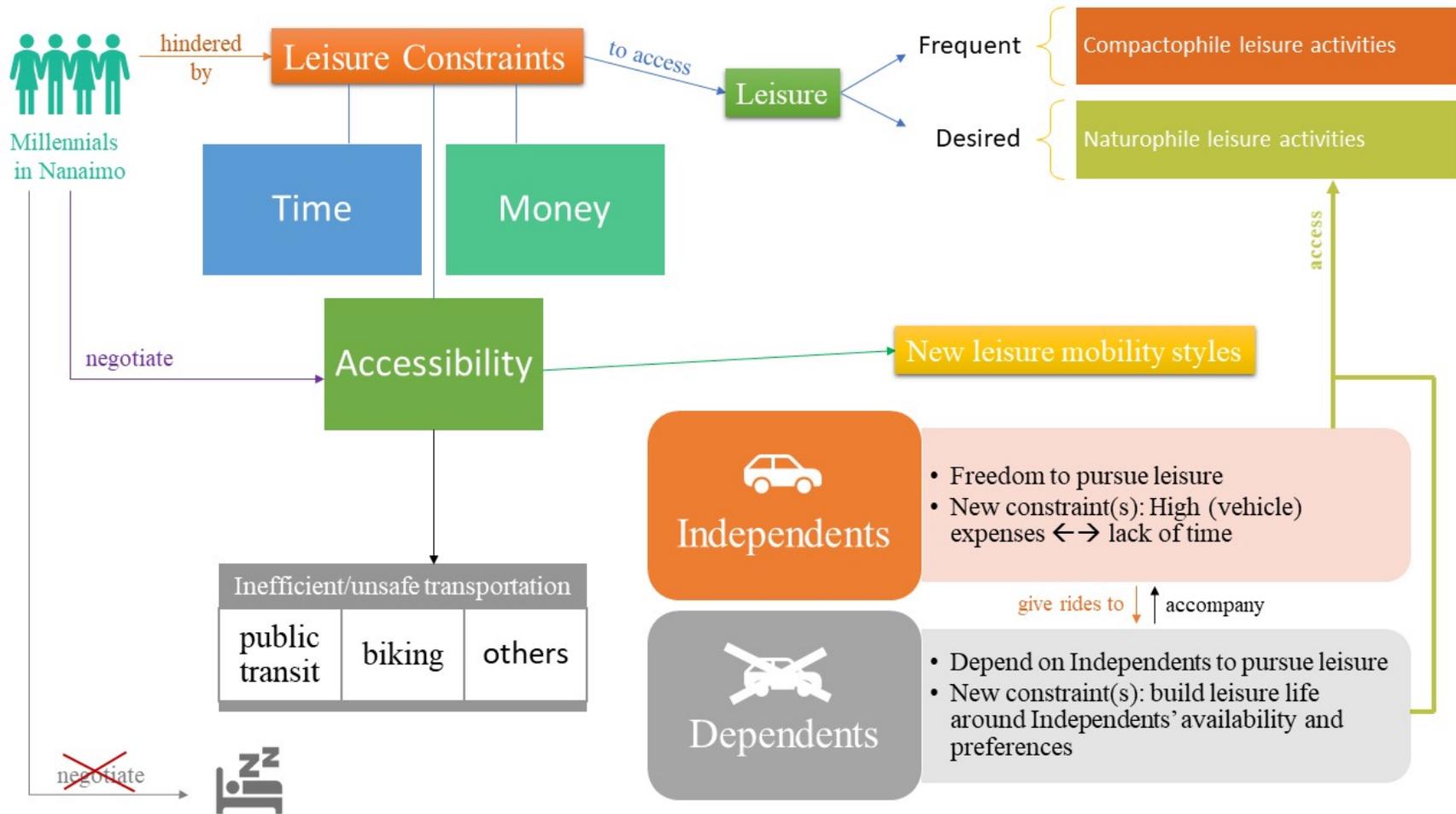


Image 2. Themes emerged from the study's findings and their interrelationships. There are three different themes that were uncovered: latent demand for leisure, transportation as a constraint to leisure, and Millennials' leisure constraint negotiation.

Chapter 5. Discussions

5.1. Introduction

“We live in a beautiful island full of unique natural surroundings, and yet the options of public transportation to get to those places are awful! Unless you carpool with your friends, I don't see many possibilities to explore the island... “

This thought expressed by one of the Dependents perfectly summarises the answers to the study's research questions. The majority of Millennials living in Nanaimo participated in compactophile leisure activities frequently, while wishing that they could carry out naturophile leisure activities more often. However, besides other existing constraints such as lack of time and financial resources, transportation was a great barrier to fulfilling those wishes. In order to overcome this barrier, a leisure/transportation negotiation took place, in which Millennials who had access to a car and Millennials who did not form an interdependent relationship. Through this relationship, two leisure mobility styles were identified: the Independents and the Dependents. The Independents participated frequently in both compactophile and naturophile leisure activities, while the Dependents spent their free time doing compactophile leisure activities that took place mostly either at home, at the university or in downtown. On the one hand, as most leisure activities carried out by Millennials in Nanaimo were highly social oriented, the Independents found company by taking their friends with them. On the other hand, the Dependents needed the Independents to participate in leisure activities which were not necessarily what they preferred.

With the findings highlighted, chapter 5 describes how this study contributes to the ongoing conversations in the field of leisure mobility research as well as sustainable leisure management using the case study of the City of Nanaimo. The differences between a virtual focus group and a traditional focus group is also discussed before identifying limitations and possibilities for future research. This chapter then concludes by presenting suggestions for the City of Nanaimo, which consists of two parts: the researcher's suggestions for sustainable transportation development for Millennials and the recommendations of Millennials themselves which were obtained through the study.

5.2. Contributions to Leisure Mobility Research

5.2.1. The Compensation Theory in Leisure

Orfeuill and Soleyret (2002) founded the compensation theory in leisure, which rejected the sustainable value of dense cities. Big cities are known for having a highly functional public

EXPLORING LEISURE MOBILITY OF MILLENNIALS

transit system compared to peripheral and rural areas. Therefore, the transportation-related carbon footprint of urban residents is smaller. However, as they attempt to escape their usual city lives for nature outside of the city, they offset their low daily carbon footprint by driving further distances for leisure on the weekends.

This theory was tested in big cities with high population density such as Paris, Geneva and Zürich (Munafò, 2015; Orfeuil & Soleyret, 2002). The City of Nanaimo is a mid-sized city with a low population density of 76.5 persons per square kilometre (Statistics Canada, 2012e). Therefore, it was challenging to test the theory in Nanaimo. Neighbourhoods within the city were analysed instead. The results obtained from the quantitative analysis in chapter 4 show that Millennial residents living in neighbourhoods where there were more green spaces like Westwood or Linley Valley were more mobile than those living in other neighbourhoods. Within Nanaimo, residents of these green neighbourhoods participated more in naturophile leisure activities and less in compactophile leisure activities compared to residents of dense neighbourhoods. Outside of Nanaimo, they visited more places for both compactophile and naturophile leisure activities than those living in other neighbourhoods.

It was no surprise that Millennials living in greener areas participated more in naturophile leisure activities within Nanaimo as parks and lakes were right outside of their doorsteps. Furthermore, since they chose to live in a neighbourhood that was close to a park or lake, they were more likely to be committed to outdoor activities. Their higher mobility was potentially due to higher car ownership among Millennials living in greener areas. Moreover, the average individual income per population 15 years and older in the greener neighbourhoods are significantly higher than most of the urban neighbourhoods (Canada 2006 Census, as cited in City of Nanaimo, 2017), which allows a car-oriented lifestyle. Since public transit access to these neighbourhoods, e.g. Westwood, was very limited, most young people living here needed a car to carry out their daily activities, including leisure. Millennials living in neighbourhoods with less green spaces did not escape their surroundings by travelling further distances for nature. However, they could not do so because of the transportation barrier. The study's findings demonstrated a great desire for participation in nature-oriented leisure activities among all Millennials.

In conclusion, it was not possible to accurately refute nor confirm the compensation theory in leisure due to three reasons: First of all, the City of Nanaimo was not a big city with a high population density. Furthermore, there were many green pockets within the city where outdoor

EXPLORING LEISURE MOBILITY OF MILLENNIALS

activities could take place without having to leave the city. Secondly, almost all Millennials living in Nanaimo wished to participate more often in naturophile activities. However, many of them were hindered by lack of accessibility to natural spaces. Without this barrier being lifted, it was challenging to understand if young people living faraway from parks and lakes would have travelled further distances more often to connect with nature. Finally, the researcher only examined leisure trips and not daily trips, which made it impossible to test the theory.

Even though the theory could neither be refuted nor confirmed, the researcher might suggest that metropolitan areas are not necessarily greener than mid-sized cities, of which there are many around the world. This is speculated because this study showed that Millennials living in Nanaimo's centres and denser areas were less mobile due to lack of transportation – both public transit and a car – than Millennials living in less dense areas who mostly owned a car. As much as they wanted to escape for greener spaces, whenever that was not possible, these young people adapted to their situation and enjoyed more compactophile leisure activities instead, such as socialising and dining in Downtown Nanaimo.

Finally, in regard to Kaufmann (2012)'s concept of motility, latent demand for leisure of Millennials that were hindered by transportation posited the city's shortcoming and challenges in improving motility. Motility is how a person or group of people use the travel possibilities to fulfil mobility projects, which are latent demands in leisure in this case, by choosing from all modes of transportation available (ibid). By applying the notion of motility which considers transportation modes as supply to meet the mobility demands, Nanaimo and other similar mid-sized cities can change certain aspects of the urban context, such as transportation infrastructure, in order to fulfil Millennials' needs for social relationships and ways of life.

5.2.2. Leisure Mobility Styles – Independents and Dependents: A New Discovery

This was the very first time that a study that aimed to explore leisure mobility was conducted in a Canadian mid-sized city. The existing literature on leisure mobility research has been focusing largely on the cases of big cities in continental European countries (Götz et al., 2003; Guereño-Omil et al., 2014; Munafò, 2015; Ohnmacht et al., 2009). These studies also examined the leisure mobility of the general population which made this study unique, as it was the first time that a study on leisure mobility placed its focus on the Millennial population of a city. The study adopted Munafò (2015)'s classification of leisure activities for leisure travel to explore the leisure repertoire of Millennials in Nanaimo, as well as how they accessed their leisure spaces

EXPLORING LEISURE MOBILITY OF MILLENNIALS

and places. By doing so, the study also identified the role of transportation as a constraint to leisure.

While investigating the role of transportation in leisure access, the theme of leisure constraint negotiation emerged. From this theme, two new leisure mobility styles were uncovered: Independents and Dependents. Different leisure mobility styles have been previously identified in the work of Götz et al. (2003), Guereño-Omil et al. (2014), Munafò (2015) and Ohnmacht et al. (2009). However, this was the very first time that the leisure mobility styles identified in a study had an interdependent relationship. The Independents had freedom in deciding where and when they could participate in a leisure activity of their choice, but they preferred to have company most of the time. In addition, they developed a sympathy for their friends who did not have access to a car, as the Independents had gone through similar experience themselves. Therefore, they were likely to automatically assume their role as ‘the drivers’ in group activities. Meanwhile, the Dependents built their leisure lives around their Independent friends’, and would join the Independents to visit any leisure places at any time that were convenient for ‘the drivers’ when possible.

This interdependent relationship between the two leisure mobility styles confirmed Ettema and Schwanen (2012)’s strong emphasis on the importance of the roles that social influence and social networks played in leisure travel research within urban areas. In this case study, not only were social relationships reasons to participate in or part of a leisure activity, but social connections were also necessary to negotiate the leisure/transportation constraint. In other words, without the Independents, it would have been challenging for the Dependents to participate in leisure activities that were not accessible without a vehicle. And without the Dependents, the Independents might have had to participate in some leisure activities on their own.

5.3. Contributions to Sustainable Leisure Management

Using the City of Nanaimo as the case study, this research confirmed that transportation was a structural constraint to leisure, which were aligned with the findings of Lyu et al. (2013), Barton (2012), and Guereño-Omil et al. (2014). Furthermore, there was a possible interrelationship between transportation barrier and other constraints. Image 3 shows the three biggest constraints to leisure identified by Millennials living in Nanaimo. They are time, finance and accessibility. According to the findings, Millennials listed work and school as the primary reasons for

EXPLORING LEISURE MOBILITY OF MILLENNIALS

their lack of time. Further findings also discovered that the inefficiency of the public transit system shortened the already-limited time one had for leisure.

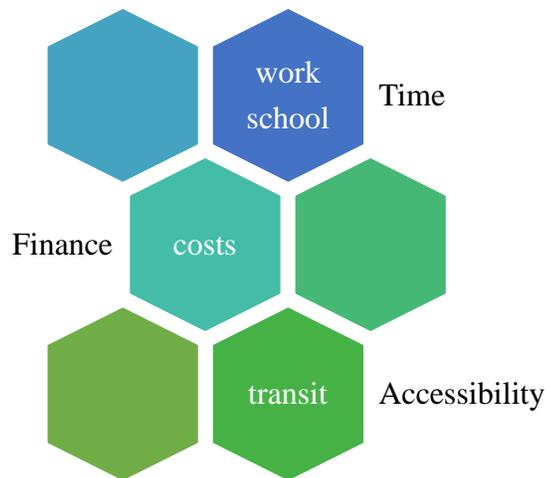


Image 3. Top constraints to leisure for Millennials living in Nanaimo.

Image 4 illustrates the compounding nature of leisure constraints, with transportation being the prominent one. First, transportation barrier existed for both work, school and leisure due to the lack of an efficient public transit system as well as an urban infrastructure that encourages more walking and biking. In order to overcome this barrier, many Millennials had to purchase their own private motorised vehicles. The primary reason for a car ownership was to avoid the bus system in order to serve their work or school lives better. The added bonus of having a car was to have the freedom to pursue leisure in their own time and space. Here, Dependents transitioned into Independents. However, it was expensive to own a car. In order to afford this, many young car owners had to either work longer hours, work multiple jobs, or work part-time while trying to balance their university courses and/or other responsibilities in life, such as young children. This led to other constraints to leisure: lack of time and lack of energy. As seen in Image 4, it is a vicious circle.

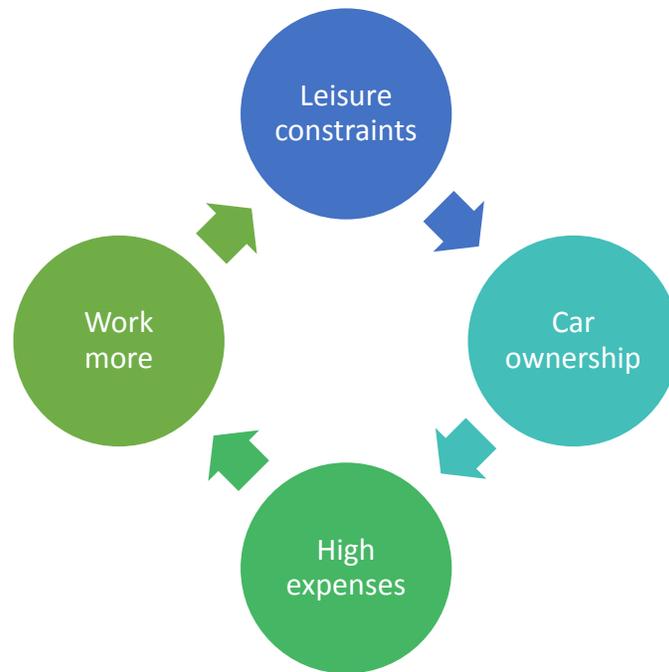


Image 4. The compounding nature of constraints in the context of transportation.

In summary, whether a Millennial was identified as an Independent or a Dependent, negotiating the leisure/transportation constraint potentially created other constraints. It is rather complex to negotiate leisure constraints which are the lack of time and finance. Nevertheless, for the transportation barrier, if the city's public transit system was improved and the city was designed to be more people-oriented rather than car-oriented, it would have been possible that the vicious circle could be broken for some Millennials. Most importantly, having an accessible, sustainable transportation system in the city will not only help Millennials overcome their leisure constraints, but also plays an important part in the sustainable development plan of the city.

5.4. Looking Forward

5.4.1. The Classification of Activities for Leisure Research

To understand the leisure repertoire of Millennials in Nanaimo, Munafò (2015)'s classification of leisure activities was adopted. The two categories of compactophile and naturophile leisure activities were particularly helpful to understand and contribute to the ongoing discussion about young people and nature connectedness. Besides, the segregation of leisure activities provided a clear general understanding of Millennials' leisure repertoire in relation to the lived environment and transportation issues. Nevertheless, this segregation intentionally ignored the fact that many activities could overlap, for instance, having a BBQ at a camping site or playing guitar

EXPLORING LEISURE MOBILITY OF MILLENNIALS

at a bonfire in the forest. Such combination of activities could be easily identified with qualitative data. However, it was impossible to do so for quantitative data. As a result, despite having both sets of data, the researcher could not fully provide a holistic understanding of Millennials' leisure repertoire. Therefore, it is important that future studies consider this overlap of categories during the design of quantitative data collection methods.

Munafò (2015) used the activities listed in the Swiss Transport Micro-census (MRMT) database to design this classification. In order to suit the study's context, the classification was adjusted based on the researcher's personal experience and observation, which made it rather subjected and allowed disconnection to the reality of leisure life in Canada, particularly with the naturophile leisure activities. It is therefore strongly recommended that future research in leisure mobility in Canada adapts Munafò (ibis.)'s classification using the Framework for Recreation in Canada (Canadian Parks and Recreation Association/Interprovincial Sport and Recreation Council, 2015). The framework is the guiding document for public recreation providers in Canada which was endorsed by Sport, Physical Activity and Recreation Ministers and by the Canadian Parks and Recreation Association (ibis). As a result, it plays an important role in future leisure mobility studies Canada since it allows theoretical findings to be pragmatically implemented. For future studies that will be conducted elsewhere, it is important to research into the existing local framework for or knowledge of the different kinds of leisure activities before making adjustment to the original classification.

5.4.2. Potential for Future Research

Given that it was the first time a study about leisure mobility was conducted in the City of Nanaimo, a large-scale study of leisure mobility of the general population of Nanaimo will serve as a strategic step towards realising the city's sustainable transportation development goal. It will also be important to compare the leisure mobility styles of Millennials and of the older population (ages 50+) as well as gain insights into the older population's perspectives of making the city's green pockets more accessible for all. The reason why this type of research question is important is because many older people migrate to Vancouver Island for its natural amenities and tranquillity, which made the median age of the island's population including Nanaimo higher than that of the province and the country (Chipeniuk, 2004; Statistics Canada, 2012b). It is possible that by providing young people access to frequently discover these natural spaces, there may be a sentiment of frustration and resentment coming from the older population. Since sustainable

EXPLORING LEISURE MOBILITY OF MILLENNIALS

development requires the involvement of all stakeholders, it is essential to understand the perspectives of not only Millennials alone, but also others who may not share the same viewpoint. This will serve as the key to implement changes and trigger innovation.

In Canada, there are also potentials to study leisure mobility of Millennials as well as the general population residing in big cities such as Vancouver, Victoria or Toronto. Big cities with higher population density will allow the compensation theory (Orfeuill & Soleyret, 2002) to be tested by comparing the carbon footprint generated from leisure travel between residents living in the city and residents living in the peripheral and remote areas. Besides, in Canada as well as other countries that host Indigenous populations such as the U.S.A., Australia and Mexico, studying leisure mobility of the Indigenous people will provide a better insight into their lifestyle and culture. Such studies will also help provide solutions to some existing social issues among this population.

In general, there should be more research that focus specifically on different demographic segments of the population, particularly vulnerable populations such as ethnic minorities, the poor, the disabled, the elders and teenagers. Besides, considering the ongoing refugee crisis, a study about leisure mobility of this particular population may not seem important nor relevant at first, but it is essential as it can help residents of host countries understand refugees in a different light, because despite being defined differently across cultures, the desire to spend time for leisure with loved ones is universal. Furthermore, by understanding who refugees are and what they need for leisure, suitable solutions can be provided to help them overcome this time of extreme difficulty.

In term of leisure mobility styles, the relationship between the Independents and the Dependents could also be explored further by including more Millennials whose only means of travel was driving. The study's findings showed that the Independents were sympathetic with the Dependents and therefore were willing to give them a ride. However, these Independents used to have similar experiences. Future research can explore whether people who have never lived without a car also share the same sort of sympathy for the Dependents. Besides, there should also be studies to determine if these interrelated leisure mobility styles also exist in other demographic sectors. The dynamic of the Independent-Dependent relationship should also be explored further in different contexts to determine the role that social connections play in leisure travel.

5.4.3. Millennials' Suggestions for the City of Nanaimo and the RDN

This chapter concludes with the suggestions that come from both the knowledge obtained from the study's findings and the recommendations provided by the Millennial participants during the data collection. In transportation development, just like any other types of urban development, there is always the question of 'the chicken or the egg' – with 'the chicken' being an established efficient transit network, and 'the egg' being a high demand for public mobility services. As challenging as it is to provide a clear-cut answer, the findings and the recommendations acquired head towards a great demand for 'the chicken'. Millennials living in Nanaimo acknowledged its beauty and potential, yet many of them have already decided to move on for not only better job opportunities, but also for better quality of life which includes easy access to leisure. As a result, having 'the chicken' first is vital as it reveals the city's potential and makes it more attractive, which will ultimately retain the existing young population and attract Millennial talents from outside the city. Besides, according to the United Nation's Sustainable Development Goals (United Nations Department of Economic and Social Affairs, 2016b), a sustainable transportation system must "provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons". It is an urgent matter. Therefore, the City cannot simply wait for 'the egg' to come, because for Millennials in general and international talents in particular, these 'eggs' may already move on and bring their talent somewhere else before they develop strong place attachment to the city.

The following recommendations differentiate between infrastructure development and those targeted at changing behaviour. For the first part, suggestions towards transportation development are geared towards both the City of Nanaimo and the RDN. The second part aims at encouraging behavioural changes through transportation initiatives and leisure services in cooperation with public and private leisure service providers.

5.4.3.1. Infrastructure development.

5.4.3.1.1. City of Nanaimo.

First and foremost, it is important for the city to focus on the spots which connect the city with the rest of the world, namely Nanaimo Airport, Duke Point Ferry Terminal, Departure Bay Ferry Terminal, and Downtown Nanaimo Harbour. Currently there is no transportation service to

EXPLORING LEISURE MOBILITY OF MILLENNIALS

the airport and Duke Point Ferry Terminal, and the bus schedules at Departure Bay Ferry Terminal are not in sync with the arrival and departure of the ferries. Most importantly, the City should seriously consider reviving the foot passenger fast-ferry service between Downtown Nanaimo and Downtown Vancouver. This will contribute to tourism development in Nanaimo as residents living in and tourists visiting Vancouver can easily cross over to Nanaimo for a day trip instead of making their big journey to the island where Nanaimo is treated as a mere transit hub. For a newcomer or a traveller, having easy access to the city centre from an airport or a ferry terminal through public transit speaks louder about the City's eagerness for sustainable development than any advertisement.

Regarding what needs to be improved, a better bus system and biking/walking infrastructure and amenities were mentioned by many Millennials who proposed the implementation of the sharing economy in transportation. Most notably, young people embraced the idea of car and bike sharing programmes. They strongly agreed that having such programmes in place would provide them the much-needed access to affordable transportation options. It is very intriguing as these young people supported the concept of sharing rather than owning, which not only proved how flexibility was an important factor in their lifestyle, but also illustrated their tendency towards sustainable behaviours. Even if such sharing programmes are already provided by the city, they should be better promoted to the Millennial generation as a way to get around, perhaps with the coordination of VIU, different companies and co-working spaces. Furthermore, making transportation more affordable and convenient for the less advantaged is required, but transportation planners and policy makers must also make public transportation more attractive for everyone else. The summary of Millennials' feedback and suggestion for transportation improvement can be found in Appendix V. Many similar ideas were summarised, and others are kept as quotes as they contain valuable thoughts and opinions from the participants.

5.4.3.1.2. Regional District of Nanaimo.

Similar to the recommendations for the City of Nanaimo, the RDN has the responsibility to boldly implement their *Transit Future Plan* in order to connect all communities together. Within the context of leisure mobility, the RDN should work together with stakeholders and push for better mobility services that connect people to the beautiful natural sites that the regional district is known for. One common challenge to provide accessible transportation in Canada are the great distances between origin and destination. Fortunately, the distances between

EXPLORING LEISURE MOBILITY OF MILLENNIALS

communities within the RDN are not lengthy. It is feasible to be ambitious and aim for a well-connected regional district where people living in rural areas can easily take a bus and go for a hike with their friends on the weekend without having to rely on adults. The most important factor is that leaders and stakeholders must also be changemakers, who embrace shifting behaviour patterns and commit to sustainable transportation.

5.4.3.2. Encouraging behavioural changes.

It is worth noting that some Millennials found it crucial to first and foremost shift the mindset of existing residents. They believed that public transportation should not be seen as something reserved exclusively for the poor and the disadvantaged, and that car ownership should not be seen as a sense of status. As a result, incentives to improve the public transit system should focus on this paradigm shift in order to create changes in the way people perceive public transit. There are two ways to achieve that goal: through transportation initiatives and through leisure.

5.4.3.2.1. Through transportation initiatives.

In addition to ensuring safety and security to heighten the comfort level and sense of trust for bus passengers and bikers, the City of Nanaimo and the RDN could introduce one day of free access to public transit services per month or per quarter. It could be on a Sunday or a holiday weekend (e.g. Family Day, Victoria Day, etc.). Furthermore, a 'Bus-to-Work' week could be introduced in combination with the existing 'Bike-to-Work' initiative. Additionally, the city and the regional district could also introduce free bus days during city or regional events, such as Nanaimo Bathtub Race, the Terry Fox Run, Parksville Beach Festival, etc. Letting residents who would otherwise drive their own cars try public transit at no cost may be an effective way to introduce them to the public transportation system and encourage them to consider alternative options for mobility. Besides, as such events and leisure activities are often done in the company of friends and family, the mass effect that a free transit day creates when someone decides to take a bus can be significant. It is therefore recommended that the city and the regional district plan these free days in conjunction with events available throughout the region.

5.4.3.2.2. Through leisure.

5.4.3.2.2.1. Public leisure service providers.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Given the high number of public cultural and natural events within the city and region, event organisers should consider accessibility an integral part of the event planning. For example, special shuttle buses that connect major transit spots to those events could be provided. Shuttles could be utilised to transfer students and young residents from VIU, or from areas which are not yet frequented by buses. Nanaimo leisure service providers can cooperate with BC Transit in order to provide shuttle services to parks and trails in Nanaimo, such as to the base of Mount Benson or Ammonite Falls. Similar service could also be provided to help people reach the different recreation facilities, particularly for those who do not live on major bus routes (e.g. Long Lake, Departure Bay, etc.). This can also be implemented by those who own recreation facilities and provide leisure services in the city and the regional district.

5.4.3.2.2. Private leisure service providers.

Watching a movie at Cineplex or go-karting in Parksville are popular leisure activities. However, when there is no bus running after a cheap movie night or buses to bring people directly to Fast Time Grand Prix in Parksville, go-karting or enjoying a new movie, especially for students who always look forwards to promotional offers, becomes impossible. The City or the regional district could cooperate with private leisure service providers such as Cineplex or Fast Time Grand Prix in Parksville to provide special shuttle schedules for days with offers and promotions, or for special events. On one hand, this can potentially help a leisure business to attract more customers – those who would have otherwise stayed home and watched Netflix. On the other hand, this could enhance ridership by addressing latent demand.

As a conclusion to this chapter, the City of Nanaimo has the potential to move towards greater sustainability in its transportation system by understanding and addressing latent demand for leisure pursuits of a key target – Millennials. This understanding, coupled with a commitment to enhance the attractiveness and accessibility of the city and its leisure venues by improving the transportation infrastructure and cooperating with different stakeholders, particularly with public and private leisure service providers; the City has the potential to enhance the quality of life of all residents.

FINAL CONCLUSION

The United Nations' Sustainable Development Goals can only be realised with the combined efforts of different stakeholders, including the younger generations. Necessary changes happen on many levels, and any attempt counts. Metropolitan areas are often looked up to as prime examples for sustainable development. However, innovations occurring in smaller, emerging economies are just as crucial, if not more important as people are looking to move to these mid-sized cities due to affordability and quality of life issues in larger cities. Nanaimo is one of these, and it has amazing potential to thrive as an exemplar of an attractive and accessible mid-sized city. While this study was not the first one that attempted to contribute to the city's effort for sustainable development or understand young people, it was the first that attempted to introduce the innovative concept of leisure mobility with the Millennial generation being the focus. Developing a sustainable transit system is a huge investment upfront, but it is a place based investment targeted at sustainable development aimed at enhancing the long term resilience and attractiveness of a community. One respondent's thought provides a valuable closure to this study:

“[...] it's sustainability, generally right? I mean that's important I mean it's... it's our planet right in the end. So I'd say if I could wish for an... or if I could dream of a perfect system, I would wish... like... imagine if there'd be something here like the European transportation system and that... that goes from having more frequency in bus transportation and buses running to spots where you actually can do stuff [...]. This is necessary infrastructure I think in the upcoming decades here in Canada or BC because this is going to generate growth, jobs, and all that. And! It does it in a sustainable manner because if you have a good transportation infrastructure and I'm not talking about roads, I'm talking about again, public transportation... capacity-wise, I don't think it can be that every single family has 2 cars in the future, right? I mean it just doesn't work... it doesn't work capacity-wise, right? So you have to somehow get more capacity going and then public... you will end up with public transport in the end anyway. That's the sustainable way... It's a long way to go and Canada is very... it's a very different... the distances are bigger and all that right? But say on a provincial level or at least on Vancouver Island level, there is so much potential I would say even, right? And there's so much potential to grow in a sustainable way and you would solve that, I'd say, with better public transportation.”

EXPLORING LEISURE MOBILITY OF MILLENNIALS

REFERENCES

- Adamiak, C., Hall, C. M., Hiltunen, M. J., & Pitkänen, K. (2016). Substitute or addition to hypermobile lifestyles? Second home mobility and Finnish CO₂ emissions. *Tourism Geographies*, 6688(March), 1–23. doi:10.1080/14616688.2016.1145250
- Aalto University Professional Development, the Regional Council of Päijät-Häme and the City of Lahti (Producer). (2015). Jeff Speck: The walkable city – lessons from the U.S. [Video file]. Retrieved from <https://www.youtube.com/watch?v=PoFO5Rt9cPM>
- Alonso, A., Monzón, A., & Cascajo, R. (2015). Comparative analysis of passenger transport sustainability in European cities. *Ecological Indicators*, 48, 578–592. doi:10.1016/j.ecolind.2014.09.022
- AlpTransit Gotthard Ltd. (2012). *AlpTransit Gotthard: New traffic route through the heart of Switzerland*. Retrieved from https://www.alptransit.ch/fileadmin/dateien/media/publikationen/atg_broschuere_e_2012_lq.pdf
- Aristotle (1999). *Politics* (B. Jowett, Trans.). Kitchener, Canada: Batoche Books. Retrieved from <http://socserv2.socsci.mcmaster.ca/econ/ugcm/3ll3/aristotle/Politics.pdf>
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Stefan, C., Egloff, B., Gosling, S. D. (2016). Facebook profiles reflect actual personality, not self-idealization, 21(3), 372–374. Retrieved from <http://www.jstor.org/stable/41062216>
- Banister, D. (2008). The sustainable mobility paradigm. *Transport Policy*, 15(2), 73–80. doi:10.1016/j.tranpol.2007.10.005
- Barton, K. S. (2012). Colorado's millennial generation: Youth perceptions and experiences of nature. *Journal of Geography*, 111(6), 213–223. doi:10.1080/00221341.2011.652648
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559. doi:10.2174/1874434600802010058
- Birkmann, J., Welle, T., Solecki, W., Lwasa, S., & Garschagen, M. (2016). Boost resilience of small and mid-sized cities. *Nature*, 537(7622), 605–608. doi:10.1038/537605a
- Black, W.R. (2010). Sustainable transportation: Problems and solutions. Retrieved from [http://reader.eblib.com.ezproxy.viu.ca/\(S\(y5132gtrrojmxkonwxbfu1m\)\)/Reader.aspx?p=465652&o=772&u=U4wNRJHuC167XIIxD7BaqQ%3d%3d&t=1468595999&h=E5F4EF14F446FFC7665376239E3257B2E58B6C08&s=46823770&ut=2413&pg=1&r=img&c=-](http://reader.eblib.com.ezproxy.viu.ca/(S(y5132gtrrojmxkonwxbfu1m))/Reader.aspx?p=465652&o=772&u=U4wNRJHuC167XIIxD7BaqQ%3d%3d&t=1468595999&h=E5F4EF14F446FFC7665376239E3257B2E58B6C08&s=46823770&ut=2413&pg=1&r=img&c=-)

EXPLORING LEISURE MOBILITY OF MILLENNIALS

1&pat=n&cms=-1&sd=2#

- Blackburn-Dwyer, B. (July 19, 2016). High-speed train will go from Malaysia to Singapore in 90 minutes [Web log post]. Retrieved from https://www.globalcitizen.org/en/content/bullet-trains-singapore-malaysia-asia/?utm_source=facebook&utm_medium=social&utm_content=global&utm_campaign=general-content&linkId=26725280
- Blackshaw, T. (2010). Leisure and emotional labour: A commentary on Rojek's "Leisure and emotional intelligence". *World Leisure Journal*, 52(4), 253-256.
Doi:10.1080/04419057.2010.9674647
- Bloch, P. H., Ridgway, N. M., & Dawson, S. A. (1994). Shopping mall as consumer habitat. *Journal of Retailing*, 70(1), 23–42. doi:10.1016/0022-4359(94)90026-4
- Bricker, S. (2014). Advancing walkable communities. *National Civic Review*, 103(1), 43–44. doi:10.1002/ncr.21174
- Brunner, S. (2016). Better, faster, longer. *Credit Suisse Bulletin*, 12-13.
- Cai, J., & Stoyanov, A. (2016). Population aging and comparative advantage. *Journal of International Economics*, 102, 1–21. doi:10.1016/j.jinteco.2016.04.006
- Canadian Parks and Recreation Association/Interprovincial Sport and Recreation Council (February 2015). A Framework for Recreation in Canada - 2015 - Pathways to Wellbeing. Ottawa, Canada: Canadian Recreation and Parks Association. Retrieved from <http://lin.ca/sites/default/files/attachments/framework-for-recreation-in-canada-2016.pdf>
- Cass, N., Shove, E., & Urry, J. (2005). Social exclusion, mobility and access. *Sociological Review*, 53(3), 539–555. doi:10.1111/j.1467-954X.2005.00565.x
- Cheng, Y.-H., & Chen, S.-Y. (2015). Perceived accessibility, mobility, and connectivity of public transportation systems. *Transportation Research Part A: Policy and Practice*, 77, 386–403. doi:10.1016/j.tra.2015.05.003
- Chipeniuk, R. (2004). Planning for amenity migration in Canada. *Mountain Research and Development*, 24(4), 327-335. Doi:[http://dx.doi.org/10.1659/0276-4741\(2004\)024\[0327:PFAMIC\]2.0.CO;2](http://dx.doi.org/10.1659/0276-4741(2004)024[0327:PFAMIC]2.0.CO;2)
- Christensen, K., Doblhammer, G., Rau, R., & Vaupel, J. W. (2009). Ageing populations: The challenges ahead. *Lancet*, 374(9696), 1196–208. doi:10.1016/S0140-6736(09)61460-4
- Christiaensen, L. (2016). Cities are the answer to job creation and poverty reduction. Aren't

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- they?. Retrieved from https://www.weforum.org/agenda/2016/07/cities-are-the-answer-to-job-creation-and-poverty-reduction-arent-they?utm_content=buffer6142c&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer
- City of Nanaimo. (2014). Nanaimo transportation master plan. Retrieved from <http://www.nanaimo.ca/assets/Departments/Engineering~Public~Works/Transportation~Master~Plan/2014-07-10%20Nanaimo%20Transportation%20Master%20Plan%20Final%20High%20Res.pdf>
- City of Nanaimo. (2017). Income mapping. Retrieved from <http://www.nanaimo.ca/assets/Departments/Community~Planning/Social~Planning/Social~Geography/Income.jpg>
- City of Vancouver. (2012). *Transportation 2040: Moving forward*. Vancouver, Canada. Retrieved from <http://vancouver.ca/files/cov/transportation-2040-plan.pdf>
- City of Vancouver. (2016). Transportation 2040 Plan: A transportation vision for the City of Vancouver. Retrieved from <http://vancouver.ca/streets-transportation/transportation-2040.aspx>
- Cordery, W. (2011, Jul 11). City must stop urban sprawl. Nanaimo Daily News. Retrieved from <http://ezproxy.viu.ca/login?url=http://search.proquest.com/docview/876209056?accountid=12246>
- Cortright, J. (2007). *Green Dividend: Cities facilitate less driving, saving money and stimulating the local economy*. Retrieved from [http://www.globalurban.org/Economic Benefits of Climate Action Presentation on Metropolitan Climate Prosperity Strategy.pdf](http://www.globalurban.org/Economic%20Benefits%20of%20Climate%20Action%20Presentation%20on%20Metropolitan%20Climate%20Prosperity%20Strategy.pdf)
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences, 13*(4), 309–320. doi:10.1080/01490409109513147
- Credo, K. R., Lanier, P. A., Matherne, C. F., & Cox, S. S. (2016). Narcissism and entitlement in millennials: The mediating influence of community service self efficacy on engagement. *Personality and Individual Differences, 101*, 192–195. doi:10.1016/j.paid.2016.05.370
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. California, CA: SAGE Publications, Inc.
- Darcy, S. (2010, January 31). Leisure constraints theory & disability travel [Web log post]. Retrieved from <http://accessibletourismresearch.blogspot.ca/2010/01/leisure-constraints->

EXPLORING LEISURE MOBILITY OF MILLENNIALS

theory-disability.html

Delbosc, A., & Currie, G. (2011). The spatial context of transport disadvantage, social exclusion and well-being. *Journal of Transport Geography*, 19(6), 1130–1137.

doi:10.1016/j.jtrangeo.2011.04.005

Deloitte. (2014a). Global automotive consumer study – the changing nature of mobility:

Exploring consumer preferences in key markets around the world. Retrieved from

<http://www2.deloitte.com/content/dam/Deloitte/us/Documents/manufacturing/us-auto-2014-gen-y-automotive-consumer-study-100914.pdf>

Deloitte. (2014b). Automotive trends and gen Y: Changing nature of mobility [Video file].

Retrieved on <http://www2.deloitte.com/us/en/pages/manufacturing/articles/2014-gen-y-automotive-consumer-study.html>

Deloitte. (2016). The 2016 Deloitte millennial survey: Winning over the next generation of leaders. Retrieved from

<https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-millennial-survey-2016-exec-summary.pdf>

De Vos, J., & Witlox, F. (2013). Transportation policy as spatial planning tool; reducing urban sprawl by increasing travel costs and clustering infrastructure and public transportation.

Journal of Transport Geography, 33, 117–125. doi:10.1016/j.jtrangeo.2013.09.014

Dolnicar, S., Laesser, C., & Matus, K. (2010). Short-haul city travel is truly environmentally sustainable. *Tourism Management*, 31(4), 505–512. doi:10.1016/j.tourman.2009.06.002

Downward, P., & Rasciute, S. (2015). Assessing the impact of the National Cycle Network and physical activity lifestyle on cycling behaviour in England. *Transportation Research Part A: Policy and Practice*, 78, 425–437. doi:10.1016/j.tra.2015.06.007

Duxbury, N., Garrett-Petts, W.F., MacLennan, D. (2015). Cultural mapping as cultural inquiry.

Retrieved from

<http://viu.ebib.com.ezproxy.viu.ca/patron/FullRecord.aspx?p=2057993&echo=1&userid=U4wNRJHuC167XIIxD7BaqQ%3d%3d&tstamp=1478147638&id=FB951B2EABFF339E47664DBAC906249F105AE161>

Dwyer, M. (Presenter). (2015, October 26). Field trip at Kwalikum Food Forest. Field

presentation at the Kwalikum Secondary School, Town of Qualicum Beach, Canada.

Dyck, D. Van, Cardon, G., Deforche, B., & De Bourdeaudhuij, I. (2011). Do adults like living in

EXPLORING LEISURE MOBILITY OF MILLENNIALS

high-walkable neighborhoods? Associations of walkability parameters with neighborhood satisfaction and possible mediators. *Health and Place*, 17(4), 971–977.

doi:10.1016/j.healthplace.2011.04.001

Economic Development Office of Nanaimo. (2010). *Nanaimo: Community profile*. Nanaimo: Canada. Retrieved from

<http://www.nanaimo.ca/assets/Departments/Economic~Development/Business~Services/CommunityProfile.pdf>

Ehrbar, H. (2016). Gotthard base tunnel. *Geomechanics and Tunnelling*, 9(2), 2016.

doi:10.1002/geot.201690015

Ehrlich, J. (Presenter) (2015, October 29). Field trip at Alderlea Farm. Field presentation at the Alderlea Farm, Duncan, Canada.

Environment and Climate Change Canada. (2016). *Planning for a sustainable future: A federal sustainable development strategy for Canada - Consultation draft*. Québec, Canada.

Retrieved from http://www.fsds-sfdd.ca/downloads/3130 - Federal Sustainable Development Strategy 2016-2019_.pdf

Ettema, D., & Schwanen, T. (2012). A relational approach to analysing leisure travel. *Journal of Transport Geography*, 24, 173–181. doi:10.1016/j.jtrangeo.2012.01.023

Ewing, R., Brownson, R. C., & Berrigan, D. (2006). Relationship between urban sprawl and weight of United States youth. *American Journal of Preventive Medicine*, 31(6), 464–474.

doi:10.1016/j.amepre.2006.08.020

Facebook. (2017). *Company info*. Retrieved from <https://newsroom.fb.com/company-info/>

Federal Statistics Office FSO. (2015). *Mobility and transport: Pocket statistics 2015* (Order no. 839-1500). Neuchâtel, Switzerland: FSO. Retrieved from <http://www.bfs.admin.ch/bfs/portal/en/index/infothek/publ.Document.195161.pdf>

Ferreira, A., Beukers, E., & Brömmelstroet, M. Te. (2012). Accessibility is gold, mobility is not: A proposal for the improvement of Dutch transport-related cost-benefit analysis.

Environment and Planning B: Planning and Design, 39(4), 683–697. doi:10.1068/b38073

Focas, C. & Bézaguet, L. (2016, March 8). L'automobile ne séduit plus les jeunes urbains [The car no longer appeals to urban youths]. *24 heures*. Retrieved from <http://www.24heures.ch/suisse/automobile-seduit-jeunes-urbains/story/14918533>

Fuhrer, U., Kaiser, F. G., & Hartig, T. (1993). Place attachment and mobility during leisure time.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Journal of Environmental Psychology, 13(4), 309–321. doi:10.1016/S0272-4944(05)80253-1

Garthwaite, J. (2011, May 26). Driving the limit: Wealthy nations maxed out on travel? *National Geographic News*. Retrieved from <http://news.nationalgeographic.com/news/energy/2011/05/110525-have-we-reached-peak-travel-demand/>

Gartshore, I. (2012, Mar 19). End urban sprawl to control rises taxes. *Nanaimo Daily News*. Retrieved from <http://ezproxy.viu.ca/login?url=http://search.proquest.com/docview/933572372?accountid=12246>

Gilderbloom, J. I., Riggs, W. W., & Meares, W. L. (2015). Does walkability matter? An examination of walkability's impact on housing values, foreclosures and crime. *Cities*, 42(PA), 13–24. doi:10.1016/j.cities.2014.08.001

Global Shapers Community. (2016). Global shapers annual survey 2016. Retrieved from <http://shaperssurvey.org/data/report.pdf?>

Godbey, G., Crawford, D. W., & Sharon Shen, X. (2010). Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research*, 42(1), 111-134. Retrieved from http://www.funlibre.org/biblioteca2/docs_digitales/investigacion/revision_de_la_teor%C3%ADa_de_las_limitaciones_del_ocio.pdf

Goldberg, D. (2014, April 22). Survey: To recruit and keep millennials, give them walkable places with good transit and other options [Web log post]. Retrieved from <http://t4america.org/2014/04/22/survey-to-recruit-and-keep-millennials-give-them-walkable-places-with-good-transit-and-other-options/>

Götz, K., Loose, W., Schmied, M., & Schubert, S. (2002). Mobility styles in leisure time: Final report for the project “Reduction of environmental damage caused by leisure and tourism traffic”. Commissioned by the Federal Environmental Agency. Frankfurt, Germany: Author.

Götz, K., Loose, W., Schmied, M., & Schubert, M. (2003). Mobilitätsstile in der Freizeit: Minderung der Umweltbelastungen des Freizeit- und Tourismusverkehrs [Mobility styles in leisure time: Reduction of environmental damage caused by leisure and tourism traffic]. Commissioned by the Federal Environmental Agency of Germany. Frankfurt am Main,

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Germany: Erich Schmidt Verlag. Harbour Air Seaplanes. (2017a.). Routes and schedules. Retrieved from <http://www.harbourair.com/book-a-flight/routes-schedules/>
- Graybill, J. O. (2014). Millennials among the professional workforce in academic libraries: Their perspective on leadership. *The Journal of Academic Librarianship*, 40(1), 10–15. doi:10.1016/j.acalib.2013.09.006
- Grieco, M. (2015). Poverty mapping and sustainable transport: A neglected dimension. *Research in Transportation Economics*, 51, 3–9. doi:10.1016/j.retrec.2015.07.002
- Guereño-Omil, B., Hannam, K., & Alzua-Sorzabal, A. (2014). Cross-border leisure mobility styles in the Basque Eurocity. *Leisure Studies*, 33(6), 547–564. doi:10.1080/02614367.2013.833282
- Hannam, K. (2006). Tourism and development III: Performances, performativities and mobilities. *Progress in Development Studies*, 6(3), 243–249. doi:10.1191/1464993406ps141pr
- Harbour Air Seaplanes. (2017b). *Know before you go*. Retrieved from <http://www.harbourair.com/the-experience/know-before-you-go/>
- Hatzopoulou, M., & Miller, E. J. (2008). Institutional integration for sustainable transportation policy in Canada. *Transport Policy*, 15(3), 149–162. doi:10.1016/j.tranpol.2007.12.002
- Health Canada. (2013). *Fuels and air pollution*. Retrieved from <http://www.hc-sc.gc.ca/ewh-semt/air/out-ext/sources/fuels-carburants-eng.php>
- Hendricks, J. (2012). Considering life course concepts. *The Journals of Gerontology*, 67(2), 226–231. doi:10.1093/geronb/gbr147
- Hicks, M. (2010, February 24). Facebook tips: What's the difference between a Facebook page and group? [Web log post]. Retrieved from <https://www.facebook.com/notes/facebook/facebook-tips-whats-the-difference-between-a-facebook-page-and-group/324706977130>
- Holden, E., & Linnerud, K. (2011). Troublesome leisure travel: The contradictions of three sustainable transport policies. *Urban Studies*, 48(14), 3087–3106. doi:10.1177/0042098010396234
- Hong, J., & Chen, C. (2014). The role of the built environment on perceived safety from crime and walking: Examining direct and indirect impacts. *Transportation*, 41(6), 1171–1185. doi:10.1007/s11116-014-9535-4
- Høyer, K. G. (2010). Sustainable tourism or sustainable mobility? The Norwegian case. *Journal*

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- of Sustainable Tourism*, (September 2012), 37–41. doi:10.1080/09669580008667354
- Hume, G. (2016, November 1). *Successful cities: Positioning Nanaimo for prosperity in the knowledge economy*. Inspire Nanaimo Presentation presented at Vancouver Island Conference Centre Shaw Auditorium, Nanaimo, Canada.
- International Transport Forum. (2011). Public acceptability of sustainable transport measures: A review of the literature. *International Transport Forum Discussion Papers*, 1–24. doi:10.1787/2223439x
- ICBC. (2016b). Road safety report: Vancouver Island region. Retrieved from <http://www.icbc.com/about-icbc/newsroom/Documents/Road%20safety%20report%20-%20Vancouver%20Island.pdf>
- IPCC. (2014). *Climate change 2014: Impacts, adaptation, and vulnerability – Summary for policymakers. Part A: global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Retrieved from https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/a5_wgII_spm_en.pdf
- Island Corridor Foundation. (2017). *Island Corridor Foundation business plan update, 2017: Draft for public input – April, 2017*. Retrieved from <http://www.islandrail.ca/wp-content/uploads/2017/03/ICF-Business-Plan-DRAFT-for-PUBLIC-INPUT-C2.pdf>
- Janjigian, L. (2016). US millennials are looking for jobs in these cities, according to LinkedIn. Retrieved from https://www.weforum.org/agenda/2016/09/these-are-the-us-cities-where-millennials-are-looking-for-jobs-according-to-linkedin?utm_content=buffer3567b&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer
- Johnson, A. J. (2013). “It's more than a shopping trip’: Leisure and consumption in a farmers’ market. *Annals of Leisure Research*, 16(0), 315–331. doi:10.1080/11745398.2013.846226
- Josh, L., Heather, H., & Betsy, D. (2014). Kingston and St John’s: The role of relative location in talent attraction and retention. In G., Jill (Ed.), *Seeking talent for creative cities: The social dynamics of innovation* (pp. 201-218). Toronto, Canada: University of Toronto Press. Retrieved from <http://site.ebrary.com/lib/viu/reader.action?ppg=246&docID=10840615&tm=1477181805233>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Kane, L. (2014, September 22). Millennials are getting something very right about money and happiness. *Business Insider*. Retrieved from <http://www.businessinsider.com/millennials-experience-economy-2014-9>
- Kaufmann, V. (2012). *Motility*. Retrieved from <http://en.forumviesmobiles.org/marks/motility-461>
- Kaufmann, V. (2013). *Smartphone or car: Young people have made their choice...* Retrieved from <http://en.forumviesmobiles.org/60sec/2013/06/18/smartphone-or-car-young-people-have-made-their-choice-927>
- Kaufmann, V. (2017). *Virtuous mobility: The advantages of the dense city challenged?* [Video file]. Retrieved from <http://en.forumviesmobiles.org/meeting/2017/02/13/virtuous-mobility-advantages-dense-city-challenged-3482>
- Kiss, G., Jansen, H., Castaldo, V. L., & Orsi, L. (2015). The 2050 city. *Procedia Engineering*, 118, 326–355. doi:10.1016/j.proeng.2015.08.434
- Kleiber, D., McGuire, F. A., Aybar-Damali, B., & Norman, W. (2008). Having more by doing less: The paradox of leisure constraints in later life. *Journal of Leisure Research*, 40(3), 343–359. Retrieved from https://www.researchgate.net/publication/232437529_Having_more_by_doing_less_The_paradox_of_leisure_constraints_in_later_life
- Kondo, K., Lee, J. S., Kawakubo, K., Kataoka, Y., Asami, Y., Mori, K., Umezaki, M., Yamauchi, T., Takagi, H., & Akabayashi, A. (2009). Association between daily physical activity and neighborhood environments. *Environmental Health and Preventive Medicine*, 14(3), 196–206. doi:10.1007/s12199-009-0081-1
- Kowalski, C. L., & Lankford, S. V. (2011). A comparative study examining constraints to leisure and recreation opportunities for youth living in remote and isolated communities. *World Leisure Journal*, 52(2), 135–147. doi:10.1080/04419057.2010.9674638
- Kulik, C. T. (2014). Aging population and management. *Academy of Management Journal*, 57(4), 929-935. doi:10.5465/amj.2014.4004
- LinkedIn. (2017). *About LinkedIn*. Retrieved from <https://press.linkedin.com/about-linkedin>
- Leslie, E., Coffee, N., Frank, L., Owen, N., Bauman, A., & Hugo, G. (2007). Walkability of local communities: Using geographic information systems to objectively assess relevant environmental attributes. *Health & Place*, 13(1), 111–122.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

doi:10.1016/j.healthplace.2005.11.001

- Lierop, D. Van, Grimsrud, M., & El-Geneidy, A. (2015). Breaking into bicycle theft: Insights from Montreal, Canada. *International Journal of Sustainable Transportation*, 9(7), 490–501. doi:10.1080/15568318.2013.811332
- Lutz, W., Warren, S., & Scherbov, S. (2008). The coming acceleration of global population ageing. *Nature*, 451, 716-719. Doi:10.1038/nature06516
- Lyu, S. O., Oh, C.-O., & Lee, H. (2013). The influence of extraversion on leisure constraints. *Journal of Leisure Research*, 45(2), 233–252. Retrieved from <https://www.questia.com/library/journal/1P3-3069504111/the-influence-of-extraversion-on-leisure-constraints>
- Martin, N. (2009). Today's Millennial generation: A look ahead to the future they create. *Techniques: Connecting Education and Careers*, 84(May), 20–23. doi:10.1080/17543260903390183
- Mathez, A., Manaugh, K., Chakour, V., El-Geneidy, A., & Hatzopoulou, M. (2012). How can we alter our carbon footprint? Estimating GHG emissions based on travel survey information. *Transportation*, 40(1), 131–149. doi:10.1007/s11116-012-9415-8
- McAllister Opinion Research. (2016). *Public views on sustainability and the built environment: A survey of public opinion in British Columbia*. Vancouver, Canada. Retrieved from http://www.refbc.com/sites/default/files/SBEpoll-full_0.pdf
- McAndrew, F. T., & Jeong, H. S. (2012). Who does what on Facebook? Age, sex, and relationship status as predictors of Facebook use. *Computers in Human Behavior*, 28(6), 2359–2365. doi:10.1016/j.chb.2012.07.007
- McCormick, K., Richter, J.L., and Pantzar, M. (2015). *Greening the economy: Lessons from Scandinavia*. Lund, Sweden: Lund University.
- Mercer. (2016). *2016 quality of living rankings*. Retrieved from <https://www.imercer.com/content/mobility/quality-of-living-city-rankings.html#list>
- Meric, S. G., Kate, G., Carolyn, H., & Josephine, V. R. (2014). Attracting and retaining talents: Evidence from Canada's city-regions. In G., Jill (Ed.), *Seeking talent for creative cities: The social dynamics of innovation* (pp. 3-30). Toronto, Canada: University of Toronto Press. Retrieved from <http://site.ebrary.com/lib/viu/readerivg.action?ppg=246&docID=10840615&tm=1477181805233>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Mindali, O., Raveh, A., & Salomon, I. (2004). Urban density and energy consumption: A new look at old statistics. *Transportation Research Part A*, 38, 143-162. Doi: 10.1016/j.tra.2003.10.004
- Miranda, S., Pinto, I. M., & Olmos, S. (2014). Analysis of inclusion in the public transportation of people with reduced mobility that live in segregated areas. *Procedia - Social and Behavioral Sciences*, 162, 487–495. doi:10.1016/j.sbspro.2014.12.230
- Mont, O., Neuvonen, A., & Lähteenoja, S. (2014). Sustainable lifestyles 2050: stakeholder visions, emerging practices and future research. *Journal of Cleaner Production*, 63, 24–32. doi:10.1016/j.jclepro.2013.09.007
- Montgomery, C. (2007, June 25). Bogota's urban happiness movement. Saturday's Globe and Mail. Retrieved from <http://www.theglobeandmail.com/life/bogotas-urban-happiness-movement/article1087786/>
- Montgomery, C. (2013). *Happy city: Transforming our lives through urban design*. Toronto, Canada: Anchor Canada.
- Moreno, M. A., Grant, A., Kacvinsky, L., Moreno, P., & Fleming, M. (2012). Older adolescents' views regarding participation in facebook research. *Journal of Adolescent Health*, 51(5), 439–444. doi:10.1016/j.jadohealth.2012.02.001
- Munafò, S. (2014). *Questioning the barbecue effect – Mobile lives forum* [Video file]. Retrieved from <http://en.forumviesmobiles.org/video/2014/11/26/questioning-barbecue-effect-2687>
- Munafò, S. (2015). *Cadres de vie, modes de vie et mobilités de loisirs : Les vertus de la ville compacte remises en cause ?* [Living environments, lifestyles and leisure mobility: Are the virtues of the compact city challenged?] (Unpublished doctoral thesis). EFPL, Lausanne, Switzerland.
- Muñiz, I., Calatayud, D., & Dobaño, R. (2013). The compensation hypothesis in Barcelona measured through the ecological footprint of mobility and housing. *Landscape and Urban Planning*, 113, 113–119. doi:10.1016/j.landurbplan.2013.02.004
- Næss, P. (2006). Are short daily trips compensated by higher leisure mobility? *Environment and Planning B: Planning and Design*, 33(2), 197–220. doi:10.1068/b31151
- Nanaimo Economic Development. (2016). *Labour force*. Retrieved from <http://www.invest-nanaimo.com/cms.asp?wpID=39>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Newman, P., & Kenworthy, J. (1991). *Cities and automobile dependence: An international sourcebook*. Aldershot, England: Avebury Technical – The Academic Publishing Group. (Original work published 1989)
- Newman, P., & Kenworthy, J. (2000). The ten myths of automobile dependence. *World Transport Policy & Practice*, 6(1), 15-25. Retrieved from http://worldcarfree.net/resources/freesources/ad_myths.pdf
- Ng, E. S. W., Schweitzer, L., & Lyons, S. T. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology*, 25(2), 281–292. doi:10.1007/s10869-010-9159-4
- Nicolas, J.-P., & David, D. (2009). Passenger transport and CO2 emissions: What does the French transport survey tell us? *Atmospheric Environment*, 43(5), 1015–1020. doi:10.1016/j.atmosenv.2008.10.030
- No Vancouver Island railway deal yet, says VIA Rail. (2014, Apr 02). *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/british-columbia/no-vancouver-island-railway-deal-yet-says-via-rail-1.2595095>
- O'Sullivan, F. (2016, January 4). Germany launches its national 'bike autobahn' cycle network. Retrieved from <http://www.citylab.com/commute/2016/01/germany-launches-its-national-bike-autobahn-cycle-network/422451/>
- OECD. (2013). Urban development. Retrieved from <http://www.oecd.org/governance/regional-policy/urbandevelopment.htm>
- Ohnmacht, T., Götz, K., & Schad, H. (2009). Leisure mobility styles in Swiss conurbations: Construction and empirical analysis. *Transportation*, 36(2), 243–265. doi:10.1007/s11116-009-9198-8
- Orfeuil, J.-P., & Soleyret, D. (2002). What are the interactions between the short and long-distance travel markets? *Recherche Transports Sécurité*, 76, 208–221. doi:10.1016/S0761-8980(02)00013-4
- Oxford University Press. (2016a). Mobility. Def. 1. In *Oxford Dictionaries' British and World English online dictionary*. Retrieved from <http://www.oxforddictionaries.com/us/definition/english/mobility>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Oxford University Press. (2016b). Accessibility. Def. 1. In *Oxford Dictionaries' British and World English online dictionary*. Retrieved from <http://www.oxforddictionaries.com/us/definition/english/accessibility>
- Oxford University Press. (2016c). Transportation. Def. 1.1. In *Oxford Dictionaries' British and World English online dictionary*. Retrieved from <http://www.oxforddictionaries.com/us/definition/english/transportation>
- Pervez, B. & Hutt, R. (2016). Purpose or profit: Which would give you more job satisfaction?. Retrieved from https://www.weforum.org/agenda/2016/07/purpose-profit-job-satisfaction-universum-deloitte-survey?utm_content=buffer0646c&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer
- Polzin, S. E., Chu, X., & Godfrey, J. (2014). The impact of millennials' travel behavior on future personal vehicle travel. *Energy Strategy Reviews*, 5, 59–65. doi:10.1016/j.esr.2014.10.003
- Power, A. (2015). LinkedIn: Facebook for professionals? *British Journal of Midwifery*, 23(3), 196–198. Retrieved from <http://ezproxy.viu.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,cookie&db=c8h&AN=103771412&site=ehost-live>
- Preston, J., & Rajé, F. (2007). Accessibility, mobility and transport-related social exclusion. *Journal of Transport Geography*, 15(3), 151–160. <http://doi.org/10.1016/j.jtrangeo.2006.05.002>
- Priester, R., Miramontes, M., & Wulfhorst, G. (2014). A Generic Code of Urban Mobility: How can Cities Drive Future Sustainable Development? *Transportation Research Procedia*, 4, 90–102. <http://doi.org/10.1016/j.trpro.2014.11.008>
- Professional Environmental Recreation Consultants Ltd. (2005). *Parks, Recreation and Culture Master Plan*. Nanaimo, Canada. Retrieved from <http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Publications~and~Forms/Master Plan Report.pdf>
- Puissant, S., & Lacour, C. (2011). Mid-sized French cities and their niche competitiveness. *Cities*, 28(5), 433–443. doi:10.1016/j.cities.2011.05.008
- Regional District of Nanaimo. (2014). Transit Future Plan. Retrieved from <http://www.rdn.bc.ca/cms/wpattachments/wpID279atID6200.pdf>
- Regional District of Nanaimo. (2015). *About the RDN*. Retrieved from

EXPLORING LEISURE MOBILITY OF MILLENNIALS

<http://www.rdn.bc.ca/cms.asp?wpID=513>

Regional District of Nanaimo. (2017). *Population statistics*. Retrieved from

<http://www.rdn.bc.ca/cms.asp?wpID=440>

Reisi, M., Aye, L., Rajabifard, A., & Ngo, T. (2014). Transport sustainability index: Melbourne case study. *Ecological Indicators*, 43, 288–296. doi:10.1016/j.ecolind.2014.03.004

Renner, M. (2016). Supporting sustainable transportation. In L. Mastny (Ed.), *Can a city be sustainable? (State of the world)* (Chapter 11) [Kindle version]. Retrieved from

[https://www.amazon.ca/Can-City-Sustainable-State-](https://www.amazon.ca/Can-City-Sustainable-State-World/dp/1610917553/ref=sr_1_sc_1?ie=UTF8&qid=1469914530&sr=8-1-spell&keywords=can+a+city+be+sustainable)

[World/dp/1610917553/ref=sr_1_sc_1?ie=UTF8&qid=1469914530&sr=8-1-spell&keywords=can+a+city+be+sustainable](https://www.amazon.ca/Can-City-Sustainable-State-World/dp/1610917553/ref=sr_1_sc_1?ie=UTF8&qid=1469914530&sr=8-1-spell&keywords=can+a+city+be+sustainable)

Revi, A., Satterthwaite, D.E., Aragón-Durand, F., Corfee-Morlot, J., Kiunsi, R.B.R., Pelling, M., Roberts, D.C., & Solecki, W. (2014). Urban areas. In C. B. Field, V. R. Barros, D. J.

Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, M. Chatterjee, K. L. Ebi, Y. O. Estrada, R. C. Genova, B. Girma, E. S. Kissel, A. N. Levy, S. MacCracken, P. R. Mastrandrea, and L. L. White (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 535-612). Cambridge, United Kingdom and New York, USA: Cambridge University Press. Retrieved from

https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap8_FINAL.pdf

Riggs, W.W. (2011). *Walkability and housing: A comparative study of income, neighborhood change and sociocultural dynamics in the San Francisco Bay area* (PhD thesis, University of California Berkeley, U.S.A.). Retrieved from

https://www.researchgate.net/publication/261215801_Walkability_and_Housing_A_Comparative_Study_of_Income_Neighborhood_Change_and_Sociocultural_Dynamics_in_the_San_Francisco_Bay_Area

Round, P. (2007, Apr 25). CSRD wants to avoid ‘Nanaimo-like’ sprawl. *Courier – Islander*. Retrieved from

<http://ezproxy.viu.ca/login?url=http://search.proquest.com/docview/358221058?accountid=12246>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, California: SAGE Publications, Inc. Retrieved from <http://web.b.ebsco-host.com/ehost/ebookviewer/ebook/ZTAwMHhuYV9fNDc0Mjk3X19BTg2?sid=fb7658cb-02a8-42db-93a2-ec1f81ccab5a@sessionmgr2&vid=0&format=EB&rid=1>
- Sapora, A. V., & Mitchell, E. D. (1961). *The theory of play and recreation* (3rd ed.). New York: The Ronald Press Company.
- Satterthwaite, D. (2010). The role of cities in sustainable development. *Sustainable Development Insights*, (4), 4-7. Boston, MA: Boston University Pardee House.
- Savaresi, A. (2016). The Paris Agreement: a new beginning? *Journal of Energy & Natural Resources Law*, 34(1), 16–26. doi:10.1080/02646811.2016.1133983
- Schmidt, J. (April 25, 2016). 175 countries sign Paris agreement and many announce they will formally join this year [Web log post]. Retrieved from <https://www.nrdc.org/experts/jake-schmidt/175-countries-sign-paris-agreement-and-many-announce-they-will-formally-join>
- Schoettle, B., & Sivak, M. (2013). The reasons for the recent decline in young driver licensing in the United States. *Traffic Injury Prevention*, 15(1), 6–9. doi:10.1080/15389588.2013.839993
- Seair Seaplanes. (2017). *Seair seaplanes flight schedule from Nanaimo to Vancouver harbour and Vancouver harbour to Nanaimo*. Retrieved from <http://seairseaplanes.com/schedule-nanaimo-vancouver-harbour-mar12-june18>
- Sébastien, D., & Diane-Gabrielle, T. (2014). Attracting knowledge workers and the creative city paradigm: Can we plan for talent in Montreal? In G., Jill (Ed.), *Seeking talent for creative cities: The social dynamics of innovation* (pp. 141-158). Toronto, Canada: University of Toronto Press. Retrieved from <http://site.ebrary.com/lib/viu/readerivg.action?ppg=246&docID=10840615&tm=1477181805233>
- Senate Department for Urban Development and the Environment. (2014). *The Feasibility Study 'Climate-Neutral Berlin 2050'*. Berlin, Germany : Author.
- Services des infrastructures, transport et environnement. (2008). *Réinventer Montréal : Plan de transport 2008* [Reinvent Montreal : Transportation plan 2008]. Montréal, Canada: Author. Retrieved from http://servicesenligne.ville.montreal.qc.ca/sel/publications/PorteAccesTelechargement?lng=Fr&systemName=68235660&client=Serv_corp

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Silvia, C. (2014). Accessibility and mobility. In M. E. Garrett (Ed.), *Encyclopedia of transportation: Social science and policy* (pp. 5-10). Thousand Oaks, California: SAGE Publications, Inc. Retrieved from <http://web.a.ebsco-host.com.ezproxy.viu.ca/ehost/ebookviewer/ebook/ZTAwMHhuYV9fODQ1OT-MwX19BTg2?sid=605f966a-cff8-4066-9e67-e60a30fcde17@sessionmgr4007&vid=0&format=EB&rid=1>
- Simmons, J. (1991). The regional mall in Canada. *Canadian Geographer / Le Géographe Canadien*, 35(3), 232–240. doi:10.1111/j.1541-0064.1991.tb01097.x
- Sioui, L., Morency, C., & Trépanier, M. (2013). How carsharing affects the travel behavior of households: A case study of Montréal, Canada. *International Journal of Sustainable Transportation*, 7(1), 52–69. doi:10.1080/15568318.2012.660109
- Sivak, M., & Schoettle, B. (2011). Recent changes in the age composition of U.S. drivers: Implications for the extent, safety, and environmental consequences of personal transportation. *Traffic Injury Prevention*, 12(6), 588–592. doi:10.1080/15389588.2011.605817
- Sivak, M., & Schoettle, B. (2012a). Recent changes in the age composition of drivers in 15 countries. *Traffic Injury Prevention*, 13(March 2015), 126–132. doi:10.1080/15389588.2011.638016
- Sivak, M., & Schoettle, B. (2012b). Update: Percentage of young persons with a driver's license continues to drop. *Traffic Injury Prevention*, 13(4), 341–342. doi:10.1080/15389588.2012.696755
- Sivak, M., & Schoettle, B. (2013). Toward understanding the recent large reductions in the proportion of young persons with a driver's license: A response to Le Vine et al. (2013). *Traffic Injury Prevention*, 14(6), 658–9. doi:10.1080/15389588.2013.793985
- Social Exclusion Unit. (2003). *Making the connections: Final report on transport and social exclusion*. London, England. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/---invest/documents/publication/wcms_asist_8210.pdf
- Sone, S. (2015). Comparison of the technologies of the Japanese Shinkansen and Chinese High-speed Railways. *Journal of Zhejiang University SCIENCE A*, 16(10), 769–780. doi:10.1631/jzus.A1500220
- Southworth, M. (2005). Designing the Walkable City. *Journal of Urban Planning and*

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Development*, 131(4), 246–257. doi:10.1061/(ASCE)0733-9488(2005)131:4(246)
- Speck, J. (2012). *Walkable city: How downtown can save America, one step at a time*. New York, NY: North Point Press.
- SquareOne. (n.d.). *Start at SquareOne*. Retrieved from <http://thinkbigatsquareone.com/>
- Stanley, J., Hensher, D. A., Stanley, J., Currie, G., Greene, W. H., & Vella-Brodrick, D. (2011). Social exclusion and the value of mobility. *Source: Journal of Transport Economics and Policy Journal of Transport Economics and Policy*, 45(2), 197–222. Retrieved from <http://www.jstor.org/stable/23072175>
- Stanley, J. K., Hensher, D. A., Stanley, J. R., & Vella-Brodrick, D. (2011). Mobility, social exclusion and well-being: Exploring the links. *Transportation Research Part A*, 45, 789–801. doi:10.1016/j.tra.2011.06.007
- Statista. (2017a). *Number of daily active Instagram users from October 2016 to January 2017 (in millions)*. Retrieved from <https://www.statista.com/statistics/657823/number-of-daily-active-instagram-users/>
- Statista. (2017b.) *Number of monthly active Twitter users worldwide from 1st quarter 2010 to 4th quarter 2016 (in millions)*. Retrieved from <https://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/>
- Statistics Canada. (2012a). Focus on Geography Series, 2011 Census (Catalogue no. 98-310-XWE2011004). Ottawa, Canada: Statistics Canada. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=938>
- Statistics Canada. (2012b). Census profile: Nanaimo, British Columbia (Code 5921007) and Nanaimo, British Columbia (Code 5921) (Catalogue no. 98-316-XWE). Ottawa, Canada: Statistics Canada. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=5921007&Geo2=CD&Code2=5921&Data=C&SearchText=nanaimo&SearchType=Begin&SearchPR=01&B1=All&Custom=&TABID=1>
- Statistics Canada. (2012c). Census profile: British Columbia (Code 59) and Canada (Code 01) (Catalogue no. 98-316-XWE). Ottawa, Canada: Statistics Canada. Retrieved from

EXPLORING LEISURE MOBILITY OF MILLENNIALS

<http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/details/Page.cfm?Lang=E&Geo1=PR&Code1=59&Geo2=PR&Code2=01&Data=Count&SearchText=British%20Columbia&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=59>

Statistics Canada. (2012d). *Labour force characteristics, population 15 years and older, by economic region, by province (Manitoba, Saskatchewan, Alberta, British Columbia)* (Catalogue no. 71-001-X). Ottawa, Canada: Statistics Canada. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/labor36c-eng.htm>

Statistics Canada. (2012e). *Focus on geography series, 2011 census – census agglomeration of Nanaimo* (Catalogue no. 98-310-XWE2011004). Ottawa, Canada: Statistics Canada. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=938>

Statistics Canada. (2015). *Motor vehicle accidents causing death, by sex and by age group (both sexes no.)* (Table 379-0031). Ottawa, Canada: Statistics Canada. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/health112a-eng.htm>

Strandell, A., & Hall, C. M. (2015). Impact of the residential environment on second home use in Finland – Testing the compensation hypothesis. *Landscape and Urban Planning, 133*, 12–23. doi:10.1016/j.landurbplan.2014.09.011

Sustainable Calgary. (2015). Active neighbourhoods Calgary. Retrieved from <http://sustainablecalgary.org/home/active-neighbourhoods-calgary/>

Sustrans. (2015). Celebrating 20 years of the network. Retrieved from <http://www.sustrans.org.uk/ncn/map/national-cycle-network/celebrating-20-years-network>

Tara, V. (2014). Attracting and retaining talent in Canadian cities: Towards a holistic view?. In G., Jill (Ed.), *Seeking talent for creative cities: The social dynamics of innovation* (pp. 31-56). Toronto, Canada: University of Toronto Press. Retrieved from <http://site.ebrary.com/lib/viu/readerivg.action?ppg=246&docID=10840615&tm=1477181805233>

Thatcher, A., & Yeow, P. H. P. (2016). Human factors for a sustainable future. *Applied Ergonomics, 57*, 1–7. doi:10.1016/j.apergo.2016.05.007

The Centre for Sustainable Transportation. (2002). *Definition and vision of sustainable transportation*. Mississauga, Canada. Retrieved from

EXPLORING LEISURE MOBILITY OF MILLENNIALS

http://cst.uwinnipeg.ca/documents/Definition_Vision_E.pdf

The City of Calgary. (2009). *Calgary transportation plan*. Calgary, Canada. Retrieved from https://www.calgary.ca/Transportation/TP/Documents/CTP2009/calgary_transportation_plan.pdf

The World Bank. (2010). *Urban accessibility and mobility index: Federal stage report*. Washington, DC: Author. Retrieved from <https://openknowledge.worldbank.org/handle/10986/18522>

The World Bank. (2016a). *Population ages 65 and above (% of total)*. Retrieved from <http://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?end=2015&locations=CA-1W&start=1965&view=chart>

The World Bank. (2016b). *Population, ages 15-64 (% of total)*. Retrieved from <http://data.worldbank.org/indicator/SP.POP.1564.TO.ZS?end=2015&locations=CA-1W&start=1965&view=chart>

The World Bank. (2016c). *Population, ages 0-14 (% of total)*. Retrieved from <http://data.worldbank.org/indicator/SP.POP.0014.TO.ZS?end=2015&locations=CA-1W&start=1965&view=chart>

The World Bank. (2016d). *Mortality caused by road traffic injury (per 100,000 people)*. Retrieved from <http://data.worldbank.org/indicator/SH.STA.TRAF.P5?locations=CA-1W-VN-OE&view=chart>

Thielman, J., Rosella, L., Copes, R., Lebenbaum, M., & Manson, H. (2015). Neighborhood walkability: Differential associations with self-reported transport walking and leisure-time physical activity in Canadian towns and cities of all sizes. *Preventive Medicine, 77*, 174–180. doi:10.1016/j.ypmed.2015.05.011

Thompson, D. (2012, April 5). *How America spends money: 100 years in the life of the family budget* [Web log post]. Retrieved from <http://www.theatlantic.com/business/archive/2012/04/how-america-spends-money-100-years-in-the-life-of-the-family-budget/255475/>

Transport Canada. (2013). *Canadian motor vehicle traffic: Collision statistics 13*. Retrieved from https://www.tc.gc.ca/media/documents/roadsafety/cmvtcs2013_eng.pdf

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Transport Canada. (2014). *Transport Canada's departmental sustainable development strategy 2014-2015 planning update*. Retrieved from <http://www.tc.gc.ca/eng/policy/acs-sd-menu-3124.html>
- Transport Canada. (2016). *Sustainable development*. Retrieved from <https://www.tc.gc.ca/eng/policy/acs-sd-menu.htm>
- Tsenkova, S., & Damiani, R. (2009). Urban sustainability: Learning from evaluation of community plans in Calgary. *Canadian Journal of Urban Research*, 18(1), 24-47. Retrieved from <http://ezproxy.viu.ca/login?url=http://search.proquest.com.ezproxy.viu.ca/docview/208740056?accountid=12246>
- Tucker, A. (2008). *Staff report: Official community plan 10-year review update*. Nanaimo, Canada. Retrieved from https://www.nanaimo.ca/assets/Departments/Community~Planning/Offical~Community~Plan~10~Year~Review/Background~Information/OCP~Public~Review~Process/OCP_UCB_update_report_Jan10_08.pdf
- Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117–1142. doi:10.1177/0149206309352246
- UBS Switzerland AG. (2016). *UBS global real estate bubble index for housing markets of select cities 2016*. Retrieved from https://www.ubs.com/global/en/wealth_management/chief-investment-office/investment-views/global-bubble-index.html
- United Nations Department of Economic and Social Affairs. (2014, July 10). *World's population increasingly urban with more than half living in urban areas*. Retrieved from <http://www.un.org/en/development/desa/news/population/world-urbanization-prospects.html>
- United Nations Department of Economic and Social Affairs. (2015). *Goal 11*. Retrieved from <https://sustainabledevelopment.un.org/sdg11>
- United Nations Department of Economic and Social Affairs. (2015b, July 29). *World population projected to reach 9.7 billion by 2050*. Retrieved from <http://www.un.org/en/development/desa/news/population/2015-report.html>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- United Nations Department of Economic and Social Affairs. (2016a). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- United Nations Department of Economic and Social Affairs. (2016b). *Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable*. Retrieved from <https://sustainabledevelopment.un.org/sdg11>
- United Nations Department of Economic and Social Affairs. (2016c). *Sustainable transport*. Retrieved from <https://sustainabledevelopment.un.org/topics/sustainabletransport>
- United Nations Human Settlements Programme. (2013). *Cities of youth: Cities of prosperity*. Retrieved from <http://unhabitat.org/books/cities-of-youth-cities-of-prosperity/>
- United Nations Human Settlements Programme. (2015). *UN-HABITAT global activities report 2015: Increasing synergy for greater national ownership*. Retrieved from <http://unhabitat.org/books/un-habitat-global-country-activities-report-2015-increasing-synergy-for-greater-national-ownership/>
- United Nations, Framework Convention on Climate Change. (2015). *Adoption of the Paris agreement: Proposal by the President, FCCC/CP/2015/L.9*. Retrieved from <http://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf>
- United Nations. (2016). *Sustainable development goals: 17 goals to transform our world*. Retrieved from <http://www.un.org/sustainabledevelopment/>
- University of California, Berkeley. (n.d.). *CoolClimate Maps*. Retrieved from <http://coolclimate.berkeley.edu/maps>
- Universum. (2016a). *Stereotypes about millennials*. Retrieved from <http://universumglobal.com/insights/stereotypes-millennials/>
- Van Dyck, D., Deforche, B., Cardon, G., & De Bourdeaudhuij, I. (2009). Neighbourhood walkability and its particular importance for adults with a preference for passive transport. *Health and Place, 15*(2), 496–504. doi:10.1016/j.healthplace.2008.08.010
- Vancouver Island University. (2016). *International education*. Retrieved from <https://calendar.viu.ca/international-education>
- Vancouver Island University. (2016). *Management*. Retrieved from <https://management.viu.ca/>
- Vancouver Island University. (n.d.). About Vancouver Island University. Retrieved from <https://www2.viu.ca/about.asp>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Vancouver Island. (2015). Welcome. Retrieved from <http://www.vancouverisland.travel/>
- Vancouver Island. (2016). *Regions and towns*. Retrieved from <http://vancouverisland.com/plan-your-trip/regions-and-towns/>
- VIA Rail Canada. (2017). *Nanaimo train station*. Retrieved from <http://www.viarail.ca/en/explore-our-destinations/stations/rockies-and-pacific/nanaimo>
- Vincos Blog. (n.d.). *World maps of social network*. Retrieved from <http://vincos.it/world-map-of-social-networks/>
- Welle, B., Liu, Q., Li, W., Adiazola-Steil, C., King, R., Sarmiento, C., & Obelheiro, M. (2015). *Cities safer by design: Guidance and examples to promote traffic safety through urban and street design*. Washington, USA. Retrieved from http://www.wri.org/sites/default/files/CitiesSaferByDesign_final.pdf
- Wilson, R. E., Gosling, S. D., & Graham, L. T. (2012). A review of facebook research in the social sciences. *Perspectives on Psychological Science*, 7(3), 203–220. doi:10.1177/1745691612442904
- Winograd, M., & Hais, M. (2014). *How Millennials could upend Wall Street and corporate America*. Washington, D.C., USA. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/06/Brookings_Winogradfinal.pdf
- Witkowski, J., & Kiba-Janiak, M. (2012). Correlation between city logistics and quality of life as an assumption for referential model. *Procedia - Social and Behavioral Sciences*, 39, 568–581. doi:10.1016/j.sbspro.2012.03.131
- Worland, J. (2015, September 27). Cars banned from Paris streets for the day. Retrieved from <http://time.com/4051345/paris-car-free-streets/>
- World Health Organisation. (2016a). *Climate impacts*. Retrieved from <http://www.who.int/sustainable-development/transport/health-risks/climate-impacts/en/>
- World Health Organisation. (2016b). *Physical activity and adults*. Retrieved from http://www.who.int/dietphysicalactivity/factsheet_adults/en/
- World Health Organisation. (2016c). *Traffic injury*. Retrieved from <http://www.who.int/sustainable-development/transport/health-risks/traffic-injury/en/>
- World Health Organisation. (2016d). *Physical activity*. Retrieved from <http://www.who.int/sustainable-development/transport/health-risks/physical-activity/en/>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

World Health Organisation. (2016e). *Noise*. Retrieved from <http://www.who.int/sustainable-development/transport/health-risks/noise/en/>

World Health Organisation. (2016f). *Transport and health equity*. Retrieved from <http://www.who.int/sustainable-development/transport/health-equity/en/>

Yves, B. (2015). Small cities as talent accelerators: Talent mobility and knowledge flows in Moncton. In G., Jill (Ed.), *Seeking talent for creative cities: The social dynamics of innovation* (pp. 219-239). Toronto, Canada: University of Toronto Press. Retrieved from <http://site.ebrary.com/lib/viu/reader.action?ppg=246&docID=10840615&tm=1477181805233>

APPENDICES

Appendix A – Sustainable Development Goals (UN DESA, 2016a)

Goal 1. End poverty in all its forms everywhere

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts*

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix B – Images of the City of Nanaimo



Neck Point Park



Beach Estates Park with a BC Ferry docking at Departure Bay in the background.

EXPLORING LEISURE MOBILITY OF MILLENNIALS



Partial view of the City of Nanaimo from the summit of Mount Benson.



The Port Theatre with Coast Bastion Hotel in the background, Downtown Nanaimo.

EXPLORING LEISURE MOBILITY OF MILLENNIALS



Vancouver Island Conference Centre, Downtown Nanaimo.

Appendix C – Leisure Mobility Styles by Götz et al. (2003)

The Fun-Oriented (FUN).

For this group, the availability of material resources and lifestyles are relatively decoupled from each other. Their main interests lie in the opportunities to experience leisure and have fun with friends. That includes taking risks as well as the engagement with and ownership of modern technologies.

a. Constitutive orientations:

- Individualistic fun, experience and risk orientations
- Affinity with modern technology
- Strong reference to (peer) groups
- Dislike towards kinships and neighbourly relationships
- Self-centred conscience
- Instrumental work-orientation

b. Social situation:

- Younger people are over-represented
- The majority is in education and training, as well as self-employed
- Below-average household net income
- Highest educational qualifications
- Highest proportion of singles with approximately two-thirds

The Modern-Exclusives (MOD-EX).

This group represents the modern mainstream, who possess both material and educational resources.

a. Constitutive orientations:

- Strong career-orientation and high job satisfaction
- Exclusivity and modernity-orientation
- Affinity with anything that is “in”, such as, for example, stock, internet, exclusive brand clothing
- But they also have distinct, yet measured, family orientation
- Openness to social justice and ecology
- Strongest affinity with technology

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Insist on gender-specific division of work
- b. Social situation:
 - Men is represented slightly above average
 - Medium to higher school qualifications
 - Above-average household net income
 - Greatest proportion of full-time employees
 - Approximately two-thirds live in a couple or a family set-up
 - 40% have children in the household

The Overburdened Family-Oriented (OVER-FAM).

The OVER-FAM group leads a strong family-oriented life. Their daily lives are mostly influenced by duties, by which they feel overwhelmed.

- a. Constitutive orientations:
 - Very strong family values
 - Demonstrate a domestic, neighbourly orientation
 - Slightly above-average willingness to purchase environmentally-friendly products
 - Strong neighbour values
 - Suffer from the problems associated with the insufficient delineation of work, domestic chores and leisure
 - Feel over-loaded and over-strained
- b. Social situation:
 - Almost two-thirds are women
 - Highest proportion of part-time employees
 - Average household net income
 - 70% live in a couple or family set-up
 - Nearly 50% have children living in the household, almost a third have two or more children

The Disadvantaged (DIS).

The DIS group members define themselves primarily through their instrumental work-orientation, which is the result of an underprivileged social situation.

- a. Constitutive orientations:

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Demonstrate an instrumental work-orientation
- Barely developed lifestyle-specific orientations, except for the above-average agreement to the item: “Enjoy drinking one over the eight with my friends”
- b. Social situation:
 - Men slightly over-represent
 - Low educational qualifications
 - Low household net income
 - Above-average unemployment rate
 - Highest proportion of blue-collar workers
 - Highest proportion of social welfare recipients and unemployment

The Traditional-Domestics (TRAD).

This final group represents a lifestyle segment of the conservative elders. They basically stay within their familiar, safe environment and loath the unknown. On the basis of their value system, they are open to aspects of sustainability.

- a. Constitutive orientations:
 - Orientation towards security and avoidance of all risks
 - Preference for durability and proximity to nature
 - Orientation towards traditional values and virtues
 - Strong reservations against modern technology
- b. Social situation:
 - 56% are women
 - Over-representation of the oldest age groups
 - Two-thirds are not employed, 58% are retirees
 - Above-average number of widows
 - Low educational qualifications
 - Low household net income/pensions

Appendix D – Leisure Mobility Styles by Ohnmacht et al. (2009)

The Sporty Types (SPO).

- Appreciate active sports such as cycling, winter sports, and hiking, as well as passive sports such as visiting a sports event
- Enjoy using the Internet, but are not into passive forms of leisure activity such as idle relaxation or watching television
- The bicycle is a popular form of transport (most households have at least one bicycle), but this type also favours the car for long-distant journeys
- Dislike walking, which seems inconsistent with their sporty and dynamic lifestyle, but they consider walking too slow
- More frequently men and more likely to be between 18 and 29 years of age
- A relatively large share lives in households with children
- Occurs more often in high-income household groups
- Rarely interested in high culture, such as opera and theatre

The Fun and Distraction Seekers (FUN).

- Somewhat younger and technically minded (18–29 years)
- Oriented towards entertainment electronics, such as personal computers, and television
- Tend to spend leisure time in idle relaxation
- Hanging out with friends is an important means of maintaining their social networks
- Enjoy partying or going to restaurants, pubs, bars, or cafe's in the company of friends
- Very strong affinity to the car and shuns other modes of transport (have fewer bicycles and are less likely to make regular use of public transport than the average). For them, the car is not just for locomotion but is also a form of material prestige and a symbol of social integration.
- Frequently live in bigger cities with more than 200,000 citizens

The Culture-Oriented (CUL).

- High educational levels
- Enjoy various leisure activities: playing and listening to music, visiting exhibitions or galleries, reading books, and acquiring additional education

EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Actively committed to community work
- Mainly favour walking, biking (have more bicycles per household than average), and the use of public transport to participate in leisure activities due to their criticism of the car based on ecological considerations
- Disproportionately high number of women
- More likely to be middle-aged (30 to 59 years)
- Households with children occur to a lesser extent than average

The Neighbourly Home-Lovers (HOME).

- Tradition-oriented
- High family values and a sense of security, oriented towards domestic and neighbour
- Gender division:
 - Preferred leisure activities:
 - Men: gardening and home improvement
 - Women: shopping
 - Preferred mode of transport:
 - Men: car, which is rated as a sign of social integration
 - Women: public transport.
- Both genders dislike the idea of cycling and consider it exhausting, inconvenient, and dangerous, a fact that is also reflected in the lower number of bicycles per household
- High degree of sociability
- Favourite pastimes: visiting restaurants and playing cards in the company of friends
- Over-represented by women, older people (60+ years), and people on a middle income

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix E – Instruction for Feedback for the Pilot Study

1. Time yourself.
2. Check if all the links work.
3. Try to go back and forth the pages (once is enough) to see if there's any problem.
4. Notice any questions that are repetitive.
5. Notice any words or questions that are ambiguous or unclear.
6. Any suggestions?

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix F – Recruitment Script

RECRUITMENT SCRIPT

What do you think about transportation in Nanaimo? Safe and reliable? Lots of bike lanes? Enough/too many parking lots? Walkable? Excellent bus services? Is it easy peasy for you to go try that new hiking trail? Or go watch that new Star Wars movie? Or simply go and grab a beer with your friends?

Tell me your stories, attract more attention to the needs of Millennials, and help contribute to sustainable development in Nanaimo (which, by the way, also helps me complete my Master's study ;)).

Sustainable transportation is part of sustainable development, and is on the agenda of many cities in their effort to tackle climate change along with other social and economic issues. Sustainable transportation includes better public transit, more bike lanes, and more opportunities to walk to places safely and conveniently.

If you are between 20 and 32 years old, you are considered a Millennial like me, and the world's future depends on us! Therefore, please join me and share your stories of how you get from A to B to spend leisure time in Nanaimo. There're 3 ways to do that:

1. Click on this link (or scan this QR code) to access my online survey: [Link or QR code]
2. Join my FB group discussion: [FB group link or QR code here]
3. Participate in the focus groups: Friday, January 20, 2017, 1:30 PM – 3:30 PM.

All focus groups will take place at VIU Campus, Building 250, Room 402 (refreshments included).

Please RSVP to lan.diem193@gmail.com, or on the FB event page: [link or QR code]

And please join my Facebook page Fun on the Move [link]. It's also the best way to get more information and updates about my project.

Of course, to appreciate your effort, there'll be a prize draw for 2 lucky winners. Each person can only win one prize. The prizes will be [TBA].

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Completing the online survey, answering all the questions on my FB page, and participating in a focus group will earn you one entry each. That means you'll get 3 entries into the draw if you participate in all of them!

Please contact me at 2507975897 or lan.diem193@gmail.com if you have any questions. I look forward to hearing your stories!

Appendix G – Logo and Banner



EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix H – Examples of Promotional Materials on Facebook

 **Fun on the Move**
25 February · Nanaimo, BC · *

Hello Nanaimo! I need only 60 more responses for my online survey for my Master's thesis before the end of next week. Please help me out! Thanks!
www.surveymonkey.com/r/nanaimobility



Leisure Mobility Questionnaire Survey

Web survey powered by SurveyMonkey.com. Create your own online survey now with SurveyMonkey's expert certified FREE templates.

SURVEYMONKEY.COM [Learn More](#)

2,855 people reached [View Results](#)

Like Comment Share

10 Chronological

13 shares

 **Fun on the Move**
21 February · *

A blog on Greater Nanaimo Cycling Coalition about my study. Did you participate? If not, do it now! www.surveymonkey.com/r/nanaimobility
<http://bikesense.org/blog/blog34.html>



FUN ON THE MOVE

Fun on the Move Study

A study on how Millennials travel in their community

BIKESENSE.ORG [Learn More](#)

99 people reached [Boost post](#)

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix I – Examples of Promotional Materials on Twitter

 **Lan Tran** @LanT193 · 24 janv.
Participate in my Master's study on #leisure #mobility and fill out my #survey!
surveymonkey.com/r/nanaimobility #nanaimo #millennial #transportation

À l'origine en anglais



City of Nanaimo, Nanaimo Bulletin, Tourism Nanaimo and 2 others

1

 **Lan Tran** @LanT193 · 5 févr.
MILLENNIALS OF NANAIMO, YOU'RE NEEDED! Join my online group discussion for my Master's study and win a prize! bit.ly/2jtQjso

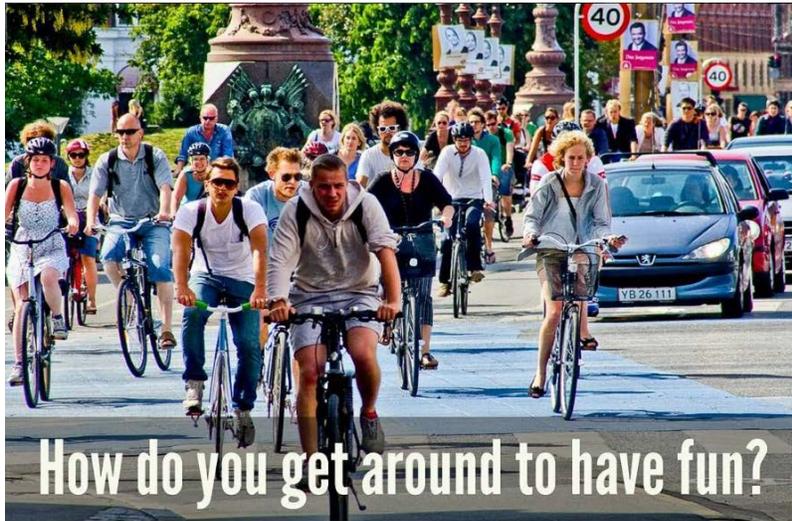
À l'origine en anglais



you can join the conversation
whenever you wish to
it'll be fun, I promise!

1

Appendix J – Examples of Promotional Materials on Instagram



Master's Thesis on Leisure Mobility in Nanaimo

PARTICIPANTS NEEDED



fleurauchocolat
Nanaimo

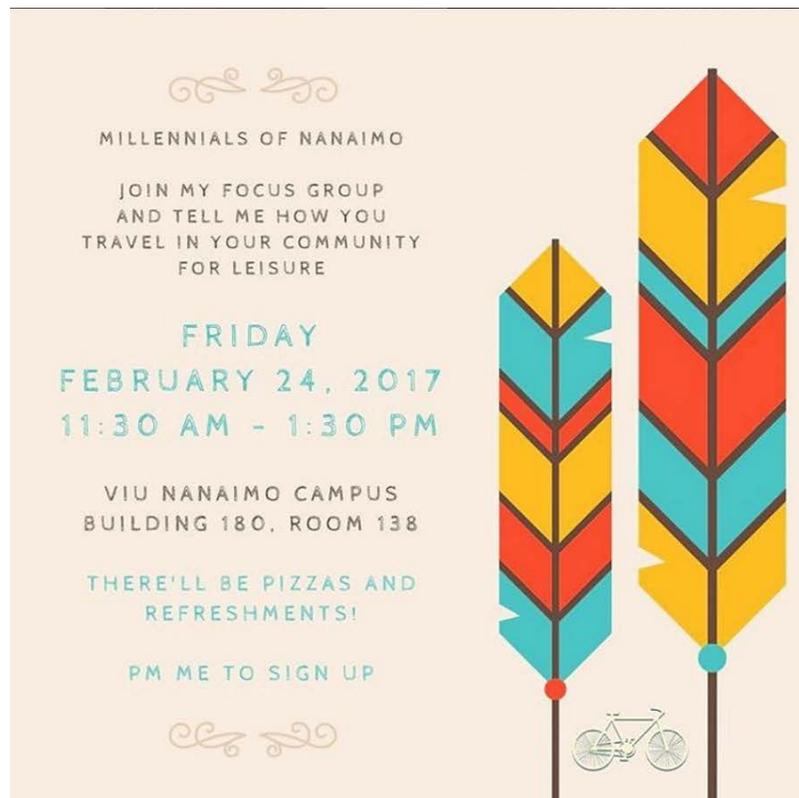
40 J'aime

12 sem

fleurauchocolat I'm doing my Master's thesis on leisure mobility. If you're between 20 and 32 years old and have been living in Nanaimo for minimum 6 months, I NEED YOU! Please fill in my survey (link in profile) and follow my FB page (facebook.com/nanaimobility) to learn about other ways to participate as well as more info and update about the study. Cheers! #leisure #mobility #sustainability #transportation #thesis #environment #urban #social #city #development #ilearnhere #nanaimo #britishcolumbia #canada #master #research

- islandimpactmarketing Great pic! ✕
- viu_rectour All the best ... ✕
- fleurauchocolat Thanks ✕
- @islandimpactmarketing! I Googled the photo and then used canva.com to create this. 😊

♡ Ajouter un commentaire...



fleurauchocolat
Nanaimo

40 J'aime

8 sem

fleurauchocolat #leisure #mobility #viu #worldviu #ilearnhere #matterhere #master #thesis #research #explorenanaimo #nanaimo #transportation #sustainability #sustainable #development #millennial #canada #focusgroup #bctransit #regionaldistrictofnanaimo #environment #social #economy

- audrey_yanru 🍕 ✕
- al.moya Wow like it! ✕

♡ Ajouter un commentaire...

Appendix K – Promotional Poster

HOW DO **YOU** GET AROUND TO HAVE FUN?

You're between 20 & 32 years old and have been living in Nanaimo for minimum 6 months?

Participate in my study and help me understand more about leisure mobility of Millennials in Nanaimo!

(It'll also help me complete my Master's thesis ☺)

How? Through 3 different ways:

 Fill in my online survey:
surveymonkey.com/r/nanaimobility

 or scan here!

 Join my Facebook group discussion
follow my Facebook page for more details:
facebook.com/nanaimobility

or scan here! 

Participate in my focus group (  included)

Date: Friday, Feb 24, 2017
Time: 11:30 - 13:30
Location: B. 180, R. 138, VIU
Please RSVP at lan.diem193@gmail.com

LEISURE. MILLENNIALS. NANAIMOBILITY

Appendix L – Infographic about the Study

An Overview of my Master's thesis on

Leisure Mobility of Millennials in Nanaimo

By 2050  of the world's population will be living in cities 

This can be good news  or bad news  depending on how cities are developed.

Transportation is important in sustainable development as it accounts for  of a city's environmental footprint

Millennials have been shown to  prefer sustainable transit

 want to enjoy a high quality of life, which includes diverse leisure activities

Understanding the needs of this generation is **important for Nanaimo's future**

The purpose of this study is to
identify the role that transportation plays in accessing leisure opportunities for Millennials living in Nanaimo.

If you   are between 20 and 32 years old &  have been living in Nanaimo for minimum 6 months

I need you!

How to participate in my study

Option 1
Fill in my online survey 

Option 2
Join my Facebook group discussion 

Option 3
Participate in my focus group 

You can participate in any of them, or all!

Like and follow my study's Facebook page to learn more about how you can participate and keep yourself informed about my study:
facebook.com/nanaimobility 

powered by  **Piktochart**
make information beautiful

Appendix M – Thank You Message

The online survey was closed today and that officially marked the end of my data collection. 336 responses, 16 participants for the FB group discussion and 9 participants for the focus group. WOW! Thank you! Merci! Danke! Gracias! धन्यवाद! 谢谢! From completing my survey, participating in my group discussions, to sharing my study and talking about it, you have no idea how much that means to me. I'll be contacting the winners for the 2-for-1 admission pass to [Oliver Woods Community Centre](#) by latest tomorrow or Wednesday. Stay tuned for the results of my research. Again, thank you so much! Have a fabulous week ahead everyone!



EXPLORING LEISURE MOBILITY OF MILLENNIALS



* 2. Are you between 20 and 32 years old and have been living in Nanaimo for minimum 6 months?

Yes

No

EXPLORING LEISURE MOBILITY OF MILLENNIALS



3. Which of the following leisure activities do you like doing? (please select all that apply)

- Visiting family, friends, neighbours, etc.
- Restaurants, cafes, bars
- Indoor activities (e.g., board/card games, watching TV, baking, etc.)
- Indoor sports (e.g., fitness, aerobic, ice hockey, etc.)
- Art & cultural activities (e.g., cinemas, theatres, museums, galleries, etc.)
- Volunteering/engaging with associations outside of work/school (e.g., religious groups, Toastmaster, etc.)
- Shopping (exclude grocery shopping)
- Relaxing in nature (e.g., gardening, walking a dog, strolling in the park, etc.)
- Outdoor activities (e.g., hiking, pick-nick, canoeing, skiing, cycling, etc.)
- Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland

EXPLORING LEISURE MOBILITY OF MILLENNIALS



4. How often do you participate in the following leisure activities?

	Daily	More than once a week	Once a week	Once a month	Once a year	Never
Visiting family, friends, neighbours, etc.	<input type="radio"/>					
Restaurants, cafes, bars	<input type="radio"/>					
Indoor activities (e.g., board/card games, watching TV, baking, etc.)	<input type="radio"/>					
Indoor sports (e.g., fitness, aerobic, ice hockey, etc.)	<input type="radio"/>					
Art & cultural activities (e.g., cinemas, theatres, museums, galleries, etc.)	<input type="radio"/>					
Volunteering/engaging with associations outside of work/school (e.g., religious groups, Toastmaster, etc.)	<input type="radio"/>					
Shopping (<u>exclude</u> grocery shopping)	<input type="radio"/>					

EXPLORING LEISURE MOBILITY OF MILLENNIALS

	Daily	More than once a week	Once a week	Once a month	Once a year	Never
Relaxing in nature (e.g., gardening, walking a dog, strolling in the park, etc.)	<input type="radio"/>					
Outdoor activities (e.g., hiking, pick-nick, canoeing, skiing, cycling, etc.)	<input type="radio"/>					
Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland	<input type="radio"/>					

EXPLORING LEISURE MOBILITY OF MILLENNIALS



5. Which of the following leisure activities do you **wish** to participate in more often? (please select all that apply)

- Visiting family, friends, neighbours, etc.
- Restaurants, cafes, bars
- Indoor activities (e.g., board/card games, watching TV, baking, etc.)
- Indoor sports (e.g., fitness, aerobic, ice hockey, etc.)
- Art & cultural activities (e.g., cinemas, theatres, museums, galleries, etc.)
- Volunteering/engaging with associations outside of work/school (e.g., religious groups, Toastmaster, etc.)
- Shopping (exclude grocery shopping)
- Relaxing in nature (e.g., gardening, walking a dog, strolling in the park, etc.)
- Outdoor activities (e.g., hiking, pick-nick, canoeing, skiing, cycling, etc.)
- Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland

6. Why can't you participate in those activities more often?

EXPLORING LEISURE MOBILITY OF MILLENNIALS



7. Where do you usually do the following leisure activities? (please select all that apply)

	Downtown Nanaimo		Malls/Shopping plazas in Nanaimo		The suburb/At home		VIU	Other cities/towns within a 30-min drive		Other cities/towns beyond a 30-min drive		Natural spaces in Nanaimo		Natural spaces within a 30-min drive from Nanaimo		Natural spaces beyond a 30-min drive from Nanaimo		N/A
Visiting family, friends, neighbours, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants, cafes, bars	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indoor activities (e.g., board/card games, watching TV, baking, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Indoor sports (e.g., fitness, aerobic, ice hockey, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Art & cultural activities (e.g., cinemas, theatres, museums, galleries, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteering/engaging with associations outside of work/school (e.g., religious groups, Toastmaster, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXPLORING LEISURE MOBILITY OF MILLENNIALS

	Downtown Nainaimo		Malls/Shopping plazas in Nainaimo		The suburb/At home		VIU	Other cities/towns within a 30-min drive		Other cities/towns beyond a 30-min drive		Natural spaces within a 30-min drive from Nainaimo		Natural spaces beyond a 30-min drive from Nainaimo		N/A	
Shopping (exclude grocery shopping)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relaxing in nature (e.g., gardening, walking a dog, strolling in the park, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor activities (e.g., hiking, pick-nick, canoeing, skiing, cycling, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXPLORING LEISURE MOBILITY OF MILLENNIALS



8. How do you access the following leisure activities? (please select all that apply)

	Driving (alone)		Driving (carpool)		Taxi	Bus/Coach		Walking		Biking		Ferry		Seaplane		N/A	
Visiting family, friends, neighbours, etc.	<input type="checkbox"/>																
Restaurants, cafes, bars	<input type="checkbox"/>																
Indoor activities (e.g., board/card games, watching TV, playing video games, baking, etc.)	<input type="checkbox"/>																
Indoor sports (e.g., fitness, aerobic, ice hockey, etc.)	<input type="checkbox"/>																
Art & cultural activities (e.g., cinemas, theatres, museums, galleries, etc.)	<input type="checkbox"/>																
Volunteering or engaging with associations outside of work/school (e.g., religious groups, Toastmaster, etc.)	<input type="checkbox"/>																
Shopping (exclude grocery shopping)	<input type="checkbox"/>																

EXPLORING LEISURE MOBILITY OF MILLENNIALS

	Driving (alone)		Driving (carpool)		Taxi		Bus/Coach		Walking		Biking		Ferry		Seaplane		N/A	
Relaxing in nature (e.g., gardening, walking a dog, going for a walk in the park, etc.)	<input type="checkbox"/>																	
Outdoor activities (e.g., hiking, pick-nick, canoeing, skiing, cycling, etc.)	<input type="checkbox"/>																	
Nature breaks, wellness retreats (maximum stay of 2 nights) within Vancouver Island, Sunshine Coast, Vancouver & Lower Mainland	<input type="checkbox"/>																	



EXPLORING LEISURE MOBILITY OF MILLENNIALS

9. How much do you agree with each of the following statement?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	N/A
I enjoy the promixity to nature that Nanaimo offers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can easily reach the places where I participate in leisure activities in Nanaimo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can easily reach the locations of any leisure activities outside of Nanaimo on Vancouver Island.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish that there were more urban leisure activities in Nanaimo (eg. shopping, nightlife, restaurants, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation is a barrier to accessing my leisure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being able to access leisure places influences where I decide to live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish that there was more accessible public transportation in Nanaimo.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

EXPLORING LEISURE MOBILITY OF MILLENNIALS



10. Do you have a driver's license?

Yes

No

11. *If not, why?*

12. Do you have access to a car?

Yes

No

13. *If not, why?*

EXPLORING LEISURE MOBILITY OF MILLENNIALS

14. Do you have access to a bicycle?

Yes

No

15. *If not, why?*

16. Do you live close to a bus stop (within a 10-minute walk)?

Yes

No

EXPLORING LEISURE MOBILITY OF MILLENNIALS



17. Please list out three adjectives that best describe a car for you in general.

Adjective 1:

Adjective 2:

Adjective 3:

18. Please list out three adjectives that best describe public transit for you in general.

Adjective 1:

Adjective 2:

Adjective 3:

19. Please list out three adjectives that best describe a bicycle for you in general.

Adjective 1:

Adjective 2:

Adjective 3:

EXPLORING LEISURE MOBILITY OF MILLENNIALS



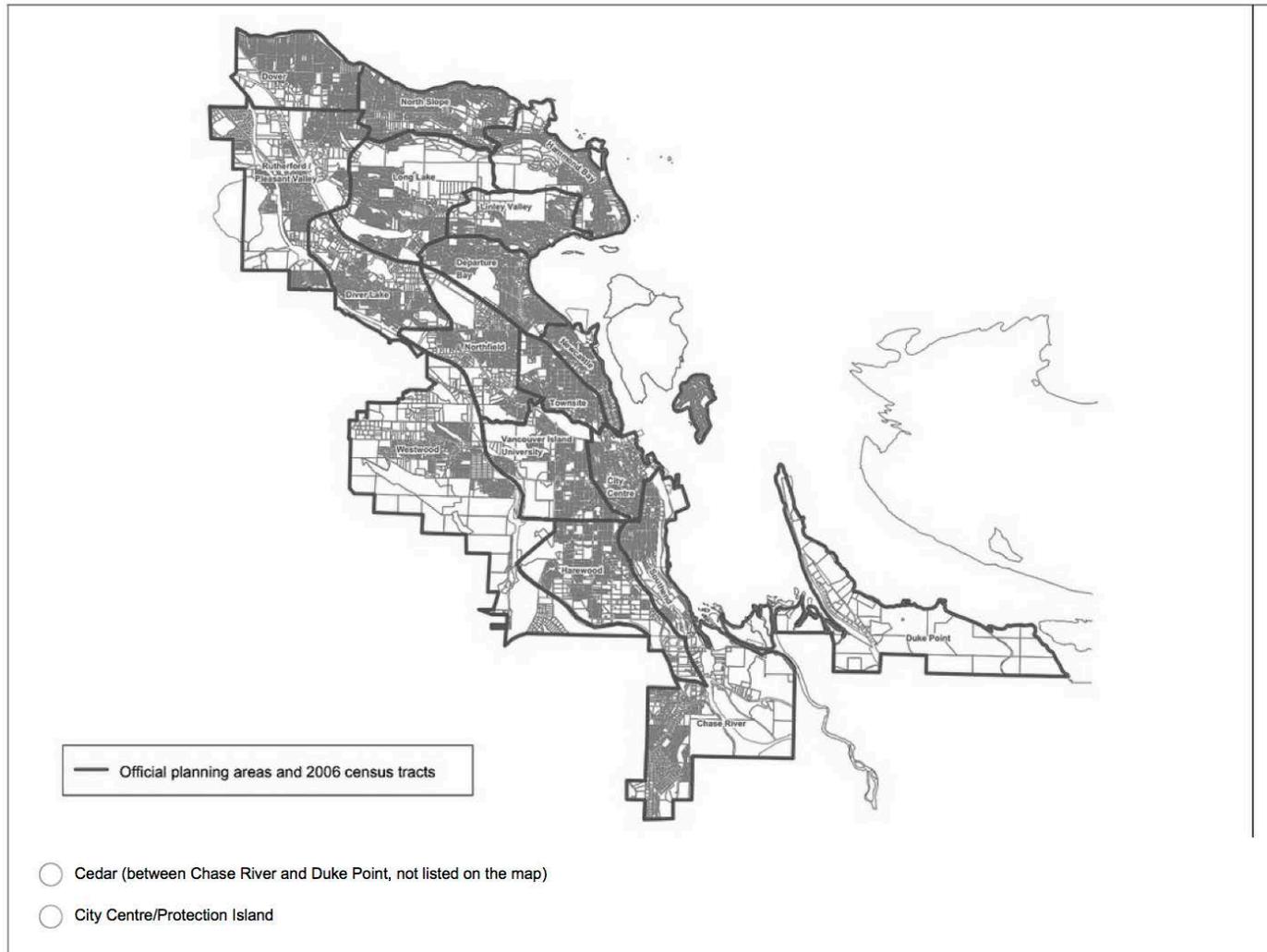
20. What improvements would you make to Nanaimo's transportation system/infrastructure if any?

21. How happy are you with the current transportation system/infrastructure of Nanaimo? (please choose between 1 and 5 hearts, with 5 being the happiest)



22. In which neighbourhood in Nanaimo do you live?

EXPLORING LEISURE MOBILITY OF MILLENNIALS



EXPLORING LEISURE MOBILITY OF MILLENNIALS

- Departure Bay
- Diver Lake
- Dover
- Hammond Bay
- Harewood
- Linley Valley
- Long Lake
- Newcastle
- Northfield
- North Slope
- Old City/Vancouver Island University
- Pleasant Valley/Turner
- Southend/Duke Point/Chase River
- Townsite
- Westwood

23. What is your age?

- 20 to 24
- 25 to 29
- 30 to 32

EXPLORING LEISURE MOBILITY OF MILLENNIALS

24. What is your gender?

- Female
- Male
- Transgender Female
- Transgender Male
- Gender Variant/Non-conforming
- Prefer not to answer
- Not listed:

25. What is the highest degree or level of education you have completed?

- High school graduate, diploma or the equivalent (e.g., GED)
- Trade/Technical/Vocational training
- Associate degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree

EXPLORING LEISURE MOBILITY OF MILLENNIALS

26. Which of the following categories best describes your employment status?

- Employed full-time (more than 20 hours per week)
- Employed part-time (20 or less hours per week)
- Participating in an internship or practicum placement
- Full-time student, working
- Full-time student, not working
- Part-time student
- Not employed, looking for work
- Not employed, NOT looking for work



Almost there!

27. How long have you been living in Nanaimo?

- 6 months - less than 1 year
- 1 - 3 years
- More than 3 years
- My whole life

EXPLORING LEISURE MOBILITY OF MILLENNIALS



28. Where did you spend the most part of your life before moving to Nanaimo? (please write down only one location, e.g. city: Québec; country: Canada)

City

Country



Well done! Thank you so much for your precious time!

If you wish to enter the draw for a two-for-one admission pass into the pools, arenas, and gymnasium drop-in programs at Oliver Woods Community Centre, please enter your email below.

You will be contacted via email if you win the prize. The draw result will also be posted on the [Facebook page](#) of the study.

29. My email address is:



Sorry, but only people who fit the criteria can participate. I appreciate your interest!



Appendix O – Research Consent Form Online Survey

RESEARCH CONSENT DISCLAIMER

“That Looks Awesome! How Do We Get There?”: Exploring Leisure Mobility Styles of Millennials in the City of Nanaimo

January, 2017

Lan Le Diem Tran

Master of Arts in Sustainable Leisure
Management

Vancouver Island University

250 797 5897

Nicole Vaugeois, PhD, Supervisor

BCRIC in Tourism & Sustainable Rural
Development

Vancouver Island University

250 753 3245, ext., 2772

Dear Participant,

Purpose: I am a student of the Master’s programme of Sustainable Leisure Management at Vancouver Island University located in Nanaimo, British Columbia, Canada. This program has a thesis component where students are required to complete a research project. I have designed a research project to identify the role that transportation plays in accessing leisure opportunities for Millennials currently living in Nanaimo. To participate in this study, you must be a young adult between the ages of 20-32 who has been living in Nanaimo for minimum 6 months.

Description: During this online survey, you will be asked to provide brief responses to questions provided. The types of questions that will be asked will relate to your engagement in leisure activities in Nanaimo, how you access them, as well as your view and opinions on transportation. You will also be asked demographic information such as age and your occupation or study programme. To recognize participation in this online survey, there will be a random draw for a pass provided by Nanaimo Parks and Recreation that grant two-for-one admission into the pools, arenas, and gymnasium drop-in programs at Oliver Woods Community Centre. There are 30 passes available for all participants of the online survey, the Facebook group discussion, and the focus group. Each participant can only win one pass. Each pass has a value of up to \$7 depending on the age of the person using it. The recipients of the passes will be notified by email and the announcement will also be posted on the study’s Facebook page. There are instructions at the end of this survey to inform you how to enter your name into the draw.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Confidentiality: As responses will be provided in the online survey will remain completely anonymous. None of your responses will be linked to your name or email account; responses will be automatically labeled with a number, to ensure anonymity. It is important to note that the study will be conducted on Survey Monkey, a US-based survey software service that uses US-based servers. As such, Survey Monkey is subject to the US security legislation, which may allow US officials to access any data obtained and stored on their servers. Accordingly, confidentiality of any information provided by the participant cannot be guaranteed. All data taken off of the SurveyMonkey site and printed will be kept in a locked file cabinet where only my thesis supervisor Nicole Vaugeois and myself will have access to the data. Electronic data files will be deleted and destroyed and printed files will be shredded two years – July 2019 – after the completion of this study. The results from this study will be reported in my written thesis report, in my oral thesis defense, and on the study’s Facebook page.

Participation: Your participation in this study is completely voluntary. You may at any time withdraw from the study without reason or explanation. You may choose to not to answer any question for any reason. As the data collected in the online survey is anonymous, it is important to note that if you decide to withdraw from the study, the data you have provided up to the point of your withdrawal will remain and be used in research results since it is not possible to distinguish your responses from those of other participants.

Consent: By selecting the “Yes” option to the question below in the survey, you are agreeing to the terms and conditions of this study. By doing so you will have agreed to having read the above form and agreeing that you have understood the information you have read, and also agreeing that you understand that you can ask questions or withdraw at any time.

If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics officer, by telephone at (250) 740-6631 or by email at reb@viu.ca.

If you have any questions about this research project, or would like more information, please feel free to contact me at lan.diem193@gmail.com.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix P – Privacy Settings for Facebook Groups

	Public	Closed	Secret
Who can join?	Anyone can join or be added or invited by a member	Anyone can ask to join or be added or invited by a member	Anyone, but they have to be added or invited by a member
Who can see the group's name?	Anyone	Anyone	Current and former members
Who can see who's in the group?	Anyone	Anyone	Only current members
Who can see the group description?	Anyone	Anyone	Current and former members
Who can see the group tags?	Anyone	Anyone	Current and former members
Who can see what members post in the group?	Anyone	Only current members	Only current members
Who can find the group in search?	Anyone	Anyone	Current and former members
Who can see stories about the group on Facebook (ex: News Feed and search)?	Anyone	Only current members	Only current members

Appendix Q – Research Consent Form Facebook Group Discussion

RESEARCH CONSENT FORM

“That Looks Awesome! How Do We Get There?”: The Journey towards Leisure of Millennials in the City of Nanaimo

January, 2017

Lan Le Diem Tran

Master of Arts in Sustainable Leisure
Management
Vancouver Island University
250 797 5897

Nicole Vaugeois, PhD, Supervisor

BCRIC in Tourism & Sustainable Rural
Development
Vancouver Island University
250 753 3245, ext., 2772

Purpose: I am a student of the Master’s programme of Sustainable Leisure Management at Vancouver Island University located in Nanaimo, British Columbia, Canada. This program has a thesis component where students are required to complete a research project. I have designed a research project to identify the role that transportation plays in accessing leisure opportunities for Millennials currently living in Nanaimo. To participate in this study, you must be a young adult between the ages of 20-32 who has been living in Nanaimo for minimum 6 months.

Description: During this study, you will be asked to provide brief responses to questions posted on the Facebook group. Your responses to each question can be as long as you desire and can take place anytime during the week; you can also respond to previously posted questions or questions/comments posed by other respondents at anytime throughout the course of the study. Please note that all questions, responses, and comments must be respectful of all participants involved in the study. This study has a zero tolerance for offensive or disrespectful comments directed towards anyone person. Please note that if comments are deemed as disrespectful or offensive you will be removed from the study immediately.

To recognize participation in this Facebook group discussion, there will be a random draw for a pass provided by Nanaimo Parks and Recreation that grant two-for-one admission into the pools, arenas, and gymnasium drop-in programs at Oliver Woods Community Centre. There are 30 passes available for all participants of the online survey, the Facebook group discussion, and the

EXPLORING LEISURE MOBILITY OF MILLENNIALS

focus group. Each participant can only win one pass. Each pass has a value of up to \$7 depending on the age of the person using it. The recipients of the passes will be notified by email and the announcement will also be posted on the study's Facebook page. Participants in the Facebook group will automatically be entered into the draw.

Confidentiality: Responses will not be confidential as other participants will be able to see your responses. As well, the Facebook Study Group will be a 'closed' group which means that any Facebook user can anyone will be able ask to join or be added or invited by a group member, but only group members can see your response. I will make sure that only people who fit the requirements of the study sample will be allowed to participate in the study. For more information on what it means to be a 'closed group' please see <https://www.facebook.com/help/220336891328465/#What-are-the-privacy-options-forgroups>. Respondents have the option to provide responses through the private message function on Facebook if desired. After this study is complete the Facebook group will then be deleted and only my thesis supervisor Nicole Vaugeois and myself will have access to the information. Electronic and paper data files will be deleted and destroyed two years - July 2019 - after the completion of this study. While the study is proceeding on Facebook, data provide by the study participants will be hosted on Facebook's US-based servers and, as such, will be subject to Facebook's privacy policy (<https://www.facebook.com/about/privacy>) and to the US security legislation, which may allow US officials to access any data obtained and stored on their servers. Accordingly, the confidentiality of any information the participant may provide also cannot be guaranteed. The results from this study will be reported in my written thesis report, in my oral thesis defense, and on the study's Facebook page.

Participation: Your participation in this study is completely voluntary. You may at any time withdraw from the study without reason or explanation. You may choose to not to answer any question for any reason. If you decide to withdraw from the study, any data you have provided up to the point of withdrawal will be removed and not included in study results.

Consent: In order to participate in the Facebook group discussion, please comment "I agree" below in this Facebook post. By doing so, you confirm that you are accepting the terms and conditions of this study and confirm that you have read the above form, understand the information

EXPLORING LEISURE MOBILITY OF MILLENNIALS

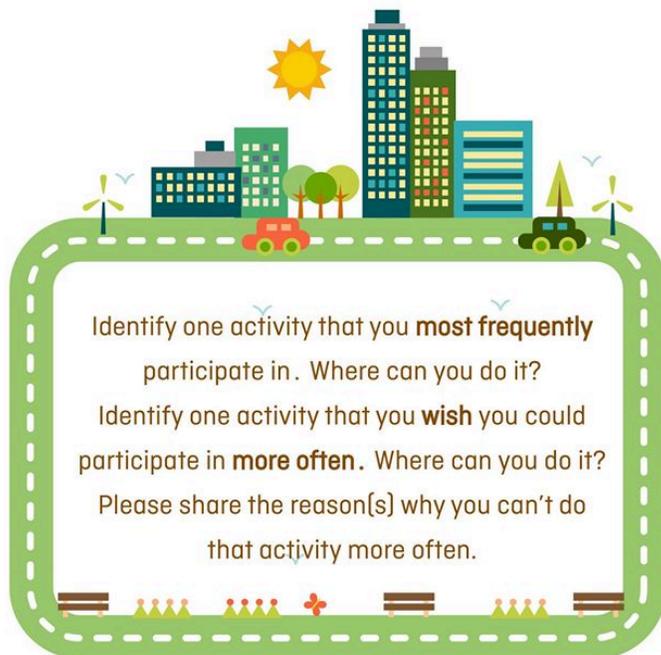
you read, understand that you can ask questions or withdraw at any time and you agree to participate in this research study. All participants must confirm their acceptance of this form in order to participate in the study and qualify for the study incentives.

If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics officer, by telephone at (250) 740-6631 or by email at reb@viu.ca.

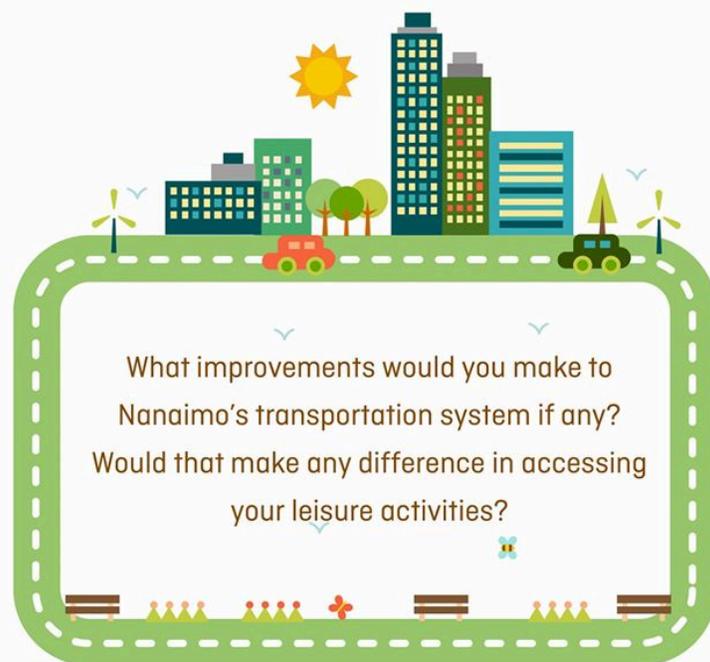
Thank you!
Lan Le Diem Tran

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Appendix R – Questions for Facebook Group Discussion



FUN ON THE MOVE



FUN ON THE MOVE

Appendix S – Research Consent Form Focus Group

RESEARCH CONSENT DISCLAIMER

“That Looks Awesome! How Do We Get There?”: The Journey towards Leisure of Millennials in the City of Nanaimo

February, 2017

Lan Le Diem Tran

Master of Arts in Sustainable Leisure Management

Vancouver Island University

250 797 5897

Nicole Vaugeois, PhD, Supervisor

BCRIC in Tourism & Sustainable Rural Development

Vancouver Island University

250 753 3245, ext., 2772

Dear Participant,

Purpose: I am a student of the Master’s programme of Sustainable Leisure Management at Vancouver Island University located in Nanaimo, British Columbia, Canada. This program has a thesis component where students are required to complete a research project. I have designed a research project to identify the role that transportation plays in accessing leisure opportunities for Millennials currently living in Nanaimo. To participate in this study, you must be a young adult between the ages of 20-32 who has been living in Nanaimo for minimum 6 months.

Description: During this study, you will be asked to engage in two activities: (1) Map your journey to access the leisure activity that you most frequently participate in; (2) Join a group discussion guided by my questions. The types of questions that will be asked will relate to your engagement in leisure activities in Nanaimo, how you access them, as well as your view and opinions on transportation. To recognize participation in this focus group, there will be a random draw for a pass provided by Nanaimo Parks and Recreation that grant two-for-one admission into the pools, arenas, and gymnasium drop-in programs at Oliver Woods Community Centre. There are 30 passes available for all participants of the online survey, the Facebook group discussion, and the focus group. Each participant can only win one pass. Each pass has a value of up to \$7 depending on the age of the person using it. The recipients of the passes will be notified by email and the announcement will also be posted on the study’s Facebook page. Participants of the focus group will automatically be entered into the draw.

EXPLORING LEISURE MOBILITY OF MILLENNIALS

Confidentiality: The data collected through the focus group will not be confidential as you are involved in an open discussion with others. However, after the focus group, I will transcribe and code the data to ensure that it is confidential. Electronic (audiovisual) data files will be deleted and destroyed and printed files will be shredded two years – July 2019 – after the completion of this study. The results from this study will be reported in my written thesis report, in my oral thesis defense, and on the study’s Facebook page.

Participation: Your participation in this study is completely voluntary. You may at any time withdraw from the study without reason or explanation. You may choose to not to answer any question for any reason. It is important to note that if you decide to withdraw from the study, you can decide whether or not the data you have provided up to the point of your withdrawal will remain and be used in research results since it is not possible to distinguish your responses from those of other participants.

Consent: By signing this consent form, you are agreeing to the terms and conditions of this study. By doing so you will have agreed to having read the above form and agreeing that you have understood the information you have read, and also agreeing that you understand that you can ask questions or withdraw at any time.

If you have any concerns about your treatment as a research participant in this study, please contact the VIU Research Ethics officer, by telephone at (250) 740-6631 or by email at reb@viu.ca.

If you have any questions about this research project, or would like more information, please feel free to contact me at lan.diem193@gmail.com

My signature below indicates that I have read and fully understand the above conditions of participation in this study and that I have had the opportunity to have any questions I may have regarding this study answered by the principal investigators.

Participant’s Signature

Date

A COPY OF THIS CONSENT FORM WILL BE LEFT WITH YOU, AND A COPY WILL BE RETAINED BY THE RESEARCHER. THANK YOU IN ADVANCE FOR YOUR PARTICIPATION.

Appendix U – Table of Cities where Millennials Spent the Majority of their Life before Moving to Nanaimo

Countries	City	Frequency
Belize	Belize	1
Bhutan	Thimphu	1
Canada	Acton	1
	Agassiz	1
	Ajax	1
	Brampton	1
	British Columbia	1
	Calgary	9
	Campbell River	3
	Castlegar	1
	Charlottetown	1
	Chilliwack	1
	Clearwater	1
	Comox	1
	Crofton	1
	Duncan	2
	Edmonton	5
	Elkford	1
	Fernie	1
	Fort McMurray	1
	Fort St John	1
	Gabriola Island	2
	Grande Prairie	2
	Kamloops	2
	Kelowna	1
	Kitchener	2
	Langley	1
	London	1
	Maple Ridge	1
	Meadow Lake	1
	Mission	2
	Montreal	1

EXPLORING LEISURE MOBILITY OF MILLENNIALS

	Nanaimo	1
	Nelson	2
	Ottawa	3
	Port Alberni	6
	Powell River	2
	Prince George	3
	Qualicum Beach	3
	Regina	2
	Rouyn-Noranda	1
	Saskatoon	2
	Smithers	1
	St-Isidore	1
	Surrey	3
	Thunder Bay	1
	Tofino	1
	Toronto	1
	Vancouver	11
	Vernon	1
	Victoria	3
	Western (Alberta & B.C.)	1
	Winnipeg	2
	Unknown	2
China	Beijing	2
	Chengdu	1
	Guiyang	1
	Qingdao	1
	Shandong	1
	Shijiazhuang	1
Colombia	Bogota	1
Curacao	Willemstad	1
Equatorial Guinea	Malabo	1
Germany	Dortmund	1
	Hamburg	1
Hong Kong	Hong Kong	1
India	Ahmedabad	1

EXPLORING LEISURE MOBILITY OF MILLENNIALS

	Bombay	1
	Chandigarh	1
	Delhi	1
	Faridkot	1
	Mumbai	3
	Vadodara	1
Kuwait	Kuwait City	1
Oman	Muscat	1
Pakistan	Gilgit valley	1
Russia	Unknown	1
Saudi Arabia	Dammam	1
Sweden	Stockholm	1
Switzerland	Igis	1
United Arab Emirates	Dubai	1
United States of America	Vermont	1

Total Valid Responses N = 136

Appendix V – Millennials’ Suggestions for Transportation Development

a. Walking:

1. Wider sidewalks along major roads connecting downtown and VIU
2. More pedestrian overpasses

b. Biking:

1. “Bike lanes, bike lanes, bike lanes! A paved corridor from City of Nanaimo to the rest of the region. We used to bike 20 km each way to work when living in Vancouver. In Nanaimo we're now forced on to the highway with a bunch of vehicles - it's crazy and dangerous and a total waste. If we had a safe way to get to work on our bikes, we would.”
2. Expand the E & N trail through downtown and the south end. On the existing E & N trail, accommodate cyclist properly at intersections (don't require dismounting, paint "elephant feet" along the crosswalks, have bike crossing lights).
3. More lanes that are connected rather than intermittent.
4. “I'd also like to see the end to the rail line. It isn't going to be repaired any time soon. Cover it up with gravel, pave it over, and turn it into a bike path akin to the Galloping Goose in Victoria. This goes beyond Nanaimo, but if you had a paved (or partially paved bike trail from Victoria to Courtenay, you'd be attracting cyclotourists from all around the world.”
5. More bike/e-bike/foldable e-bike rentals
6. Access to assistance to purchase bikes
7. Set up a public bike-sharing system
8. Design bike paths that avoid hills
9. More bike storage areas
10. Add more designated bike lanes so bikes aren't in main roads (dangerous for both cyclists and drivers)
11. Clearer road rules to improve bike safety
12. Make a concerted effort to protect and promote cycling

c. Public transit:

EXPLORING LEISURE MOBILITY OF MILLENNIALS

1. More sustainable transportation alternatives and more incentives to switch over to more sustainable commuting: “(...) a complete mindset shift of residents from thinking that public transportation is for the poor and owning/driving a car provides a sense of status. Smart people take transit, it has nothing to do with class. Make it easy for smart people to take transit.”
2. “Nanaimo's transportation infrastructure needs to be updated. It needs to be a priority of the city to create a system that is beneficial to the public. The city is quite long and spans many areas. Not all of these areas have bus access and it sees a lot of individuals left without a way to get around the city. Many people rely on the bus out of necessity. These people should be shown more respect from the city through the scaling up of access to transit. I strongly believe that the transit system in Nanaimo is one of our city's biggest flaws and something that should be at the top of every list when the city has extra funds to put towards infrastructure development.”
3. Re-evaluation of bus scheduling: longer operation hours (start earlier in the morning and end later at night), higher frequency (i.e. every 20 minutes) especially at night and on the weekend, when many people get off work or have work on those days, as well as when people want to go out drinking and don't want to drive
4. Revise bus routes: more express connections between major hubs, more direct routes, less stops
5. Ensured safety of bus drivers, and protocol for situations such as snow
6. Improve punctuality: Buses should arrive on time, not late, and not too early neither
7. Greater accessible bus transit system to outdoors, trails, and hiking spots
8. Greater accessible bus transit system that connects to Nanaimo's East and West parts, as well as other parts of the city
9. Greater accessible bus transit system that connects Nanaimo to other parts of the island, especially other cities such as Parksville, Qualicum Beach, Chemainus, Victoria, etc.
10. Create more routes with Handy Dart BC Transit buses for transit routes that have not yet been established
11. Provide shuttle bus services that aim at serving the student community of VIU
12. Bus service to the airport and Duke Point ferry terminal

EXPLORING LEISURE MOBILITY OF MILLENNIALS

13. Better bus service to the ferries that line up better with arrival and departure times
 14. Better planning: “Stop building developments outside transit accessible areas. This is stupid and not sustainable.”
 15. Improve bus stops: more shelters, visible bus signs, better lighting, better seating, more display of bus schedules
 16. “Safer to use (there have been a few times where I have see people who were either on drugs or drunk)”.
 17. Improve bus fare system: cheaper passes, free rides to those who can't afford it and need to access services, allow bus transfer tickets to be used both ways instead of one, develop a fast pass system
 18. Improve accessibility to bus schedules and information on the website
- d. Driving:
1. More accessibility to carpool and car-sharing programmes
 2. Educate drivers on bike safety
 3. Less traffic lights on highway, more overpasses and introduce off-ramps
 4. Improvements to the light systems on the parkway to prevent backups at peak hours
 5. Fix the many bottlenecks along the Old Island highway
- e. New/other ideas:
1. Re-establish the fast ferry connection between Downtown Nanaimo and Downtown Vancouver
 2. Re-establish the commuter railway: “Add passenger trains, we have train track in the city, and I know many people also enjoy travel by trains, and this can also be a special tourism project for Nanaimo, like short sightseeing train for enjoying the island view.”
 3. “I'd love to see a Gondola up to the summit of Benson. This would be a boon to tourism (giving those visiting something to do that would make it a touch more accessible), but also a benefit for locals who want to hike up, but don't want to hike down Benson. I'm great at going up hill, but walking down hill kills my knees.”
 4. Introduce streetcars

